



**UNITED
NATIONS**



**Framework Convention
on Climate Change**

Distr.
GENERAL

FCCC/KP/CMP/2005/8/Add.3
30 March 2006

Original: ENGLISH

**CONFERENCE OF THE PARTIES SERVING AS THE
MEETING OF THE PARTIES TO THE KYOTO PROTOCOL**

**Report of the Conference of the Parties serving as the
meeting of the Parties to the Kyoto Protocol
on its first session, held at Montreal
from 28 November to 10 December 2005**

Addendum

**Part Two: Action taken by the Conference of the Parties serving as the
meeting of the Parties to the Kyoto Protocol
at its first session**

CONTENTS

**Decisions adopted by the Conference of the Parties serving as the
meeting of the Parties to the Kyoto Protocol**

<i>Decision</i>		<i>Page</i>
16/CMP.1	Land use, land-use change and forestry	3
17/CMP.1	Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.....	10
18/CMP.1	Criteria for cases of failure to submit information relating to estimates of greenhouse gas emissions by sources and removals by sinks from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.....	12
19/CMP.1	Guidelines for national systems under Article 5, paragraph 1, of the Kyoto Protocol	14
20/CMP.1	Good practice guidance and adjustments under Article 5, paragraph 2, of the Kyoto Protocol	21

<i>Decision</i>		<i>Page</i>
21/CMP.1	Issues relating to adjustments under Article 5, paragraph 2, of the Kyoto Protocol	50
22/CMP.1	Guidelines for review under Article 8 of the Kyoto Protocol	51
23/CMP.1	Terms of service for lead reviewers	84
24/CMP.1	Issues relating to the implementation of Article 8 of the Kyoto Protocol – 1	85
25/CMP.1	Issues relating to the implementation of Article 8 of the Kyoto Protocol – 2	90
26/CMP.1	Review processes during the period 2006–2007 for Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol	91
27/CMP.1	Procedures and mechanisms relating to compliance under the Kyoto Protocol	92

Decision 16/CMP.1

Land use, land-use change and forestry

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Affirming that the implementation of land use, land-use change and forestry activities included under the provisions of the Kyoto Protocol shall be consistent with the objectives and principles of, and any decisions taken under, the United Nations Framework Convention on Climate Change and its Kyoto Protocol,

Having considered decision 11/CP.7 adopted by the Conference of the Parties at its seventh session,

1. *Affirms* that the following principles govern the treatment of land use, land-use change and forestry activities:

- (a) That the treatment of these activities be based on sound science
- (b) That consistent methodologies be used over time for the estimation and reporting of these activities
- (c) That the aim stated in Article 3, paragraph 1, of the Kyoto Protocol not be changed by accounting for land use, land-use change and forestry activities
- (d) That the mere presence of carbon stocks be excluded from accounting
- (e) That the implementation of land use, land-use change and forestry activities contributes to the conservation of biodiversity and sustainable use of natural resources
- (f) That accounting for land use, land-use change and forestry does not imply a transfer of commitments to a future commitment period
- (g) That reversal of any removal due to land use, land-use change and forestry activities be accounted for at the appropriate point in time
- (h) That accounting excludes removals resulting from: (i) elevated carbon dioxide concentrations above their pre-industrial level; (ii) indirect nitrogen deposition; and (iii) the dynamic effects of age structure resulting from activities and practices before the reference year;

2. *Decides* that good practice guidance, and methods to estimate, measure, monitor and report changes in carbon stocks and anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry activities, as developed by the Intergovernmental Panel on Climate Change, shall be applied by Parties, if decided in accordance with relevant decisions of the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

3. *Decides* that anthropogenic greenhouse gas emissions by sources and removals by sinks shall be accounted for in accordance with the annex to the present decision and reported in annual inventories and reviewed in accordance with relevant decisions relating to Articles 5, 7 and 8 of the Kyoto Protocol, and in accordance with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, any future elaboration of these guidelines, or parts of them, and any good practice guidance

on land-use change and forestry in accordance with relevant decisions of the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

4. *Adopts* the definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under Articles 3, 6 and 12 of the Kyoto Protocol contained in the attached annex for application in the first commitment period.

ANNEX

Definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the Kyoto Protocol**A. Definitions**

1. For land use, land-use change and forestry activities under Article 3,¹ paragraphs 3 and 4, the following definitions shall apply:
 - (a) “Forest” is a minimum area of land of 0.05–1.0 hectare with tree crown cover (or equivalent stocking level) of more than 10–30 per cent with trees with the potential to reach a minimum height of 2–5 metres at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10–30 per cent or tree height of 2–5 metres are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest
 - (b) “Afforestation” is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources
 - (c) “Reforestation” is the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989
 - (d) “Deforestation” is the direct human-induced conversion of forested land to non-forested land
 - (e) “Revegetation” is a direct human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation contained here
 - (f) “Forest management” is a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner
 - (g) “Cropland management” is the system of practices on land on which agricultural crops are grown and on land that is set aside or temporarily not being used for crop production
 - (h) “Grazing land management” is the system of practices on land used for livestock production aimed at manipulating the amount and type of vegetation and livestock produced.

¹ “Article” in this annex refers to an Article of the Kyoto Protocol, unless otherwise specified.

B. Article 3, paragraph 3

2. For the purposes of Article 3, paragraph 3, eligible activities are those direct human-induced afforestation, reforestation and/or deforestation activities that meet the requirements set forth in this annex and that started on or after 1 January 1990 and before 31 December of the last year of the commitment period.
3. For the purposes of determining the area of deforestation to come into the accounting system under Article 3, paragraph 3, each Party shall determine the forest area using the same spatial assessment unit as is used for the determination of afforestation and reforestation, but not larger than 1 hectare.
4. For the first commitment period, debits² resulting from harvesting during the first commitment period following afforestation and reforestation since 1990 shall not be greater than credits³ accounted for on that unit of land.
5. Each Party included in Annex I shall report, in accordance with Article 7, on how harvesting or forest disturbance that is followed by the re-establishment of a forest is distinguished from deforestation. This information will be subject to review in accordance with Article 8.

C. Article 3, paragraph 4

6. A Party included in Annex I may choose to account for anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from any or all of the following human-induced activities, other than afforestation, reforestation and deforestation, under Article 3, paragraph 4, in the first commitment period: revegetation, forest management, cropland management and grazing land management.
7. A Party included in Annex I wishing to account for activities under Article 3, paragraph 4, shall identify, in its report to enable the establishment of its assigned amount pursuant to Article 3, paragraphs 7 and 8, the activities under Article 3, paragraph 4, which it elects to include in its accounting for the first commitment period. Upon election, a decision by a Party will be fixed for the first commitment period.
8. During the first commitment period, a Party included in Annex I that selects any or all of the activities mentioned in paragraph 6 above shall demonstrate that such activities have occurred since 1990 and are human-induced. A Party included in Annex I shall not account for emissions by sources and removals by sinks resulting from activities under Article 3, paragraph 4, if these are already accounted for under Article 3, paragraph 3.
9. For the first commitment period, accountable anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from cropland management, grazing land management and revegetation under Article 3, paragraph 4, shall be equal to anthropogenic greenhouse gas emissions by sources and removals by sinks in the commitment period, less five times the anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from these eligible activities in the base year of that Party, while avoiding double accounting.
10. For the first commitment period, a Party included in Annex I that incurs a net source of emissions under the provisions of Article 3, paragraph 3, may account for anthropogenic greenhouse gas emissions by sources and removals by sinks in areas under forest management under Article 3, paragraph 4, up to a level that is equal to the net source of emissions under the provisions of Article 3, paragraph 3, but not greater than 9.0 megatonnes of carbon times five, if the total anthropogenic

² "Debits": where emissions are larger than removals on a unit of land.

³ "Credits": where removals are larger than emissions on a unit of land.

greenhouse gas emissions by sources and removals by sinks in the managed forest since 1990 is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3.

11. For the first commitment period only, additions to and subtractions from the assigned amount of a Party⁴ resulting from forest management under Article 3, paragraph 4, after the application of paragraph 10 above and resulting from forest management project activities undertaken under Article 6, shall not exceed the value inscribed in the appendix⁵ below, times five.

12. A Party may request the Conference of the Parties to reconsider its numerical values as contained in paragraph 10 and in the appendix as mentioned in paragraph 11, with a view to the Conference of the Parties recommending a decision for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, no later than two years prior to the beginning of the first commitment period. Such a reconsideration shall be based upon country-specific data and the elements of guidance and consideration in footnote 5 to paragraph 11. These shall be submitted and reviewed in accordance with relevant decisions relating to Articles 5, 7 and 8 of the Kyoto Protocol, and in accordance with the Intergovernmental Panel on Climate Change (IPCC) *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, any future elaboration of these guidelines, or parts of them, and any good practice guidance on land use, land-use change and forestry in accordance with the relevant decisions of the Conference of the Parties.

D. Article 12

13. The eligibility of land use, land-use change and forestry project activities under Article 12 is limited to afforestation and reforestation.

14. For the first commitment period, the total of additions to a Party's assigned amount resulting from eligible land use, land-use change and forestry project activities under Article 12 shall not exceed one per cent of base year emissions of that Party, times five.

15. The treatment of land use, land-use change and forestry project activities under Article 12 in future commitment periods shall be decided as part of the negotiations on the second commitment period.

E. General

16. Each Party included in Annex I shall, for the purposes of applying the definition of "forest" as contained in paragraph 1 (a) above, select a single minimum tree crown cover value between 10 and 30 per cent, a single minimum land area value between 0.05 and 1 hectare and a single minimum tree height value between 2 and 5 metres. The selection of a Party shall be fixed for the duration of the first commitment period. The selection shall be included as an integral part of its report to enable the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, in accordance with decision 19/CP.7, and shall include the values for tree crown cover, tree height and the minimum land area. Each Party shall justify in its reporting that such values are consistent with the information that has historically been reported to the Food and Agriculture Organization of the United Nations or other international bodies, and if they differ, explain why and how such values were chosen.

⁴ In accordance with decision 13/CMP.1.

⁵ In arriving at the values in the appendix below, the Conference of the Parties was guided by the application of an 85 per cent discount factor to account for the removals identified in paragraph 1 (h) of decision 16/CMP.1 and a 3 per cent cap on forest management, using a combination of data provided by Parties and by the Food and Agriculture Organization of the United Nations. Consideration was also given to national circumstances (including the degree of effort needed to meet Kyoto Protocol commitments and the forest management measures implemented). The accounting framework established in this paragraph shall not be construed as establishing any precedent for the second and subsequent commitment periods.

17. For the first commitment period, and subject to other provisions in this annex, the additions to and subtractions from the assigned amount of a Party pursuant to Article 3, paragraphs 7 and 8, shall be equal to anthropogenic greenhouse gas emissions by sources and removals by sinks measured as verifiable changes in carbon stocks, and non-carbon dioxide greenhouse gas emissions during the period 1 January 2008 to 31 December 2012 resulting from afforestation, reforestation and deforestation under Article 3, paragraph 3, and forest management under Article 3, paragraph 4, that have taken place since 1 January 1990. Where the result of this calculation is a net sink of greenhouse gases, this value shall be added to the assigned amount of that Party. Where the result of this calculation is a net source of greenhouse gas emissions, this value shall be subtracted from the assigned amount of that Party.

18. Accounting of anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, shall begin with the onset of the activity or the beginning of the commitment period, whichever comes later.

19. Once land is accounted for under Article 3, paragraphs 3 and 4, all anthropogenic greenhouse gas emissions by sources from, and removals by sinks on this land must be accounted for throughout subsequent and contiguous commitment periods.

20. National inventory systems under Article 5, paragraph 1, shall ensure that areas of land subject to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, are identifiable, and information about these areas should be provided by each Party included in Annex I in their national inventories in accordance with Article 7. Such information will be reviewed in accordance with Article 8.

21. Each Party included in Annex I shall account for all changes in the following carbon pools: above-ground biomass, below-ground biomass, litter, dead wood, and soil organic carbon. A Party may choose not to account for a given pool in a commitment period if transparent and verifiable information is provided that the pool is not a source.

APPENDIX

Party^a	Mt C/yr
Australia	0.00
Austria	0.63
Belarus	
Belgium	0.03
Bulgaria	0.37
Canada	12.00
Croatia	0.265 ^b
Czech Republic	0.32
Denmark	0.05
Estonia	0.10
Finland	0.16
France	0.88
Germany	1.24
Greece	0.09
Hungary	0.29
Iceland	0.00
Ireland	0.05
Italy	0.18
Japan	13.00
Latvia	0.34
Liechtenstein	0.01
Lithuania	0.28
Luxembourg	0.01
Monaco	0.00
Netherlands	0.01
New Zealand	0.20
Norway	0.40
Poland	0.82
Portugal	0.22
Romania	1.10
Russian Federation	33.00 ^c
Slovakia	0.50
Slovenia	0.36
Spain	0.67
Sweden	0.58
Switzerland	0.50
Ukraine	1.11
United Kingdom	0.37

^a The list of countries in this table differs from that found in decision 5/CP.6 as a result of consultations undertaken during the session.

^b This figure has been added by decision 22/CP.9.

^c This figure is changed from 17.63 to 33.00 by decision 12/CP.7.

Decision 17/CMP.1

Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling, in particular, Article 3, paragraphs 3 and 4, Article 5, paragraph 2, and Article 7, paragraph 1, of the Kyoto Protocol,

Recalling also decisions 11/CP.7, 19/CP.7, 21/CP.7, 22/CP.7 and 13/CP.9,

Reaffirming that anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol should be reported in a transparent, consistent, comparable, complete and accurate way,

Having considered the relevant recommendations of the Subsidiary Body for Scientific and Technological Advice,

1. *Decides* that for the first commitment period Parties included in Annex I to the Convention that have ratified the Kyoto Protocol shall apply the good practice guidance for land use, land-use change and forestry, as developed by the Intergovernmental Panel on Climate Change, in a manner consistent with the Kyoto Protocol, with decision 16/CMP.1 and with the annexes to this decision,¹ for the purpose of providing information on anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, in accordance with Article 5, paragraph 2, of the Kyoto Protocol;

2. *Decides* to use, for reporting information supplementary to annual greenhouse gas inventory information in the first commitment period, in addition to the elements specified in paragraphs 5–9 of the annex to decision 15/CMP.1, supplementary information to be included in an annex to the national inventory report, contained in annex I to this decision, as well as the tables of the common reporting format² for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, contained in annex II to this decision;

3. *Requests* the secretariat to develop reporting software for the tables referred to in paragraph 2 above.

¹ Noting that reporting methods contained in chapter 4 of the Intergovernmental Panel on Climate Change *Good Practice Guidance for Land Use, Land-Use Change and Forestry* should ensure that areas of land subject to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, are identifiable.

² The common reporting format is a standardized format to be used by Parties for electronic reporting of estimates of greenhouse gas emissions and removals and any other relevant information. For technical reasons (for example, size of tables and fonts), the layout of the printed version of the tables of the common reporting format for land use, land-use change and forestry activities in this document cannot be standardized.

ANNEXES

*[to be incorporated in accordance with decision 15/CP.10, paragraph 5]**

*2nd plenary meeting
30 November 2005*

* Paragraph 2 of the present decision decides the use of (a) supplementary information to be included in an annex to the national inventory report, and (b) the tables of the common reporting format for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, included in annexes I and II, respectively. This decision was forwarded for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) with a note in the annex section which specifies that these annexes will be incorporated in accordance with decision 15/CP.10, paragraph 5 (FCCC/CP/2004/10/Add.2). Paragraph 5 of decision 15/CP.10 requests the Subsidiary Body for Scientific and Technological Advice (SBSTA) to update the common reporting format tables contained in annex II to that decision and to prepare a draft decision for adoption by the COP/MOP to incorporate the updated tables in an annex to the present decision. Such an update should be undertaken following the consideration of experiences gained in using the tables of the common reporting format contained in annex II to decision 15/CP.10 by the SBSTA at its twenty-seventh session. The tables of the common reporting format are available in document FCCC/CP/2004/10/Add.2, pages 47–61.

Decision 18/CMP.1

Criteria for cases of failure to submit information relating to estimates of greenhouse gas emissions by sources and removals by sinks from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Having considered decisions 11/CP.7, 19/CP.7 and 22/CP.7,

1. *Decides* that a Party included in Annex I to the Convention shall not issue removal units pursuant to paragraph 26 of the annex to decision 13/CMP.1 for a specific activity under Article 3, paragraph 3, or a specific elected activity under Article 3, paragraph 4, associated with a year of the commitment period, if the magnitude of the adjustments to that activity, as defined in the annex to this decision, exceeds 9 per cent for that year;

2. *Decides* that for any adjustments relating to an activity under Article 3, paragraph 3, or an elected activity under Article 3, paragraph 4, associated with a year of the commitment period, the review reports under Article 8 of the Kyoto Protocol shall include the magnitude of the adjustments to that activity as the percentage calculated in accordance with the previous paragraph.

ANNEX

1. The magnitude (M) of the adjustments to an activity for a year of the commitment period, expressed as a percentage, is measured as the absolute value of the “adjusted net estimate for that activity minus the submitted net estimate for the activity”, divided by the sum of the absolute values of all submitted components for that activity, multiplied by 0.18.¹

2. Mathematically, this is expressed by the following equation:

$$M(\%) = \frac{|Net_{adjusted} - Net_{submitted}|}{\sum_j |COMP_{submitted_j}|} \times 0.18 \times 100$$

where:

Net_{adjusted} = the estimate of net emissions/removals for the activity after application of any adjustments, expressed in tonnes of carbon dioxide (CO₂) equivalent

Net_{submitted} = the estimate of net emissions/removals for the activity as submitted by the Party, expressed in tonnes of CO₂ equivalent

COMP_{submitted_j} = estimate for component ‘j’ of a specific activity under Article 3, paragraphs 3 and 4, as reported by the Party in the common reporting format tables for supplementary data for land use, land-use change and forestry activities under Article 3, paragraph 3 and any elected activities under Article 3, paragraph 4, that represents either aggregate estimates of carbon-stock change in individual carbon pools or aggregated estimates of emissions from an individual category, expressed in tonnes CO₂ equivalent. Specifically,

- For tables 5(KP-I), components are the aggregate totals for each carbon-stock change column for the activity; gains and losses should be considered separate components, where applicable
- For tables 5(KP-II), components are the aggregate emissions for the activity from nitrogen (N) fertilization, drainage of soils, disturbance associated with land-use conversion, lime application or biomass burning.

9th plenary meeting
9–10 December 2005

¹ This value was selected as an indicator of the average share of the land use, land-use change and forestry emissions and removals relative to total emissions for Parties included in Annex I to the Convention.

Decision 19/CMP.1

Guidelines for national systems under Article 5, paragraph 1, of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling Article 5, paragraph 1, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, in particular its provision that each Party included in Annex I shall have in place, no later than one year prior to the start of the first commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol,

Recognizing the importance of such national systems for the implementation of other provisions of the Kyoto Protocol,

Having considered decision 20/CP.7, adopted by the Conference of the Parties at its seventh session,

1. *Adopts* the guidelines for national systems under Article 5, paragraph 1, of the Kyoto Protocol as contained in the annex to the present decision;
2. *Urges* Parties included in Annex I to implement the guidelines as soon as possible.

ANNEX

Guidelines for national systems for the estimation of anthropogenic greenhouse gas emissions by sources and removals by sinks under Article 5, paragraph 1, of the Kyoto Protocol¹

I. Applicability

1. The provisions of these guidelines shall apply for each Party included in Annex I to the Convention which is also a Party to the Kyoto Protocol. Parties' implementation of national system requirements may differ according to national circumstances, but shall include the elements described in these guidelines. Any differences in implementation shall not impair the performance of the functions described in these guidelines.

II. Definitions

A. Definition of national system

2. A national system includes all institutional, legal and procedural arrangements made within a Party included in Annex I for estimating anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and for reporting and archiving inventory information.

B. Other definitions

3. The meaning of the following terms in these guidelines for national systems² is the same as in the glossary of the Intergovernmental Panel on Climate Change (IPCC) good practice guidance,³ accepted by the IPCC at its sixteenth session:⁴

- (a) **Good practice** is a set of procedures intended to ensure that greenhouse gas inventories are accurate in the sense that they are systematically neither over- nor underestimated as far as can be judged, and that uncertainties are reduced as far as possible. Good practice covers choice of estimation methods appropriate to national circumstances, quality assurance and quality control at the national level, quantification of uncertainties, and data archiving and reporting to promote transparency
- (b) **Quality control (QC)** is a system of routine technical activities to measure and control the quality of the inventory as it is being developed. The QC system is designed to:
 - (i) Provide routine and consistent checks to ensure data integrity, correctness and completeness;
 - (ii) Identify and address errors and omissions;
 - (iii) Document and archive inventory material and record all QC activities.

¹ "Article" in these guidelines refers to an Article of the Kyoto Protocol, unless otherwise specified.

² The guidelines for national systems for the estimation of anthropogenic greenhouse gas emissions by sources and removals by sinks under Article 5, paragraph 1, of the Kyoto Protocol are referred to herein as "guidelines for national systems".

³ The IPCC *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* is referred to as the "IPCC good practice guidance" in these guidelines for national systems.

⁴ Montreal, 1–8 May 2000.

Quality control activities include general methods such as accuracy checks on data acquisition and calculations and the use of approved standardized procedures for emission calculations, measurements, estimating uncertainties, archiving information and reporting. Higher tier QC activities also include technical reviews of source categories, activity and emission factor data and methods

- (c) **Quality assurance** (QA) activities include a planned system of review procedures conducted by personnel not directly involved in the inventory compilation development process, to verify that data quality objectives were met, ensure that the inventory represents the best possible estimate of emissions and sinks given the current state of scientific knowledge and data available, and support the effectiveness of the QC programme
- (d) **Key source category** is one that is prioritized within the national inventory because its estimate has a significant influence on a country's total inventory of direct greenhouse gases in terms of the absolute level of emissions, the trend in emissions, or both
- (e) **Decision tree** is a flow-chart describing the specific ordered steps which need to be followed to develop an inventory or an inventory component in accordance with the principles of good practice.

4. **Recalculation**, consistent with the UNFCCC reporting guidelines on annual inventories, is a procedure for re-estimating anthropogenic greenhouse gas (GHG)⁵ emissions by sources and removals by sinks of previously submitted inventories⁶ as a consequence of changes in methodologies, changes in the manner in which emission factors and activity data are obtained and used, or the inclusion of new source and sink categories.

III. Objectives

5. The objectives of national systems under Article 5, paragraph 1, for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, referred to below as national systems, are:

- (a) To enable Parties included in Annex I to estimate anthropogenic GHG emissions by sources and removals by sinks, as required by Article 5, and to report these emissions by sources and removals by sinks in accordance with Article 7, paragraph 1, and relevant decisions of the Conference of the Parties (COP) and/or the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP);
- (b) To assist Parties included in Annex I in meeting their commitments under Articles 3 and 7;
- (c) To facilitate the review of the information submitted under Article 7 by Parties included in Annex I, as required by Article 8;
- (d) To assist Parties included in Annex I to ensure and improve the quality of their inventories.

⁵ References to greenhouse gases (GHG) in these guidelines for national systems refer to GHGs not controlled by the Montreal Protocol.

⁶ "National GHG inventories" are referred to simply as "inventories" in these guidelines for the sake of brevity.

IV. Characteristics

6. National systems should be designed and operated to ensure the transparency, consistency, comparability, completeness and accuracy of inventories as defined in the guidelines for the preparation of inventories by Parties included in Annex I, in accordance with relevant decisions of the COP and/or COP/MOP.
7. National systems should be designed and operated to ensure the quality of the inventory through planning, preparation and management of inventory activities. Inventory activities include collecting activity data, selecting methods and emission factors appropriately, estimating anthropogenic GHG emissions by sources and removals by sinks, implementing uncertainty assessment and quality assurance/quality control (QA/QC) activities, and carrying out procedures for the verification of the inventory data at the national level, as described in these guidelines for national systems.
8. National systems should be designed and operated to support compliance with Kyoto Protocol commitments relating to the estimation of anthropogenic GHG emissions by sources and removals by sinks.
9. National systems should be designed and operated to enable Parties included in Annex I to consistently estimate anthropogenic emissions by all sources and removals by all sinks of all GHGs, as covered by the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and IPCC good practice guidance, in accordance with relevant decisions of the COP and/or COP/MOP.

V. General functions

10. In the implementation of its national system, each Party included in Annex I shall:
 - (a) Establish and maintain the institutional, legal and procedural arrangements necessary to perform the functions defined in these guidelines for national systems, as appropriate, between the government agencies and other entities responsible for the performance of all functions defined in these guidelines;
 - (b) Ensure sufficient capacity for timely performance of the functions defined in these guidelines for national systems, including data collection for estimating anthropogenic GHG emissions by sources and removals by sinks and arrangements for technical competence of the staff involved in the inventory development process;
 - (c) Designate a single national entity with overall responsibility for the national inventory;
 - (d) Prepare national annual inventories and supplementary information in a timely manner in accordance with Article 5 and Article 7, paragraphs 1 and 2, and relevant decisions of the COP and/or COP/MOP;
 - (e) Provide information necessary to meet the reporting requirements defined in the guidelines under Article 7 in accordance with the relevant decisions of the COP and/or COP/MOP.

VI. Specific functions

11. In order to meet the objectives and perform the general functions described above, each Party included in Annex I shall undertake specific functions relating to inventory planning, preparation and management.⁷

A. Inventory planning

12. As part of its inventory planning, each Party included in Annex I shall:

- (a) Designate a single national entity with overall responsibility for the national inventory;
- (b) Make available the postal and electronic addresses of the national entity responsible for the inventory;
- (c) Define and allocate specific responsibilities in the inventory development process, including those relating to choice of methods, data collection, particularly activity data and emission factors from statistical services and other entities, processing and archiving, and QC and QA. This definition shall specify the roles of, and cooperation between, government agencies and other entities involved in the preparation of the inventory, as well as the institutional, legal and procedural arrangements made to prepare the inventory;
- (d) Elaborate an inventory QA/QC plan which describes specific QC procedures to be implemented during the inventory development process, facilitate the overall QA procedures to be conducted, to the extent possible, on the entire inventory and establish quality objectives;
- (e) Establish processes for the official consideration and approval of the inventory, including any recalculations, prior to its submission and to respond to any issues raised by the inventory review process under Article 8.

13. As part of its inventory planning, each Party included in Annex I should consider ways to improve the quality of activity data, emission factors, methods and other relevant technical elements of inventories. Information obtained from the implementation of the QA/QC programme, the review process under Article 8 and other reviews should be considered in the development and/or revision of the QA/QC plan and the quality objectives.

B. Inventory preparation

14. As part of its inventory preparation, each Party included in Annex I shall:

- (a) Identify key source categories following the methods described in the IPCC good practice guidance (chapter 7, section 7.2);
- (b) Prepare estimates in accordance with the methods described in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, as elaborated by the IPCC good practice guidance, and ensure that appropriate methods are used to estimate emissions from key source categories;

⁷ For the purpose of these guidelines for national systems, the inventory development process encompasses inventory planning, preparation and management. These steps of the inventory development process are considered in these guidelines only in order to clearly identify the functions to be performed by the national systems, as described in paragraphs 12 to 17 of the present guidelines.

- (c) Collect sufficient activity data, process information and emission factors as are necessary to support the methods selected for estimating anthropogenic GHG emissions by sources and removals by sinks;
 - (d) Make a quantitative estimate of inventory uncertainty for each source category and for the inventory in total, following the IPCC good practice guidance;
 - (e) Ensure that any recalculations of previously submitted estimates of anthropogenic GHG emissions by sources and removals by sinks are prepared in accordance with the IPCC good practice guidance and relevant decisions of the COP and/or COP/MOP;
 - (f) Compile the national inventory in accordance with Article 7, paragraph 1, and relevant decisions of the COP and/or COP/MOP;
 - (g) Implement general inventory QC procedures (tier 1) in accordance with its QA/QC plan following the IPCC good practice guidance.
15. As part of its inventory preparation, each Party included in Annex I should:
- (a) Apply source-category-specific QC procedures (tier 2) for key source categories and for those individual source categories in which significant methodological and/or data revisions have occurred, in accordance with the IPCC good practice guidance;
 - (b) Provide for a basic review of the inventory by personnel that have not been involved in the inventory development, preferably an independent third party, before the submission of the inventory, in accordance with the planned QA procedures referred to in paragraph 12 (d) above;
 - (c) Provide for a more extensive review of the inventory for key source categories, as well as source categories where significant changes in methods or data have been made;
 - (d) Based on the reviews described in paragraph 15 (b) and (c) above and periodic internal evaluations of the inventory preparation process, re-evaluate the inventory planning process in order to meet the established quality objectives referred to in paragraph 12 (d).

C. Inventory management

16. As part of its inventory management, each Party included in Annex I shall:
- (a) Archive inventory information for each year in accordance with relevant decisions of the COP and/or COP/MOP. This information shall include all disaggregated emission factors, activity data, and documentation about how these factors and data have been generated and aggregated for the preparation of the inventory. This information shall also include internal documentation on QA/QC procedures, external and internal reviews, documentation on annual key sources and key source identification and planned inventory improvements;
 - (b) Provide review teams under Article 8 with access to all archived information used by the Party to prepare the inventory, in accordance with relevant decisions of the COP and/or COP/MOP;
 - (c) Respond to requests for clarifying inventory information resulting from the different stages of the review process of the inventory information, and information on the national system, in a timely manner in accordance with Article 8.

17. As part of its inventory management, each Party included in Annex I should make the archived information accessible by collecting and gathering it at a single location.

VII. Updating of the guidelines

18. These guidelines shall be reviewed and revised, as appropriate, by consensus, in accordance with decisions of the COP/MOP, taking into account any relevant decisions of the COP.

*2nd plenary meeting
30 November 2005*

Decision 20/CMP.1

Good practice guidance and adjustments under Article 5, paragraph 2, of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling Article 5, paragraph 2, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change,

Further recalling decisions 1/CP.3, 2/CP.3, 1/CP.4, 8/CP.4 and 5/CP.6 of the Conference of the Parties,

Having considered decision 21/CP.7 adopted by the Conference of the Parties at its seventh session,

1. *Endorses* the Intergovernmental Panel on Climate Change (IPCC) report entitled *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*, as accepted by the sixteenth session of the Intergovernmental Panel on Climate Change held in Montreal, Canada, 1 to 8 May 2000 (hereinafter referred to as the IPCC good practice guidance), as an elaboration of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*;
2. *Decides* that the IPCC good practice guidance referred to in paragraph 1 shall be used by Parties included in Annex I to the Convention (Annex I Parties) in their preparation of national greenhouse gas inventories under the Kyoto Protocol;
3. *Decides* that adjustments referred to in Article 5, paragraph 2, of the Kyoto Protocol shall be applied only when inventory data submitted by Annex I Parties are found to be incomplete and/or are prepared in a way that is not consistent with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* as elaborated by the IPCC good practice guidance and any good practice guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;
4. *Decides* that the calculation of adjustments shall commence only after an Annex I Party has been provided with opportunities to correct any deficiencies in accordance with the time frame and procedures set forth in the guidelines for inventory review under Article 8;
5. *Decides* that the adjustment procedure shall result in estimates that are conservative for the Party concerned so as to ensure that anthropogenic emissions are not underestimated and anthropogenic removals by sinks and anthropogenic base year emissions are not overestimated;
6. *Emphasizes* that adjustments are intended to provide an incentive for Annex I Parties to provide complete and accurate annual greenhouse gas inventories prepared in accordance with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* as elaborated by the IPCC good practice guidance and any good practice guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol. Adjustments are intended to correct inventory problems for the purpose of accounting emissions inventories and assigned amounts of the Annex I Parties. Adjustments are not intended to substitute for the obligation of an Annex I Party to estimate and report greenhouse gas inventories in accordance with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* as elaborated by the IPCC good practice guidance and any good practice guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

7. *Decides* that adjusted estimates shall be calculated in accordance with the technical guidance on methodologies for adjustments contained in the annex to this decision. Such technical guidance shall ensure consistency and comparability and that similar methods are used for similar problems as far as possible across all inventories reviewed under Article 8;

8. *Decides* that any adjustments applied to the base year inventory estimates of an Annex I Party shall be used in the calculation of the Party's assigned amount pursuant to Article 3, paragraphs 7 and 8, in accordance with the modalities for the accounting of assigned amount under Article 7, paragraph 4, and shall not be replaced by a revised estimate subsequent to the establishment of the Party's assigned amount pursuant to Article 3, paragraphs 7 and 8;

9. *Decides* that any adjustments applied to the inventory for a year of the commitment period of the Annex I Party shall be used in the annual compilation and accounting of emission inventories and assigned amounts;

10. *Decides* that in the event of a disagreement between the Annex I Party and the expert review team regarding the adjustment, the issue will be forwarded to the Compliance Committee;

11. *Decides* that an Annex I Party may submit a revised estimate for a part of its inventory of a year of the commitment period to which an adjustment was previously applied, provided that the revised estimate is submitted, at the latest, in conjunction with the inventory for the year 2012. Subject to a review under Article 8 and the acceptance of the revised estimate by the expert review team, the revised estimate shall replace the adjusted estimate. In the event of a disagreement between the Annex I Party and the expert review team regarding the revised estimate, the issue will be forwarded to the Compliance Committee, which will resolve the disagreement in accordance with the procedures and mechanisms on compliance. The option for an Annex I Party to submit a revised estimate for a part of its inventory to which an adjustment was previously applied should not prevent Annex I Parties from making best efforts to correct the problem at the time it was initially identified and in accordance with the time frame set forth in the guidelines for review under Article 8.

ANNEX

Technical guidance on methodologies for adjustments under Article 5, paragraph 2, of the Kyoto Protocol**I. Objective**

1. The objective of this technical guidance on methodologies for adjustments under Article 5, paragraph 2, of the Kyoto Protocol¹ is:
 - (a) To provide for adjusted estimates that fully meet the requirements of decision 20/CMP.1;
 - (b) To ensure that adjustments are applied consistently,² comparably and transparently, taking into account the time frames provided in the guidelines for review under Article 8, and that, as far as possible, similar methods are used for similar problems across all inventories subject to adjustments under Article 8.

II. General approach

2. This technical guidance establishes general and specific procedures and methods for use by expert review teams to calculate adjustments. These procedures and methods are supplemented by inventory review resources listed in appendix I to this technical guidance, which will also facilitate consistency in calculation of adjustments by expert review teams.

A. Procedures

3. The calculation and application of adjustments shall follow paragraphs 3–11 of decision 20/CMP.1.
4. Adjustments shall be applied, taking into account section II.B below, only when inventory data submitted by Parties included in Annex I to the Convention (Annex I Parties) including supplementary inventory data on Article 3, paragraphs 3 and 4, are found to be incomplete and/or are prepared in a way that is not consistent with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the Revised 1996 IPCC Guidelines) as elaborated by the Intergovernmental Panel on Climate Change (IPCC) reports entitled *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* and *Good Practice Guidance for Land Use, Land-Use Change and Forestry*³ (hereinafter referred to collectively as the IPCC good practice guidance), and any good practice guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP).
5. Expert review teams shall, under their collective responsibility, calculate, document and recommend adjustments in accordance with the provisions for the review of annual inventories under Article 8 and this technical guidance. A compilation of the provisions relevant to the timing and reporting of adjustments from these guidelines is included in appendix II to this technical guidance.

¹ All articles referred to in this technical guidance are those of the Kyoto Protocol. Adjustments under Article 5, paragraph 2, of the Kyoto Protocol are hereinafter referred to as adjustments.

² In this context, consistency means that the application of adjustments should be consistent across Parties and by all expert review teams.

³ In the context of the Kyoto Protocol and in accordance with decision 15/CP.10, the IPCC *Good Practice Guidance for Land Use, Land-Use Change and Forestry* shall be applied for the first commitment period.

6. The expert review team should collectively decide on the methodological approach for calculation of any adjustment, including relevant components of the adjustment method (such as data sources, drivers⁴ and clusters⁵ used).
7. Expert review teams should apply the appropriate adjustment method, selected from table 1, in a simple manner, given the limited time available for the calculation of adjustments according to the provisions for the review of annual inventories in the guidelines for review under Article 8 (see paragraph 3 of appendix II).
8. Expert review teams should apply this technical guidance in a consistent and comparable manner and, as far as possible, use similar methods for similar problems across all inventories reviewed under Article 8, taking into account the provisions for obtaining conservative estimates, as described in paragraphs 51 and 52 below.
9. To enhance consistency in the application of adjustments for any given Party, the same adjustment method should be used, whenever possible, in cases where the same inventory problem was adjusted in an earlier year (e.g. for the base year or for an earlier year of the commitment period). This provision applies to both the basic adjustment method,⁶ and the main components used in the calculation of the adjustment, as appropriate, such as the source of international data, drivers, clusters and any other inventory parameter used.
10. Any adjustments to estimates of emissions and removals for purposes of establishing the assigned amount under Article 3, paragraphs 7 and 8, will only be applied during the initial review under Article 8.
11. Adjustments should be applied only for individual inventory years, specifically the base year or the latest year of the commitment period under review, and not for an entire time series or group of years, except for cases described in paragraphs 12 and 13 (b)–(c) below.
12. Adjustments should not be retroactively applied for any year preceding the inventory year subject to review, except in cases where recalculated estimates for previous commitment period years and/or instances relating to paragraph 13 (c) below were submitted by the Party together with the inventory information of the inventory year subject to review. Where the Party submits recalculated estimates for commitment period years prior to the inventory year subject to review, adjustments may be applied retroactively for those estimates that have not yet been reviewed, if the provisions of paragraph 4 above apply to these recalculated estimates.
13. For estimates of emissions and removals resulting from activities under Article 3, paragraphs 3 and 4, adjustments may be applied to an individual year or for a group of years, as follows:
- (a) For activities for which the Party has chosen to account annually, any adjustments should be applied during the annual review for the latest submitted inventory;
 - (b) For activities for which the Party has chosen to account for the entire commitment period, any adjustments should be considered and applied for any individual year or for

⁴ For the purpose of this technical guidance, *driver* refers to indicative data other than activity data or other inventory parameters used in the calculation of emission or removal estimates, that are correlated with emissions or removals, such as gross domestic product (GDP), population, associated production data, wells drilled, GDP per capita. The criteria for selecting drivers for the purpose of adjustments are given in paragraph 40.

⁵ For the purpose of this technical guidance, *cluster* refers to inventory-related data from a group of countries. The criteria for selecting clusters for the purpose of adjustments are given in paragraph 39.

⁶ For the purpose of this technical guidance, *basic adjustment methods* are those methods that provide an emission or removal estimate before the application of a conservativeness factor described in section III.D below.

any group of years of the commitment period, as necessary, only during the annual review for the final year of the commitment period. Adjustments shall not be considered or applied during any annual review prior to that for the final year of the commitment period;

- (c) For cropland management, grazing land management and revegetation under Article 3, paragraph 4, any adjustment to the emissions or removals in the base year resulting from these activities should be considered and applied according to the choice made by a Party regarding the periodicity of accounting of these activities (e.g. annually or at the end of the commitment period). In the case that the Party has chosen to account annually for these activities and submits recalculated estimates, adjustments may be applied retroactively for the base year, provided these recalculated estimates have not yet been subject to review and the provisions of paragraph 4 above apply to these recalculated estimates.

14. The selection of data and other components required for an adjustment method should take into account the time series for any such component.

15. Even if some aspects of a particular case are not fully covered by this technical guidance, the experts calculating the adjustment shall adhere to paragraphs 3–11 of decision 20/CMP.1 and, as closely as possible, to this technical guidance.

B. Applicability of adjustments

16. In considering the need for an adjustment, expert review teams should adhere to standard inventory review approaches, which also include assessment of the time series for a given estimate.

17. If the expert review team finds that an estimate submitted by a Party leads to an underestimation of emissions in the base year, or an overestimation of emissions in a year of the commitment period, the adjustment calculated in accordance with paragraph 54 below should not be applied, if such a calculation would result in an adjusted estimate with a value for the base year that is higher than the original estimate submitted by the Party or a value for a year of the commitment period that is lower than the original estimate.

18. Similarly, if the expert review team finds that an estimate submitted by a Party leads to an underestimation of removals resulting from any activity under Article 3, paragraph 3, or any elected activity under Article 3, paragraph 4, in a year of the commitment period, or an overestimation of removals in the base year for any elected activity under Article 3, paragraph 4 (cropland management, grazing land management, revegetation), the adjustment calculated in accordance with paragraph 54 below should not be applied if such a calculation would result in an adjusted estimate that is less conservative than the original estimate submitted by the Party.

19. An adjustment procedure should be initiated if the information provided by the Party is not sufficiently transparent, taking into account the provisions of paragraph 4 above.

20. If the expert review team identifies a deviation from the Revised 1996 IPCC Guidelines as elaborated by the IPCC good practice guidance that is caused by the allocation of estimates to a wrong category or activity under Article 3, paragraph 3 or 4, adjustments should not be applied in the following cases:⁷

⁷ In these cases, reallocation is recommended to the Party as part of the review of annual inventories under Article 8.

- (a) If reallocation to the correct source category does not affect total emissions from sources included in Annex A to the Kyoto Protocol
- (b) If the reallocation does not affect the accounting of emissions and/or removals from any individual activity under Article 3, paragraph 3, or any elected activity under Article 3, paragraph 4.

21. If a Party has chosen not to account for a given carbon pool for an activity under Article 3, paragraph 3, or an elected activity under Article 3, paragraph 4, an adjustment for this pool should not be applied for reasons of incompleteness as long as the Party has demonstrated, in accordance with paragraph 21 of the annex to decision 16/CMP.1, that the pool in question is not a source.

III. Methods and conservativeness

22. In general, expert review teams shall calculate each adjustment at the level at which the problem is identified, e.g. the IPCC category level or for the specific component in question. If the problem is limited to only one IPCC category, only the estimate for that source or sink should be adjusted. Similarly, if only one component of a given estimate is problematic (such as inconsistent, incorrect or misapplied emission factors or other inventory parameters, or activity data), the review team should replace only that component in calculating the adjusted estimate. For land use, land-use change and forestry (LULUCF) estimates, consideration should be given to the spatial disaggregation of estimates, where relevant and applicable.

23. If the necessary input data or parameters are not available at the IPCC category level at which the problem is identified, or the problem involves more than one component of an emission or removal estimation method used by the Party, or the complexity of the methodology used does not allow replacing only the problematic component in question, more aggregate data should be used as the basis for the adjustment. However, expert review teams should make every effort to make the adjustment at the levels at which the problems were identified, in order to avoid making data that do not qualify for an adjustment subject to the adjustment.

A. Choice of methods

24. If an emission or removal estimate needs to be adjusted,⁸ the expert review team should choose one of the basic adjustment methods in this technical guidance for the calculation of an estimate for purposes of adjustment.

25. In choosing the basic adjustment method and the input data that are appropriate for a specific adjustment case, expert review teams should, in general, follow the methods listed in priority order in table 1, as appropriate, unless otherwise indicated in the sector-specific elements included in chapter IV. If the requirements for the highest priority adjustment method according to the table are not available, the next preferred adjustment method should be used.

26. If a consistent time series of estimates prepared in accordance with the IPCC good practice guidance is available and no more than two years' estimates are missing, a simple extrapolation of this time series would be the most appropriate adjustment method.

⁸ For example, if an emission or removal estimate is missing, if the estimation method used by the Party was not in conformity with the Revised 1996 IPCC Guidelines as elaborated by the IPCC good practice guidance, or if there is a problem with more than one component (emission factor, activity data or other parameter) of the estimation method used by the Party.

27. If an adjustment is triggered by lack of transparency, and this lack of transparency precludes the expert review team from assessing possible cases of over- or underestimation or from assessing the cause of the potential deviation from the Revised 1996 IPCC Guidelines as elaborated by the IPCC good practice guidance (such as inappropriate activity data, emission factors or methods), expert review teams should also apply the basic adjustment methods in the order of priority listed in table 1.

Table 1. Basic adjustment methods to obtain an emission/removal estimate (in order of priority)

Basic adjustment method	Requirements/applicability
1 Default IPCC tier 1	Obtain activity data, emission factors and other estimation parameters following the prioritizations indicated in paragraphs 33 and 34 below
2 Extrapolation of emissions or removals	Only for a missing/inappropriate estimate for the year in question if a consistent time series of emission or removal estimates is available
3 Extrapolation/interpolation of emissions or removals based on a driver	Only for a missing/inappropriate estimate for the year in question if a consistent time series of emission or removal estimates and a corresponding driver are available
4 Correlation of emissions or removals between source/sink categories or gases within an inventory	Emission or removal estimate for the gas/source/sink category that is correlated to the emissions or removals that need adjustment
5 Average emission or removal rate from a cluster of countries based on a driver	Driver for the country in question and emission or removal rate per driver for a cluster of countries

Note: The methods in this table are those methods that provide an emission or removal estimate before the application of a conservativeness factor described in section III.D below. Further details on the basic adjustment methods listed in this table are given in section III.C below.

28. In the exceptional case where none of the basic adjustment methods listed in table 1 is suitable for a given adjustment case, expert review teams may use other adjustment methods. If adjustment methods other than those included in this technical guidance are applied, expert review teams should report the reason for not using any of the basic adjustment methods of this technical guidance and should justify why they consider the method chosen as appropriate.

B. Choice of data and other components

29. In choosing any input data for calculating an adjustment, expert review teams should give, as appropriate, preference to the national data available in the respective Party's inventory submission or made available by the Party before or during the review, provided that these data were not the cause for the adjustment.

30. Expert review teams should not conduct time-consuming searches for national data that have not been made available to the review team by the Party, or generate new country-specific data.

31. If national data as indicated in paragraph 29 above are not available or are not deemed suitable for the respective adjustment case, expert review teams should select data from the recommended international data sources included in the inventory review resources listed in appendix I.

32. The international data sources to be included in the inventory review resources listed in appendix I should meet most of the following criteria:

- (a) The organizations that make the data available are recognized intergovernmental organizations (e.g. United Nations, Food and Agriculture Organization of the United Nations, International Energy Agency (IEA))
- (b) The data are regularly updated, maintained and disseminated
- (c) The data are originally generated by the countries themselves (national statistics)
- (d) The data are widely applicable to Annex I Parties
- (e) The data are easily accessible by the secretariat and expert review teams (e.g. through Internet or CD-ROM), in a timely manner and at reasonable cost
- (f) Sufficient information is available to assess the applicability of activity data, drivers, emission factors or other estimation parameters (e.g. descriptions of how the data are collected, which definitions are used, geographic coverage).

1. Choice of activity data

33. If the calculation of an adjustment requires the use or replacement of activity data, e.g. either as input to the IPCC tier 1 default methodology or because the activity data are the cause of the adjustment, and if no national data are available, expert review teams should use, in order of preference:

- (a) Recommended international data sources as included in the inventory review resources listed in appendix I
- (b) Extrapolation (interpolation) methods if the international data sources do not provide data for the year in question, in which case the activity data should be obtained as follows (in order of preference):
 - (i) Extrapolation (interpolation) of national activity data, if these data are available as required in paragraph 29 above, and were collected in accordance with the IPCC good practice guidance
 - (ii) Extrapolation (interpolation) of data from recommended international data sources included in the inventory review resources listed in appendix I
 - (iii) Extrapolation (interpolation) using drivers or surrogate data from the inventory review resources listed in appendix I
- (c) Activity data based on appropriate drivers (e.g. activity data per capita) from a cluster of countries following the provisions of paragraphs 35–38 below.

2. Choice of emission factors or other inventory parameters

34. If the calculation of an adjustment requires the use or replacement of an emission factor or other inventory parameter, e.g. either as input to the IPCC tier 1 default methodology or because the emission factor or other inventory parameter itself is the cause of the adjustment, the expert review team should use, in order of preference:

- (a) IPCC default values from the IPCC good practice guidance, the Revised 1996 IPCC Guidelines or other recommended international data sources included in the inventory review resources listed in appendix I, and consistent with the IPCC good practice guidance. If emission factors or other inventory parameters from other international data

sources are used, the expert review team should, in the review report, justify and document the reason for their use

- (b) Extrapolation (interpolation) of the national emission factor, implied emission factor or average carbon-stock-change factor or other inventory parameter from earlier years as reported in the common reporting format (CRF) or national inventory report if the factor in question was prepared in accordance with the IPCC good practice guidance
- (c) Average implied emission factor or average carbon-stock-change factor or other inventory parameter from a cluster of countries obtained as described in paragraphs 35–38 below.

3. Choice of drivers and clusters

35. If the calculation of an adjustment requires the use of a driver, the expert review team should use the recommended drivers as included in the inventory review resources listed in appendix I.

36. If an average inventory parameter from a cluster of countries is used, expert review teams should follow the recommended approaches and tools for clustering of inventory data as included in the inventory review resources listed in appendix I. The inclusion in the inventory review resources listed in appendix I of drivers and approaches and tools for clustering of inventory data should be subject to guidance by lead reviewers in accordance with the provisions of appendix I.

37. Expert review teams should report the reason for the use of drivers and clusters and demonstrate the appropriateness of the cluster and/or the correlation between the driver and the emissions or removals. The use of drivers or approaches and tools for clustering of inventory data other than those recommended in the inventory review resources listed in appendix I should be explained and justified.

38. When using an average inventory parameter from a cluster of countries, assumptions made in choosing the cluster should be documented, as should how the given inventory average parameter compares with the default parameter or range provided in the IPCC good practice guidance or Revised 1996 IPCC Guidelines, where available. Similarly, when clustering is related to the use of a driver (application of an average driver-based emission or removal rate) from a cluster of countries, assumptions made for the composition of the cluster and the established relationship with the driver should be documented.

39. The clusters⁹ to be used in the adjustment process should, to the extent possible, be selected according to the following criteria, taking into account expert judgement:

- (a) Only Annex I Parties that have undergone an individual review, and for which the relevant data were deemed accurate during the review process and for which no adjustment to any inventory parameter of the gases or categories concerned was made, should be included. Inventory data from the Party subject to adjustment should be excluded from the cluster
- (b) The cluster should cover a minimum number of countries, as specified in the recommended approaches and tools for clustering of inventory data
- (c) The grouping of countries into clusters should, to the extent possible, take into account similar national circumstances. National circumstances could relate to, inter alia, climatic conditions, economic development, operation or management practices, types of

⁹ Because of the need to use reviewed data from other countries, clustering will only be possible for one year prior to the year in question. This implies that clustering would have to be combined with extrapolation techniques.

oil and gas activity, or the age of equipment or installations and their technical features, forest, land-use and soil characteristics, depending on the source or sink category in question.

40. The drivers to be used in the adjustment process should, to the extent possible, be selected according to the following criteria:

- (a) The driver shall be adequately correlated with the emissions or removals concerned
- (b) The significance of the relationship between the driver used and the emissions or removals calculated needs to be demonstrated, taking into account national circumstances.

C. Details and variations on the basic adjustment methods

41. The following section provides further guidance on the application of the basic adjustment methods described in section III.A above. Because this section covers possible variations of those methods, the numbering and ordering do not match the list in table 1.

1. Default IPCC tier 1 methods

42. This basic adjustment method refers to default IPCC tier 1 methods as described in the Revised 1996 IPCC Guidelines and as elaborated by the IPCC good practice guidance. If this adjustment method is used, the IPCC good practice guidance should always be consulted before the Revised 1996 IPCC Guidelines. This adjustment method will only be applicable if activity data are available from national sources in accordance with paragraph 29 above or from international data sources as described in paragraph 31 above, or are obtained as described in paragraph 33 above. An emission factor or other inventory parameter as required by the method and obtained as described in paragraph 34 above should be used.

2. Extrapolation and interpolation methods

43. If extrapolation and/or interpolation methods are used, the expert review team should follow the guidance on trend extrapolation and interpolation provided in the IPCC good practice guidance, in particular, section 7.3.2.2 of the *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* and section 5.6 of the *Good Practice Guidance for Land Use, Land-Use Change and Forestry*.

44. *Extrapolation of emission or removal estimates* is applicable if inventory estimates are missing or not prepared in accordance with the IPCC good practice guidance for the beginning (base year) and/or the end (latest inventory year) of the time series, and reviewed and time-series-consistent values are available for most years of the time series.

45. *Extrapolation of inventory parameters* (e.g. activity data): in addition to applying extrapolation methods to emission or removal estimates it may be necessary to use extrapolation at the level of activity data, emission factors or other inventory parameters, depending on the circumstances (see paragraphs 33 and 34 above).

46. *Extrapolation of emissions or removals using drivers or surrogate data* can be applied if inventory estimates are available for some years (at a minimum for all years but two) of the time series but are missing or not prepared in accordance with the IPCC good practice guidance for the required year (base year and/or latest inventory year). The emissions or removals need to be strongly correlated with other well-known and more readily available indicative data (drivers).

47. *Interpolation* is applicable for calculating an adjustment for a given inventory year provided that reviewed values of the adjacent years are available. This method would most likely be applied in exceptional cases only, but could be applicable to activity data, emission factors or other inventory parameters, depending on the circumstances.

3. Adjustment methods based on correlation of emissions/removals between categories or gases

48. *Correlation of emissions or removals between categories or gases* within an inventory could in some cases be used to estimate emissions or removals of a specific gas or from a specific category. For example, CH₄ and N₂O emissions from fuel combustion activities could be calculated from CO₂ emissions, if available.

4. Adjustment methods based on clustering of countries

49. *Application of average inventory parameters from a cluster of countries* with comparable national circumstances for the sector in question could be used to correct any inventory parameter (e.g. emission factor) that was found not to be in accordance with IPCC good practice guidance, or as input to the IPCC tier 1 method. The inventory review resources listed in appendix I provide recommended approaches and tools for clustering inventory data. If an adjustment has to be made for a given country, expert review teams should assign the Party in question to the cluster of countries to which it would most likely belong according to its national circumstances.

50. *Application of an average driver-based emission/removal rate from a cluster of countries* can be used if an emission or removal estimate is missing entirely or was not prepared in accordance with the IPCC good practice guidance, but data for a parameter driving the emissions or removals from that source or sink are available for the country in question. The estimate is derived by establishing a relationship between emissions/removals and an appropriate driver for the cluster of countries with comparable national circumstances, and applying this relationship to the Party in question. If data for the driver are not available for the year in question, the driver should be extrapolated as described in paragraph 46 above.

D. Conservative approach

51. The choice of adjustment methods and application of inventory parameters relevant to the calculation of adjustments should result in conservative estimates, in that emission estimates for the base year are not overestimated, and that emission estimates for a year of the commitment period are not underestimated relative to the likely true value of the emissions of the Party concerned.

52. Similarly, the choice of adjustment methods and application of inventory parameters relevant to the calculation of adjustments should result in conservative estimates, in that removal estimates for the base year are not underestimated, and that removal estimates for a year of the commitment period are not overestimated relative to the likely true value of the removals of the Party concerned.

53. As a principle to achieve conservative estimates, the calculation of an adjustment for a commitment period year should not result in an emission estimate that is lower or a removal estimate that is higher than that originally submitted by the Party, and an adjustment for an estimate of the base year should not result in an emission estimate that is higher or a removal estimate that is lower than the originally submitted estimate.

54. To ensure conservativeness for the purpose of adjustments, a conservativeness factor should be applied to the specific component of the estimation method used by the Party or to the emission/removal estimate generated by the basic adjustment methods described in section III.A of this technical guidance.

For illustration purposes, this approach may be expressed as:

$$M \times CF = \text{Adjusted estimate}$$

Where M is the component of an estimation method used by a Party, or the emission or removal estimate generated by a basic adjustment method in this technical guidance, and CF is the conservativeness factor.

55. The conservativeness factor should be selected from the tables of conservativeness factors provided in appendix III to this technical guidance. In the case that the tables do not provide a conservativeness factor for a given source/sink category, a conservativeness factor for a category with similar characteristics should be used.

56. For cases where only one component of an estimation method used by a Party is replaced, the expert review team should apply the conservativeness factor to that component, in accordance with paragraph 22 above. In other cases, the expert review team should apply the conservativeness factor to the emission or removal estimate generated by the basic adjustment method, in accordance with paragraph 24 above.

57. If, exceptionally, an expert review team considers that, in its expert judgement, the estimate generated by applying the basic approach referred to in paragraph 54 above is not conservative or is overly conservative for the Party concerned,¹⁰ the expert review team may use an alternative approach for applying conservativeness, and, where applicable, in accordance with the provisions of paragraphs 22 and 28 above. The expert review team shall justify and document the technical reason for its decision, and for its choice of the alternative approach used, and include this information in the review report.

IV. Sector-specific elements

58. When calculating adjustments, expert review teams should follow the provisions of chapter III taking into account the sector-specific elements given below, as appropriate. The provisions of this chapter apply to the calculation of the adjustments before applying the conservativeness factor described in section III.D above.

A. Fuel combustion

59. When adjusting CO₂ emissions from one or several disaggregated IPCC source categories, care should be taken that total CO₂ emissions are in accordance with the total fuel consumption, which is generally better known than the fuel consumption in each of the disaggregated IPCC source categories.

60. In the event that total CO₂ emissions from fuel combustion need to be adjusted, the reference approach is the preferred option for calculating an adjustment. Reference approach estimates should preferably be taken from the Party. If this is not considered appropriate, emission estimates from the IEA can be used.

61. If an N₂O emission factor from road transport needs to be replaced, increased use of catalytic converters leading to increased emission factors should be taken into account when calculating an adjustment.

¹⁰ That is, the expert review team believes that the likely true value of the emissions or removals from a source/sink for a year of the commitment period is higher or much lower than the adjusted estimate generated, or the true value of the emissions from a source in the base year is lower or much higher than the adjusted estimate generated, taking into account any guidance from lead reviewers on this matter.

B. Industrial processes

62. The expert review team should consider the possibility of double counting (for instance, the use of lime in iron and steel production) and avoid any double counting through the application of adjustments.

63. If adjusting hydrofluorocarbon (HFC), perfluorocarbon (PFC) and sulphur hexafluoride (SF₆) estimates from the consumption of halocarbons and SF₆, consideration should be given to the uncertainty of sales figures (e.g. for sales of these chemicals to the foam blowing industry) and other parameters (such as the composition of the mix in coolants) as given in the IPCC good practice guidance.

C. Agriculture

64. When adjusting emissions from agricultural soils, preference should be given to tier 1.a methods as provided in the IPCC good practice guidance.

65. The expert review team should note that when adjusting emissions from manure management systems, savannah burning, or field burning of agricultural residues, the same activity data should be used for CH₄ as for N₂O.

66. Similarly, consistent livestock data should be used for CH₄ and N₂O emissions from enteric fermentation and manure management, and for N₂O emissions from animal manure applied to soils.

D. Land use, land-use change and forestry

67. When using data from a cluster of countries, data should be selected on the basis of the similarity of these countries in relation to:

- (a) National circumstances such as climatic conditions, vegetation types, management regimes, national policies and others
- (b) Choices in relation to definitions, data acquisition methods, and reporting of carbon pools¹¹ and of activities in accordance with decision 16/CMP.1.

68. Adjustments should not be applied in the case that a Party has not reported a category contained in appendices to chapter 3 of the IPCC *Good Practice Guidance for Land Use, Land-Use Change and Forestry* unless it was previously included in the inventory.

69. Estimates of emissions and removals in the LULUCF sector and from LULUCF activities may be based not on annual data but on extrapolations and may be recalculated at a later stage. For this reason, the application of an adjustment to the base year of cropland management, grazing land management or revegetation through an extrapolation should be done with care, given that data may not be reported for the years between the base year and the commitment period. If an extrapolation is needed for the base year of these activities, the expert review team could use as a driver the time series for the LULUCF sector included in the annual inventory submission under the Convention.

70. When expert review teams are choosing a basic adjustment method from table 1 for the LULUCF sector, they should carefully assess whether the IPCC tier 1 methods are indeed the most appropriate methods to derive a conservative estimate.

¹¹ If a Party has chosen not to account for a given carbon pool for an activity under Article 3, paragraph 3, or an elected activity under Article 3, paragraph 4, an adjustment for this pool should not be applied for reasons of incompleteness as long as the Party has demonstrated, in accordance with paragraph 21 of the annex to decision 16/CMP.1, that the pool in question is not a source.

E. Waste

71. Data on populations and/or urban populations, and GDP per capita, could be used in some cases to estimate the volume of solid waste, taking into account national circumstances. Urban population and protein consumption data could be used to obtain activity data to estimate emissions from domestic wastewater handling. Production data associated with the main industries in a specific country could be used as a possible driver to estimate the amount of industrial wastewater, taking into account differences in technologies (e.g. emission per unit production).

72. For activity data, a cluster of countries based mainly on waste management practices could be used for estimating certain types of data, such as the waste generation rate, but not for estimating other types of data, such as the amount of waste incinerated or the amount of waste deposited, because these data largely depend on national environmental waste management policies.

73. When adjusting emissions from waste incineration, the applicability of drivers is very limited.

74. When adjusting emissions from solid waste disposal sites or wastewater treatment, the recovery of the methane needs to be considered. For solid waste disposal the expert review team should also take into account that if activity data are constant or increasing and the country used the IPCC tier 1 default method, this will have resulted in a conservative emission estimate.

APPENDIX I

List of inventory review resources relevant for the calculation of adjustments

1. This appendix lists inventory review resources relevant for the calculation of adjustments using the adjustment methods and approaches described in the technical guidance.
2. The information contained in the inventory review resources listed here will be maintained by the UNFCCC secretariat and made available to expert review teams by electronic means. This information will be updated periodically following the collective recommendation of lead reviewers on ways to improve the review process,¹ including the consistent application of the technical guidance by expert review teams.
 - A. Resources for supporting the review of greenhouse gas (GHG) inventories
 1. Recommendations for improving the technical review of GHG inventories and for applying common approaches in the review by expert review teams (*resulting from meetings of lead reviewers*)
 2. Recommended international data sources (*for activity data, drivers, emission factors and other estimation parameters*)
 3. Recommended approaches and tools for clustering of inventory data
 4. Recommended drivers (*prepared on the basis of data obtained from external data sources that have adequate correlation with GHG estimates*).
 - B. Specific resources for the calculation of adjustments
 1. Information on previous adjustment calculations by expert review teams.

¹ This would also include any guidance for identifying departures from the IPCC good practice guidance.

APPENDIX II

Provisions for review under Article 8 of the Kyoto Protocol that relate to adjustments**I. Timing**

1. Within the review of the inventory, the expert review team shall list all the problems identified, indicating which would need an adjustment, and send this list to the Annex I Party no later than 25 weeks from the submission due date of the annual inventory. This list should be prepared under the collective responsibility of the expert review team.
2. The Annex I Party shall comment on these questions within six weeks and, where requested by the review team, may provide revised estimates.
3. If adjustments are still needed, the expert review team shall calculate adjustments in accordance with this technical guidance, in consultation with the Party concerned, and shall prepare a draft individual inventory review report which includes, where appropriate, adjusted estimates and related information, within eight weeks of the receipt of the comments on the questions posed, and shall send the draft report to the Party concerned.
4. The Annex I Party shall be provided with four weeks to comment on the draft individual inventory review report and, where appropriate, on whether, and for what reasons, it accepts or rejects the adjustment. If the Party concerned disagrees with the proposed adjustment(s) the expert review team should send the notification from the Party, along with the recommendation of the expert review team, in its final report to the COP/MOP and the Compliance Committee, which will resolve the disagreement in accordance with the procedures and mechanisms on compliance.

II. Reporting

5. The following information on adjustments shall be reported by the expert review teams in the review reports:
 - (a) The original estimate, if applicable
 - (b) The underlying problem
 - (c) The adjusted estimate
 - (d) The rationale for the adjustment¹
 - (e) The assumptions, data and methodology used to calculate the adjustment
 - (f) A description of how the adjustment is conservative
 - (g) The expert review team's identification of possible ways for the Annex I Party to address the underlying problem
 - (h) The magnitude of the numerical values relating to an adjusted problem as:
 - (i) The percentage by which the aggregate adjusted GHG emissions for an Annex I Party exceed the aggregate submitted emissions, defined as aggregate submitted

¹ This includes procedures for selection of the calculation methods used for the adjustments.

emissions of the gases and from the sources listed in Annex A to the Kyoto Protocol, for any single year²

- (ii) The sum of the numerical values of the percentages calculated in paragraph 5 (h) above for all years of the commitment period for which the review has been conducted
- (i) Any adjustments relating to any activity under Article 3, paragraph 3, and/or any elected activity under Article 3, paragraph 4, taking into account any decision of the COP/MOP relating to cases of failure to submit information on these activities
- (j) The number of reviews that identified and adjusted the problem previously, and the percentage that the key source category contributed to the aggregate submitted emissions, defined as aggregate submitted emissions of the gases and from the sources listed in Annex A to the Kyoto Protocol
- (k) An indication whether the adjustment was agreed upon by the Annex I Party and the expert review team.

² “Any single year” refers to the years of the commitment period.

APPENDIX III

Tables of conservativeness factors

1. This appendix provides two sets of tables of conservativeness factors to be used in the calculation of adjustments to ensure that adjusted estimates are conservative, in accordance with paragraphs 51 and 52 of the technical guidance. The first set of tables (tables 1 and 2) covers conservativeness factors for sources included in Annex A to the Kyoto Protocol. The second set of tables (tables 3.a, 3.b, 4.a and 4.b) covers conservativeness factors for emissions and removals from land use, land-use change and forestry (LULUCF). For both sets of tables, these conservativeness factors are provided in two parts:

- (a) For Annex A sources, one for use in the calculation of adjustments for a base year estimate and one for the calculation of adjustments for a year of the commitment period
- (b) For estimates of emissions and removals from LULUCF, separate factors are provided for emissions and removals, for use in the calculation of adjustments to the LULUCF sector during the initial review for the purpose of establishing a Party's assigned amount (tables 3.a and 3.b), and for use in the calculation of adjustments of activities under Article 3, paragraphs 3 and 4 (tables 4.a and 4.b).

2. In all tables, conservativeness factors are provided for emission factors or other estimation parameters, activity data, and emission or removal estimates for each IPCC category and Article 3, paragraph 3 and 4 activity, and corresponding gas.

3. When a given category is not covered in the table, the provision of paragraph 55 of the technical guidance applies, such as for categories "other" under industrial processes, agriculture, LULUCF, waste and the IPCC sector "7 Other".

4. The conservativeness factors in these tables will be updated, as required, following the collective recommendation of lead reviewers, subject to approval by the Subsidiary Body for Scientific and Technological Advice.

1. Application of conservativeness factors to estimates from LULUCF (tables 3.a, 3.b, 4.a, 4.b)

5. According to paragraphs 22 and 23 of the technical guidance, adjustments should be applied at the lowest level possible at which the problem is identified. Therefore, there might be a need to apply adjustments to individual components (e.g. emission factors, inventory parameters or activity data) as well as to estimates of carbon stock changes from individual carbon pools.

6. To ensure that the selection of the conservativeness factors from the tables of conservativeness factors for LULUCF contributes to a conservative adjustment in line with paragraph 53 of the guidance, the expert review team should determine whether the individual component or the carbon stock change from the individual pool subject to adjustment leads to an increase of either emissions or removals, and choose the conservativeness factor accordingly from the respective tables, taking into account the year to which the adjustment is applied (base year or year of the commitment period, as appropriate). For any component or carbon stock change that contributes to increasing emissions, conservativeness factors should be selected from tables 3.a, 4.a or 4.b as appropriate; for any component or carbon stock change that contributes to increasing removals, conservativeness factors should be selected from tables 3.b, 4.a or 4.b, as appropriate.

2. Background information on the preparation of the tables of conservativeness factors

7. The conservativeness factors are derived from uncertainty values and parameters provided in the IPCC good practice guidance, and in some cases are determined by expert judgement for the purpose of this technical guidance, as indicated below:

- (a) If the IPCC good practice guidance provides an uncertainty range for a component, this range for that component is used;
- (b) If the IPCC good practice guidance provides an uncertainty range for emissions or removals from a particular category or a combined uncertainty range can be calculated from the uncertainty values and/or ranges of the input parameters using the tier 1 method, the range generated by applying the uncertainty value for the category is used;
- (c) In cases where the IPCC good practice guidance does not provide an uncertainty range for an estimate or a combined uncertainty range cannot be calculated because necessary information is not available, an assessed uncertainty range determined by expert judgement for the purposes of this technical guidance is used.

8. Different conservativeness factors are provided for use in adjustments to estimate for a base year and for a year of the commitment period. The conservativeness factors are calculated using the 25th or 75th percentile of the range generated by an uncertainty value for the gas and category, as appropriate, for use in an adjustment for the base year, or a year of the commitment period, assuming a log-normal distribution.

9. The uncertainty values have been grouped into five sets of uncertainty bands, with corresponding conservativeness factors, by assigning a given uncertainty value to a given band. These bands relate to the underlying uncertainties, as follows:

Estimated uncertainty range (%)	Assigned uncertainty band (%)	Conservativeness factors for emissions in the base year and/or removals in a year of the commitment period	Conservativeness factor for emissions in a year of the commitment period and/or removals in the base year
Less than or equal to 10	7	0.98	1.02
Greater than 10 and less than or equal to 30	20	0.94	1.06
Greater than 30 and less than or equal to 50	40	0.89	1.12
Greater than 50 and less than or equal to 100	75	0.82	1.21
Greater than 100	150	0.73	1.37

Table 1 Conservativeness factors for adjustments in the base year (for sources in Annex A to the Kyoto Protocol)

	Emission factors						Activity data	Emission estimates						
	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆		CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	
1. Energy														
A. Fuel combustion (sectoral approach)														
1. Energy industries	0.98	0.82	0.73				0.98	0.94	0.82	0.73				
2. Manufacturing industries and construction	0.98	0.82	0.73				0.94	0.94	0.73	0.73				
3. Transport (aviation and shipping)	0.98	0.89	0.82				0.82	0.82	0.73	0.73				
3. Transport (road and other)	0.98	0.89	0.82				0.94	0.94	0.89	0.73				
4. Other sectors	0.98	0.82	0.73				0.94	0.94	0.73	0.73				
5. Other	0.98	0.82	0.73				0.82	0.94	0.73	0.73				
Biomass (all fuel combustion sources)	N/A	0.82	0.82				0.82	N/A	0.73	0.73				
Fuel combustion (reference approach)	0.98						0.98	0.98						
B. Fugitive emissions from fuels														
1. Solid fuels	0.73	0.73					0.98	0.73	0.73					
2. Oil and natural gas	0.73	0.73	0.73				0.98	0.73	0.73	0.73				
2. Industrial processes														
A. Mineral products (cement)	0.94						0.98	0.94						
A. Mineral products (all other sources)	0.94						0.82	0.73						
B. Chemical industry	0.98	0.73					0.94	0.94	0.73					
Nitric acid production			0.82				0.94			0.73				
Adipic acid production			0.98				0.94			0.94				
C. Metal production	0.98	0.82			0.82	0.82	0.98	0.94	0.73			0.82	0.82	
D. Other production	0.94	0.73	0.82				0.94	0.89	0.73	0.73				
E. Production of halocarbons and SF ₆				0.89	0.82	0.82	0.82				0.89	0.82	0.82	
F. Consumption of halocarbons and SF ₆				0.82	0.82	0.82	0.82				0.82	0.82	0.82	
G. Other														
3. Solvent and other product use	0.94		0.94				0.82	0.94		0.94				
4. Agriculture														
A. Enteric fermentation		0.89					0.98		0.89					
B. Manure management		0.89	0.82				0.98		0.89	0.82				
C. Rice cultivation		0.89					0.94		0.89					
D. Agricultural soils ^a	0.82	0.82	0.73				0.82	0.73	0.82	0.73				
N ₂ O (fertilizer and manure)	N/A	N/A	0.82				0.94	N/A	N/A	0.73				
E. Prescribed burning of savannahs	N/A	0.94	0.94				0.82	N/A	0.82	0.82				
F. Field burning of agricultural residues	N/A	0.94	0.94				0.82	N/A	0.82	0.82				
G. Other														
6. Waste														
A. Solid waste disposal on land	0.89	0.89					0.82	0.73	0.73					
B. Waste-water handling		0.89	0.89				0.98		0.82	0.82				
C. Waste incineration	0.89	0.82	0.89				0.82	0.73	0.73	0.73				
D. Other														
7. Other (please specify)														

N/A: Not applicable, because Parties are either not required to report this source in the greenhouse gas inventories or not required to include it in their national total.

^a The conservativeness factor for N₂O from Agricultural soils is different to the conservativeness factor for N₂O from fertilizer and manure because the Agricultural soils category includes N₂O emissions from indirect sources and histosols.

Table 2 Conservativeness factors for adjustments in the commitment period (for sources in Annex A to the Kyoto Protocol)

	Emission factors						Activity data	Emission estimates								
	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆		CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆			
1. Energy																
A. Fuel combustion (sectoral approach)																
1. Energy industries	1.02	1.21	1.37				1.02	1.06	1.21	1.37						
2. Manufacturing industries and construction	1.02	1.21	1.37				1.06	1.06	1.37	1.37						
3. Transport (aviation and shipping)	1.02	1.12	1.21				1.21	1.21	1.37	1.37						
3. Transport (road and other)	1.02	1.12	1.21				1.06	1.06	1.12	1.37						
4. Other sectors	1.02	1.21	1.37				1.06	1.06	1.37	1.37						
5. Other	1.02	1.21	1.37				1.21	1.06	1.37	1.37						
Biomass (all fuel combustion sources)	N/A	1.21	1.21				1.21	N/A	1.37	1.37						
Fuel combustion (reference approach)	1.02						1.02	1.02								
B. Fugitive emissions from fuels																
1. Solid fuels	1.37	1.37					1.02	1.37	1.37							
2. Oil and natural gas	1.37	1.37	1.37				1.02	1.37	1.37	1.37						
2. Industrial processes																
A. Mineral products (cement)	1.06						1.02	1.06								
A. Mineral products (all other sources)	1.06						1.21	1.37								
B. Chemical industry	1.02	1.37					1.06	1.06	1.37							
Nitric acid production			1.21				1.06			1.37						
Adipic acid production			1.02				1.06			1.06						
C. Metal production	1.02	1.21			1.21	1.21	1.02	1.06	1.37				1.21	1.21		
D. Other production	1.06	1.37	1.21				1.06	1.12	1.37	1.37						
E. Production of halocarbons and SF ₆				1.12	1.21	1.21	1.21					1.12	1.21	1.21		
F. Consumption of halocarbons and SF ₆				1.21	1.21	1.21	1.21					1.21	1.21	1.21		
G. Other																
3. Solvent and other product use	1.06		1.06				1.21	1.06		1.06						
4. Agriculture																
A. Enteric fermentation		1.12					1.02		1.12							
B. Manure management		1.12	1.21				1.02		1.12	1.21						
C. Rice cultivation		1.12					1.06		1.12							
D. Agricultural soils ^a	1.21	1.21	1.37				1.21	1.37	1.21	1.37						
N ₂ O (fertilizer and manure)	N/A	N/A	1.21				1.06	N/A	N/A	1.37						
E. Prescribed burning of savannahs	N/A	1.06	1.06				1.21	N/A	1.21	1.21						
F. Field burning of agricultural residues	N/A	1.06	1.06				1.21	N/A	1.21	1.21						
G. Other																
6. Waste																
A. Solid waste disposal on land	1.12	1.12					1.21	1.37	1.37							
B. Waste-water handling		1.12	1.12				1.02		1.21	1.21						
C. Waste incineration	1.12	1.21	1.12				1.21	1.37	1.37	1.37						
D. Other																
7. Other (please specify)																

N/A: Not applicable, because Parties are either not required to report this source in the greenhouse gas inventories or not required to include it in their national total.

^a The conservativeness factor for N₂O from Agricultural soils is different to the conservativeness factor for N₂O from fertilizer and manure because the Agricultural soils category includes N₂O emissions from indirect sources and histosols.

Table 3.a Conservativeness factors for adjustments to the land use, land-use change and forestry sector during the initial review for the purpose of establishing a Party's assigned amount under Article 3, paragraphs 7 and 8

Conservativeness factors for emissions^a

	Emission factors and other estimation parameters			Activity data	Emission estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
5. LULUCF							
A. Forest Land							
1. Forest Land remaining Forest Land							
Carbon stock changes in living biomass				0.98	0.73		
Annual increment	0.73			0.98			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	0.94			0.98			
Carbon stock changes in dead organic matter				0.98	0.73		
Dead wood	0.73			0.98			
Litter	0.82			0.98			
Carbon stock changes in soils	0.82			0.98	0.73		
2. Land converted to Forest Land							
Carbon stock changes in living biomass				0.94	0.73		
Annual increment	0.73			0.94			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	0.82			0.94			
Carbon stock changes in dead organic matter				0.94			
Dead wood	0.98			0.94	0.94		
Litter	0.82			0.94	0.73		
Carbon stock changes in soils	0.82			0.94	0.73		
B. Cropland							
1. Cropland remaining Cropland							
Carbon stock changes in living biomass	0.82			0.98	0.82		
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.98	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.98	0.82		
2. Land converted to Cropland							
Carbon stock changes in living biomass	0.82			0.94	0.82		
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.94	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.94	0.82		
C. Grassland							
1. Grassland remaining Grassland							
Carbon stock changes in living biomass				0.98	0.73		
Above-ground biomass	0.82			0.98			
Root to shoot ratio	0.73			0.98			
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.98	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.98	0.82		
2. Land converted to Grassland							
Carbon stock changes in living biomass				0.94	0.73		
Above-ground biomass	0.82			0.94			
Root to shoot ratio	0.73			0.94			
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.94	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.94	0.82		

Table 3.a (continued)

	Emission factors and other estimation parameters			Activity data	Emission estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
D. Wetlands							
1. Wetlands remaining Wetlands							
Carbon stock changes in living biomass and soils (peat extraction and flooded lands)	0.73			0.98	0.73		
2. Land converted to Wetlands							
Carbon stock changes in living biomass				0.94			
Peat extraction	0.82			0.94	0.82		
Flooded land	0.82			0.94	0.73		
Carbon stock changes in soils (peat extraction)	0.82			0.94	0.82		
E. Settlements							
1. Settlements remaining Settlements							
Carbon stock changes in living biomass				0.98	0.82		
Crown cover and number of trees	0.94			0.98			
Removal factors and other estimation parameters	0.89			0.98			
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.98	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.98	0.82		
2. Land converted to Settlements							
Carbon stock changes in living biomass	0.82			0.94	0.82		
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.94	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.94	0.82		
F. Other Land							
1. Other Land remaining Other Land							
Carbon stock changes in living biomass	0.82			0.98	0.73		
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.98	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.98	0.73		
2. Land converted to Other Land							
Carbon stock changes in living biomass	0.82			0.94	0.82		
Carbon stock changes in dead organic matter	See Forest Land remaining Forest Land			0.94	See Forest Land remaining Forest Land		
Carbon stock changes in soils	0.82			0.94	0.82		
Cross-cutting sources							
Fertilizer use			0.73	0.94			0.73
Drained soils (peat extraction) and flooded lands		0.73	0.73	0.94		0.73	0.73
Drained soils (excluding peat extraction)		0.73	0.73	0.82		0.73	0.73
Disturbances associated with land-use conversions to Cropland ^b			0.73/0.82	0.94			0.73
Lime application (limestone and dolomite)	0.98			0.82	0.82		
Controlled burning and wildfires ^c		0.82	0.82	0.94		0.82	0.82

Note: BEF = biomass expansion factor

^a Including for decreases in carbon stocks in individual carbon pools.

^b For N₂O emission factors and other parameters, the value of 0.73 is to be used for emission factors, whereas 0.82 is to be used for any other estimation parameters.

^c For Parties that do not include CO₂ emissions from biomass burning in their carbon stock changes estimates under the respective land categories, the values given for the "Other estimation parameters" or "Carbon stock changes" from the land categories where the burning occurs should be used.

Table 3.b Conservativeness factors for adjustments to the land use, land-use change and forestry sector during the initial review for the purpose of establishing a Party's assigned amount under Article 3, paragraphs 7 and 8

Conservativeness factors for removals^a

	Emission factors and other estimation parameters			Activity data	Removal estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
5. LULUCF							
A. Forest Land							
1. Forest Land remaining Forest Land							
Carbon stock changes in living biomass				1.02	1.37		
Annual increment	1.37			1.02			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	1.06			1.02			
Carbon stock changes in dead organic matter				1.02	1.37		
Dead wood	1.37			1.02			
Litter	1.21			1.02			
Carbon stock changes in soils	1.21			1.02	1.37		
2. Land converted to Forest Land							
Carbon stock changes in living biomass				1.06	1.37		
Annual increment	1.37			1.06			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	1.21			1.06			
Carbon stock changes in dead organic matter				1.06			
Dead wood	1.02			1.06	1.06		
Litter	1.21			1.06	1.37		
Carbon stock changes in soils	1.21			1.06	1.37		
B. Cropland							
1. Cropland remaining Cropland							
Carbon stock changes in living biomass	1.21			1.02	1.21		
Carbon stock changes in dead organic matter				1.02			
See Forest Land remaining Forest Land							
Carbon stock changes in soils	1.21			1.02	1.21		
2. Land converted to Cropland							
Carbon stock changes in living biomass	1.21			1.06	1.21		
Carbon stock changes in dead organic matter				1.06			
See Forest Land remaining Forest Land							
Carbon stock changes in soils	1.21			1.06	1.21		
C. Grassland							
1. Grassland remaining Grassland							
Carbon stock changes in living biomass				1.02	1.37		
Above-ground biomass	1.21			1.02			
Root to shoot ratio	1.37			1.02			
Carbon stock changes in dead organic matter				1.02			
See Forest Land remaining Forest Land							
Carbon stock changes in soils	1.21			1.02	1.21		
2. Land converted to Grassland							
Carbon stock changes in living biomass				1.06	1.37		
Above-ground biomass	1.21			1.06			
Root to shoot ratio	1.37			1.06			
Carbon stock changes in dead organic matter				1.06			
See Forest Land remaining Forest Land							
Carbon stock changes in soils	1.21			1.06	1.21		

Table 3.b (continued)

	Emission factors and other estimation parameters			Activity data	Removal estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
D. Wetlands							
1. Wetlands remaining Wetlands							
Carbon stock changes in living biomass and soils (peat extraction and flooded lands)	1.37			1.02	1.37		
2. Land converted to Wetlands							
Carbon stock changes in living biomass				1.06			
Peat extraction	1.21			1.06	1.21		
Flooded land	1.21			1.06	1.37		
Carbon stock changes in soils (peat extraction)	1.21			1.06	1.21		
E. Settlements							
1. Settlements remaining Settlements							
Carbon stock changes in living biomass				1.02	1.21		
Crown cover and number of trees	1.06			1.02			
Removal factors and other estimation parameters	1.12			1.02			
Carbon stock changes in dead organic matter				See Forest Land remaining Forest Land	1.02		See Forest Land remaining Forest Land
Carbon stock changes in soils	1.21			1.02	1.21		
2. Land converted to Settlements							
Carbon stock changes in living biomass	1.21			1.06	1.21		
Carbon stock changes in dead organic matter				See Forest Land remaining Forest Land	1.06		See Forest Land remaining Forest Land
Carbon stock changes in soils	1.21			1.06	1.21		
F. Other Land							
1. Other Land remaining Other Land							
Carbon stock changes in living biomass	1.21			1.02	1.37		
Carbon stock changes in dead organic matter				See Forest Land remaining Forest Land	1.02		See Forest Land remaining Forest Land
Carbon stock changes in soils	1.21			1.02	1.37		
2. Land converted to Other Land							
Carbon stock changes in living biomass	1.21			1.06	1.21		
Carbon stock changes in dead organic matter				See Forest Land remaining Forest Land	1.06		See Forest Land remaining Forest Land
Carbon stock changes in soils	1.21			1.06	1.21		

Note: BEF = biomass expansion factor

^a Including for increases in carbon stocks in individual carbon pools.

Table 4.a Conservativeness factors for adjustments to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4**Conservativeness factors for removals^a in a year of the commitment period / emissions^a in the base year^b**

	Emission factors and other estimation parameters			Activity data	Emission/removal estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
Supplementary information reported under the Kyoto Protocol							
Article 3.3 activities							
A.1 Afforestation and reforestation							
Carbon stock changes in above-ground biomass				0.94	0.73		
Annual increment	0.73			0.94			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	0.82			0.94			
Carbon stock changes in below-ground biomass				0.94	0.73		
Annual increment	0.73			0.94			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	0.82			0.94			
Carbon stock changes in litter	0.82			0.94	0.73		
Carbon stock changes in dead wood	0.98			0.94	0.94		
Carbon stock changes in soils	0.82			0.94	0.73		
A.2 Deforestation							
Carbon stock changes in above-ground biomass	0.82			0.94	0.82		
Carbon stock changes in below-ground biomass	0.82			0.94	0.82		
Carbon stock changes in litter	0.82			0.94	0.73		
Carbon stock changes in dead wood	0.73			0.94	0.73		
Carbon stock changes in soils							
Mineral soils (management practices and estimation parameters) ^c	0.82			0.98	0.73		
Organic soils	0.82			0.98	0.82		
Article 3.4 activities							
B.1 Forest management							
Carbon stock changes in above-ground biomass				0.98	0.73		
Annual increment	0.73			0.98			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	0.94			0.98			
Carbon stock changes in below-ground biomass				0.98	0.73		
Annual increment	0.73			0.98			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	0.94			0.98			
Carbon stock changes in litter	0.82			0.98	0.73		
Carbon stock changes in dead wood	0.73			0.98	0.73		
Carbon stock changes in soils	0.82			0.98	0.73		

Table 4.a (continued)

	Emission factors and other estimation parameters			Activity data	Emission/removal estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
B.2 Cropland management							
Carbon stock changes in above-ground biomass	0.82			0.98	0.82		
Carbon stock changes in below-ground biomass	0.82			0.98	0.82		
Carbon stock changes in litter	0.82			0.98	0.73		
Carbon stock changes in dead wood	0.73			0.98	0.73		
Carbon stock changes in soils				0.98			
Mineral soils ^d (management practices and estimation parameters) ^c	0.82			0.98/0.94	0.73		
Organic soils	0.82			0.98	0.82		
B.3 Grazing land management							
Carbon stock changes in above-ground biomass	0.82			0.98	0.82		
Carbon stock changes in below-ground biomass	0.73			0.98	0.73		
Carbon stock changes in litter	0.82			0.98	0.73		
Carbon stock changes in dead wood	0.73			0.98	0.73		
Carbon stock changes in Soil (management practices and estimation parameters) ^c	0.82			0.98	0.73		
B.4 Revegetation							
Carbon stock changes in above-ground biomass	0.82			0.98	0.82		
Carbon stock changes in below-ground biomass	0.82			0.98	0.82		
Carbon stock changes in litter	0.82			0.98	0.73		
Carbon stock changes in dead wood	0.73			0.98	0.73		
Carbon stock changes in soils	0.82			0.98	0.73		
Cross-cutting sources							
N fertilization			0.73	0.94			0.73
Drainage of soils (forest management)			0.73	0.82			0.73
Lime application	0.98			0.82	0.82		
Biomass burning (for Article 3.3 activities and Forest management under Article 3.4) ^c		0.82	0.82	0.94		0.82	0.82
Biomass burning (for all Article 3.4 activities except Forest management) ^c		0.82	0.82	0.82		0.82	0.82
Disturbances associated with land-use conversions to cropland ^f			0.73/ 0.82	0.94			0.73

Note: BEF = biomass expansion factor

^a Including for increases and decreases in carbon stocks in individual carbon pools (in a year of the commitment period and base year, respectively).

^b For the base year, conservativeness factors given in this table apply to only Cropland management, Grazing land management and Revegetation under Article 3, paragraph 4, of the Kyoto Protocol.

^c For adjustments concerning management practices and estimation parameters, the conservativeness factors given for emission factors and other estimation parameters are to be used.

^d With regard to activity data, the value of 0.94 is to be used for pre-1990 data.

^e For Parties that do not include CO₂ emissions from biomass burning in their carbon stock change estimates under the respective activities, the values given for the "Other estimation parameters" or "Carbon stock changes" from the activities where the burning occurs, should be used.

^f For N₂O emission factors and other parameters the value of 0.73 is to be used for emission factors, whereas 0.82 is to be used for any other estimation parameters.

Table 4.b Conservativeness factors for adjustments to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4

Conservativeness factors for emissions^a in a year of the commitment period / removals^a in the base year^b

	Emission factors and other estimation parameters			Activity data	Emission/removal estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
Supplementary information reported under the Kyoto Protocol							
Article 3.3 activities							
A.1 Afforestation and reforestation							
Carbon stock changes in above-ground biomass				1.06	1.37		
Annual increment	1.37			1.06			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	1.21			1.06			
Carbon stock changes in below-ground biomass				1.06	1.37		
Annual increment	1.37			1.06			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	1.21			1.06			
Carbon stock changes in litter	1.21			1.06	1.37		
Carbon stock changes in dead wood	1.02			1.06	1.06		
Carbon stock changes in soils	1.21			1.06	1.37		
A.2 Deforestation							
Carbon stock changes in above-ground biomass	1.21			1.06	1.21		
Carbon stock changes in below-ground biomass	1.21			1.06	1.21		
Carbon stock changes in litter	1.21			1.06	1.37		
Carbon stock changes in dead wood	1.37			1.06	1.37		
Carbon stock changes in soils							
Mineral soils (management practices and estimation parameters) ^c	1.21			1.02	1.37		
Organic soils	1.21			1.02	1.21		
Article 3.4 activities							
B.1 Forest management							
Carbon stock changes in above-ground biomass				1.02	1.37		
Annual increment	1.37			1.02			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	1.06			1.02			
Carbon stock changes in below-ground biomass				1.02	1.37		
Annual increment	1.37			1.02			
Other estimation parameters (wood density, BEFs, root to shoot ratio, biomass loss (fellings) etc.)	1.06			1.02			
Carbon stock changes in litter	1.21			1.02	1.37		
Carbon stock changes in dead wood	1.37			1.02	1.37		
Carbon stock changes in soils	1.21			1.02	1.37		

Table 4.b (continued)

	Emission factors and other estimation parameters			Activity data	Emission/removal estimates		
	CO ₂	CH ₄	N ₂ O		CO ₂	CH ₄	N ₂ O
B.2 Cropland management							
Carbon stock changes in above-ground biomass	1.21			1.02	1.21		
Carbon stock changes in below-ground biomass	1.21			1.02	1.21		
Carbon stock changes in litter	1.21			1.02	1.37		
Carbon stock changes in dead wood	1.37			1.02	1.37		
Carbon stock changes in soils							
Mineral soils ^d (management practices and estimation parameters) ^c	1.21			1.02/1.06	1.37		
Organic soils	1.21			1.02	1.21		
B.3 Grazing land management							
Carbon stock changes in above-ground biomass	1.21			1.02	1.21		
Carbon stock changes in below-ground biomass	1.37			1.02	1.37		
Carbon stock changes in litter	1.21			1.02	1.37		
Carbon stock changes in dead wood	1.37			1.02	1.37		
Carbon stock changes in soils (management practices and estimation parameters) ^c	1.21			1.02	1.37		
B.4 Revegetation							
Carbon stock changes in above-ground biomass	1.21			1.02	1.21		
Carbon stock changes in below-ground biomass	1.21			1.02	1.21		
Carbon stock changes in litter	1.21			1.02	1.37		
Carbon stock changes in dead wood	1.37			1.02	1.37		
Carbon stock changes in soils	1.21			1.02	1.37		
Cross-cutting sources							
N fertilization			1.37	1.06			1.37
Drainage of soils (forest management)			1.37	1.21			1.37
Lime application	1.02			1.21	1.21		
Biomass burning (for Article 3.3 activities and Forest management under Article 3.4) ^e		1.21	1.21	1.06		1.21	1.21
Biomass burning (for all Article 3.4 activities except Forest management) ^e		1.21	1.21	1.21		1.21	1.21
Disturbances associated with land-use conversions to cropland ^f			1.37/ 1.21	1.06			1.37

Note: BEF = biomass expansion factor

^a Including for decreases and increases in carbon stocks in individual carbon pools (in a year of the commitment period and base year, respectively).

^b For the base year, conservativeness factors given in this table apply to only Cropland management, Grazing land management and Revegetation under Article 3, paragraph 4, of the Kyoto Protocol.

^c For adjustments concerning management practices and estimation parameters, the conservativeness factors given for emission factors and other estimation parameters are to be used.

^d With regard to activity data, the value of 1.06 is to be used for pre-1990 data.

^e For Parties that do not include CO₂ emissions from biomass burning in their carbon stock change estimates under the respective activities, the values given for the "Other estimation parameters" or "Carbon stock changes" from the activities where the burning occurs should be used.

^f For N₂O emission factors and other parameters the value of 1.37 is to be used for emission factors, whereas 1.21 is to be used for any other estimation parameters.

Decision 21/CMP.1

Issues relating to adjustments under Article 5, paragraph 2, of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, Having considered decisions 21/CP.7, 23/CP.7, 20/CP.9 and 15/CP.11,

1. *Requests* that lead reviewers, as defined in paragraphs 36–42 of the guidelines for review under Article 8 of the Kyoto Protocol (decision 23/CP.7), collectively consider and make recommendations on:
 - (a) Means to improve the consistent application, by expert review teams, of the technical guidance on methodologies for adjustments under Article 5, paragraph 2, of the Kyoto Protocol, especially the approaches to ensure conservativeness of adjusted estimates;
 - (b) The development and regular update of the information in the inventory review resources listed in appendix I to the technical guidance;
 - (c) Means to ensure a common approach in applying the provisions of paragraph 57 of the technical guidance and to limit the flexibility given to the expert review teams in this regard, if considered necessary;
 - (d) Updating, as appropriate, before the beginning of reporting for the commitment period and thereafter, whenever necessary, the tables of conservativeness factors included in appendix III to the technical guidance, including the underlying construction and structure of the uncertainty bands of those tables;
2. *Requests* the secretariat to include any recommendations from the collective consideration of the lead reviewers in their annual report, referred to in paragraph 40 of the guidelines for review under Article 8 of the Kyoto Protocol, to the Subsidiary Body for Scientific and Technological Advice for its consideration;
3. *Requests* the Subsidiary Body for Scientific and Technological Advice, following the consideration of the report referred to in paragraph 2 above, to take any appropriate action pursuant to the recommendations from lead reviewers referred to in paragraph 1 (c) and (d) above;
4. *Requests* the secretariat, following the collective recommendation of lead reviewers, to regularly update the information in the inventory review resources listed in appendix I to the technical guidance;
5. *Requests* the secretariat to archive information on adjustments contained in review reports and other relevant information, and make it available and easily accessible for expert review teams;
6. *Decides* that with respect to any adjustments applied retroactively in accordance with paragraph 12 of the technical guidance, only the adjustment applied for the inventory year under review shall be relevant for the eligibility requirement laid out in paragraph 3 (e) of decision 15/CMP.1.

*2nd plenary meeting
30 November 2005*

Decision 22/CMP.1

Guidelines for review under Article 8 of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling Article 8 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change,

Having considered decision 23/CP.7, adopted by the Conference of the Parties at its seventh session,

Recognizing the importance of the review process under Article 8 for the implementation of other provisions of the Kyoto Protocol,

1. *Adopts* the guidelines for review under Article 8 of the Kyoto Protocol as contained in the annex to the present decision;
2. *Decides* that for each Party included in Annex I the review prior to the first commitment period shall be initiated upon receipt of the report as mentioned in paragraph 6 of the annex to decision 13/CMP.1. The review prior to the commitment period for each Party, including the procedures for adjustments under Article 5, paragraph 2, between the expert review team and the Party, shall be completed within 12 months of the initiation of the review and a report shall be forwarded expeditiously to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol and the Compliance Committee. Further expertise and resources shall be provided to ensure the quality of the review in the case where review has to take place for several Parties at the same time;
3. *Decides* to start the periodic review for each Party included in Annex I when it submits its first national communication under the Kyoto Protocol;
4. *Decides* to start the annual review for each Party included in Annex I in the year that the Party commences reporting under Article 7, paragraph 1;
5. *Decides* to start the annual review in the year following the submission of the report referred to in paragraph 6 of the annex to decision 13/CMP.1 for those Parties included in Annex I that started reporting information under Article 7, paragraph 1, on a voluntary basis earlier than required under Article 7, paragraph 3;
6. *Invites* Parties that opt to submit information for review before January 2007 to notify the secretariat at their earliest convenience in order to facilitate the timely establishment of the expert review teams.

ANNEX

Guidelines for review under Article 8 of the Kyoto Protocol¹**Part I: General approach to review****A. Applicability**

1. Each Party included in Annex I to the Convention which is also a Party to the Kyoto Protocol will be subject to review of information submitted under Article 7 in accordance with the provisions of these guidelines. For these Parties, the review process established under these guidelines shall encompass any existing review under the Convention.

B. Objectives

2. The objectives for review under Article 8 of the Kyoto Protocol are:
- (a) To establish a process for a thorough, objective and comprehensive technical assessment of all aspects of the implementation of the Kyoto Protocol by Parties included in Annex I;
 - (b) To promote consistency and transparency in the review of information submitted by Parties included in Annex I under Article 7 of the Kyoto Protocol;
 - (c) To assist Parties included in Annex I in improving their reporting of information under Article 7 and the implementation of their commitments under the Kyoto Protocol;
 - (d) To provide the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP), and the Compliance Committee, with a technical assessment of the implementation of the Kyoto Protocol by Parties included in Annex I.

C. General approach

3. The provisions of these guidelines shall apply to the review of information submitted by Parties included in Annex I under Article 7, relevant decisions of the COP/MOP and relevant decisions of the Conference of the Parties (COP) specific to Parties included in Annex I.

4. The expert review team shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of the Kyoto Protocol and identify any potential problems in, and factors influencing, the fulfilment of commitments. The expert review team shall conduct technical reviews to provide information expeditiously to the COP/MOP and the Compliance Committee in accordance with the procedures in these guidelines.

5. At any stage in the review process, expert review teams may put questions to, or request additional or clarifying information from, the Parties included in Annex I regarding a potential problem identified by the team. The expert review team should offer advice to Parties included in Annex I on how to correct problems that they identify, taking into account the national circumstances of the Party. The expert review team shall also provide technical advice to the COP/MOP or the Compliance Committee, upon request.

6. Parties included in Annex I should provide the expert review team with access to information necessary to substantiate and clarify the implementation of their commitments under the Kyoto Protocol,

¹ “Article” in these guidelines refers to an article of the Kyoto Protocol, unless otherwise specified.

in accordance with relevant guidelines adopted by the COP and/or the COP/MOP and, during the in-country visits, should also provide appropriate working facilities. Parties included in Annex I should make every reasonable effort to respond to all questions and requests from the expert review team for additional clarifying information relating to identified problems and correct such problems within the time limits set out in these guidelines.

1. Questions of implementation

7. If the expert review team identifies potential problems during the review, it shall put questions to the Party included in Annex I regarding these potential problems and offer advice to the Party on how to correct them. The Party may correct the problems or provide additional information within the time frame set out in these guidelines. Subsequently, a draft of each review report shall be forwarded to the Party subject to review for comment.

8. Only if an unresolved problem pertaining to language of a mandatory nature in these guidelines influencing the fulfilment of commitments still exists after the Party included in Annex I has been provided with opportunities to correct the problem within the time frames established under the relevant review procedures, shall that problem be listed as a question of implementation in the final review reports. An unresolved problem pertaining to language of a non-mandatory nature in these guidelines shall be noted in the final review report, but shall not be listed as a question of implementation.

2. Confidentiality

9. Pursuant to a request from the expert review team for additional data or information or access to data used in the preparation of the inventory, a Party included in Annex I may indicate whether such information and data are confidential. In such a case, the Party should provide the basis for protecting such information, including any domestic law, and upon receipt of assurance that the data will be maintained as confidential by the expert review team, shall submit the confidential data in accordance with domestic law and in a manner that allows the expert review team access to sufficient information and data for the assessment of conformity with the Intergovernmental Panel on Climate Change (IPCC) *Revised 1996 IPCC Guidelines for Greenhouse Gas Inventories* as elaborated by the IPCC *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* and any good practice guidance adopted by the COP/MOP. Any confidential information and data submitted by a Party in accordance with this paragraph shall be maintained as confidential by the expert review team, in accordance with any decisions on this matter adopted by the COP/MOP.

10. An expert review team member's obligation not to disclose confidential information shall continue after termination of his or her service on the expert review team.

D. Timing and procedures

1. Initial review

11. Each Party included in Annex I shall be subject to review prior to the first commitment period or within one year after the entry into force of the Kyoto Protocol for that Party, whichever is later.

12. The expert review team shall review the following information contained or referenced in the report referred to in paragraph 6 of the annex to decision 13/CMP.1 for each Party included in Annex I:

- (a) Complete inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for all years from 1990, or other approved base year or period under Article 3, paragraph 5, to the most recent year available with an emphasis on the base year or period, including the selected base year for hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride in accordance with

Article 3, paragraph 8, and the most recent year, for conformity with Article 5, paragraph 2, in accordance with the procedures contained in part II of these guidelines

- (b) The calculation of the assigned amount pursuant to Article 3, paragraphs 7 and 8, and the commitment period reserve, for conformity with the modalities for the accounting of assigned amounts under Article 7, paragraph 4, in accordance with the procedures contained in part III of these guidelines
- (c) The national system pursuant to Article 5, paragraph 1, in accordance with the procedures contained in part IV of these guidelines
- (d) The national registry pursuant to Article 7, paragraph 4, in accordance with the procedures contained in part V of these guidelines.

13. The first national communication due under the Convention after the Kyoto Protocol has entered into force for that Party will be reviewed prior to the first commitment period in accordance with the provisions of paragraph 19 below.²

14. For each Party included in Annex I, the elements specified in paragraph 12 (a) to 12 (d) above shall be reviewed in conjunction. An in-country visit shall be conducted as part of this review.

2. Annual review

15. Each Party included in Annex I shall be subject to an annual review of:

- (a) The annual inventory, including the national inventory report and the common reporting format (CRF), for conformity with Article 5, paragraph 2, in accordance with the procedures contained in part II of these guidelines
- (b) The following supplementary information, in accordance with the guidelines for the preparation of the information required under Article 7, section I:
 - (i) Information provided during the commitment period for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, for conformity with the requirements of relevant decisions of the COP/MOP, in accordance with the procedures contained in part II of these guidelines
 - (ii) Information on assigned amounts pursuant to Article 3, paragraphs 7 and 8, emission reduction units, certified emission reductions, assigned amount units and removal units, in accordance with the procedures contained in part III of these guidelines
 - (iii) Changes in national systems in accordance with the procedures contained in part IV of these guidelines
 - (iv) Changes in national registries in accordance with the procedures contained in part V of these guidelines
 - (v) Information provided on matters relating to Article 3, paragraph 14, and supplementary information in accordance with the procedures contained in part VI of these guidelines.

² This will be the case if this national communication is submitted prior to the first commitment period.

16. The annual review, including adjustment procedures as part of the review of the annual or base year inventory, shall be concluded within one year of the due date for submission of the information to be reported under Article 7, paragraph 1.

17. The elements specified in paragraph 15 (b) (iii) and (iv) above shall be subject to review as part of the annual review only if problems or significant changes have been identified by an expert review team or if the Party included in Annex I reports significant changes in its inventory report as defined in paragraphs 101 and 114 of these guidelines.

18. The elements described in paragraph 15 above shall be reviewed together for each Party included in Annex I by a single expert review team.

3. Periodic review

19. Each national communication submitted under the Kyoto Protocol by a Party included in Annex I shall be subject to a scheduled in-country review in accordance with part VII of these guidelines.³

E. Expert review teams and institutional arrangements

1. Expert review teams

20. Each submission under Article 7 shall be assigned to a single expert review team that shall be responsible for performing the review in accordance with the procedures and time frames established in these guidelines. A submission by a Party included in Annex I shall not be reviewed in two successive review years by expert review teams with identical composition.

21. Each expert review team shall provide a thorough and comprehensive technical assessment of information submitted under Article 7 and shall, under its collective responsibility, prepare a review report, assessing the implementation of the commitments of the Party included in Annex I and identifying any potential problems in, and factors influencing, the fulfilment of commitments. The expert review teams shall refrain from making any political judgement. If needed, the expert review teams shall calculate adjustments in accordance with any guidance under Article 5, paragraph 2, adopted by the COP/MOP, in consultation with the Party concerned.

22. Expert review teams shall be coordinated by the secretariat and shall be composed of experts selected on an ad hoc basis from the UNFCCC roster of experts and will include lead reviewers. Expert review teams formed for the tasks carried out under the provisions of these guidelines may vary in size and composition, taking into account the national circumstances of the Party under review and the different expertise needs of each review task.

23. Participating experts shall serve in their personal capacity.

24. Participating experts shall have recognized competence in the areas to be reviewed according to these guidelines. The training to be provided to experts, and the subsequent assessment after the

³ It is likely that the fourth national communication will be the first national communication under the Kyoto Protocol and that such review will occur prior to the first commitment period: Article 7, paragraph 3, states that each Party included in Annex I shall submit the information required under Article 7, paragraph 2, as part of the first national communication due under the Convention after the Protocol has entered into force for it and after adoption of guidelines for the preparation of information under Article 7. This Article also states that the COP/MOP shall determine the frequency of submission of national communications, taking into account any timetable for submission of national communications decided upon by the COP. Decision 11/CP.4 requests Parties included in Annex I to submit a third national communication by 30 November 2001 and subsequent national communications on a regular basis, at intervals of three to five years, to be decided at a future session, and requires that each of those national communications should be subject to an in-depth review coordinated by the secretariat.

completion of the training⁴ and/or any other means needed to ensure the necessary competence of experts for participation in expert review teams shall be designed and operationalized in accordance with relevant decisions of the COP and the COP/MOP.

25. Experts selected for a specific review activity shall neither be nationals of the Party under review, nor be nominated or funded by that Party.

26. Experts shall be nominated by Parties to the Convention to the roster of experts and, as appropriate, by intergovernmental organizations, in accordance with guidance provided for this purpose by the COP.

27. Participating experts from Parties not included in Annex I and Parties included in Annex I with economies in transition shall be funded according to the existing procedures for participation in UNFCCC activities. Experts from other Parties included in Annex I shall be funded by their governments.

28. In the conduct of the review, expert review teams shall adhere to these guidelines and work on the basis of established and published procedures agreed upon by the Subsidiary Body for Scientific and Technological Advice (SBSTA), including quality assurance and control and confidentiality provisions.

2. Competences

29. Competences required of members of the expert review teams for the review of annual information submitted under Article 7, paragraph 1, are:

- (a) Greenhouse gas inventories in general and/or specific sectors (energy, industrial processes, solvents and other products use, agriculture, land use, land-use change and forestry, and waste);
- (b) National systems, national registries, information on assigned amounts and information related to Article 3, paragraph 14.

30. Competences required of members of the expert review teams for the review of national communications and the supplementary information under Article 7, paragraph 2, are in those areas referred to in paragraph 135 (b) and (c) of these guidelines.

3. Composition of the expert review teams

31. The secretariat shall select the members of the review teams to review the annual information submitted under Article 7, paragraph 1, and to review national communications and the supplementary information under Article 7, paragraph 2, in a way that the collective skills of the team address the areas mentioned in paragraphs 29 and 30 above, respectively.

32. The secretariat shall select the members of the expert review teams with a view to achieving a balance between experts from Annex I and non-Annex I Parties in the overall composition of the expert review teams, without compromising the selection criteria referred to in paragraph 31 above. The secretariat shall make every effort to ensure geographical balance among those experts selected from non-Annex I Parties and among those experts selected from Annex I Parties.

33. The secretariat shall ensure that in any expert review team one co-lead reviewer shall be from a Party included in Annex I and one from a Party not included in Annex I.

⁴ Those experts that opt not to participate in the training have to undergo a similar assessment successfully in order to enable them to qualify for participation in expert review teams.

34. Without compromising the selection criteria stated in paragraphs 31, 32 and 33 above, the formation of expert review teams should ensure, to the extent possible, that at least one member is fluent in the language of the Party under review.

35. The secretariat shall prepare an annual report to the SBSTA on the composition, including the selection of experts for the review teams and the lead reviewers, and the actions taken to ensure the application of the selection criteria stated in paragraphs 31 and 32 above.

4. Lead reviewers

36. Lead reviewers shall act as co-lead reviewers for the expert review teams under these guidelines.

37. Lead reviewers should ensure that the reviews in which they participate are performed according to the review guidelines and are performed consistently across Parties by each expert review team. They also should ensure the quality and the objectivity of the thorough and comprehensive technical assessments in the reviews and to provide for continuity, comparability and timeliness of the review.

38. Lead reviewers may be offered additional training to that referred to in paragraph 24 above to enhance their skills.

39. With the administrative support of the secretariat, lead reviewers shall, for each review activity:

- (a) Prepare a brief work plan for the review activity;
- (b) Verify that the reviewers have all the necessary information provided by the secretariat prior to the review activity;
- (c) Monitor the progress of the review activity;
- (d) Coordinate queries of the expert review team to the Party and coordinate the inclusion of the answers in the review reports;
- (e) Provide technical advice to the ad hoc experts, if needed;
- (f) Ensure that the review is performed and the review report is prepared in accordance with the relevant guidelines;
- (g) For inventory reviews, verify that the review team gives priority to individual source categories for review in accordance with the guidelines.

40. Lead reviewers collectively shall also:

- (a) Prepare an annual report to the SBSTA with suggestions on how to improve the review process in the light of paragraph 2 of the present guidelines;
- (b) Advise on the standardized data comparisons of inventory information referred to in paragraph 67 below.

41. Lead reviewers shall comprise experts from Parties to the Convention nominated to the UNFCCC roster by Parties, and their collective skills shall address the areas mentioned in paragraph 29 above. During the period when national communications and the supplementary information under Article 7, paragraph 2, are reviewed, additional experts from Parties to the Convention nominated to the UNFCCC roster by Parties will act as lead reviewers whose collective skills relate to the areas referred to in paragraph 30 above.

42. Lead reviewers shall be assigned for a minimum period of two years and a maximum period of three years to ensure the continuity and consistency of the review process. Half of the lead reviewers shall be assigned initially for a term of two years and the other half for a term of three years. The terms of service of lead reviewers for a given period of service shall be designed and operationalized in accordance with relevant decisions of the COP and the COP/MOP.

5. Ad hoc review experts

43. Ad hoc review experts shall be selected from those nominated by Parties or, exceptionally and only when the required expertise for the task is not available among them, from the relevant intergovernmental organizations belonging to the UNFCCC roster of experts for specific annual or periodic reviews by the secretariat. They shall perform individual review tasks in accordance with the duties set out in their nomination.

44. Ad hoc review experts shall, as necessary, perform desk review tasks in their home countries and participate in in-country visits, centralized reviews and in review meetings.

6. Guidance by the SBSTA

45. The SBSTA shall provide general guidance to the secretariat on the selection of experts and coordination of the expert review teams and to the expert review teams on the expert review process. The reports mentioned in paragraphs 35 and 40 (a) above are intended to provide the SBSTA with inputs for elaborating such guidance.

F. Reporting and publication

46. The expert review team shall, under its collective responsibility, produce the following review reports for each Party included in Annex I:

- (a) For the initial review, a report on the review of the elements described in paragraph 12 (a) to 12 (d) above in accordance with parts II, III, IV and V of these guidelines
- (b) For the annual review, a status report after the initial check of the annual inventory and a final report on the annual review of the elements in paragraph 15 above in accordance with parts II, III, IV, V and VI of these guidelines
- (c) For the periodic review, a report on the review of the national communication in accordance with part VII of these guidelines.

47. Review reports for each Party included in Annex I shall follow a format and outline comparable to that set out in paragraph 48 below and shall include the specific elements described in parts II to VII of these guidelines.

48. All final review reports prepared by the expert review team, except for status reports, shall include the following elements:

- (a) An introduction and summary
- (b) A description of the technical assessment of each of the elements reviewed according to the relevant sections on the scope of the review in parts II to VII of these guidelines, including:
 - (i) A description of any potential problems in, and factors influencing the fulfilment of, commitments identified during the review

- (ii) Any recommendations provided by the expert review team to solve the potential problems
- (iii) An assessment of any efforts by the Party included in Annex I to address any potential problems identified by the expert review team during the current review or during previous reviews that have not been corrected
- (iv) Any questions of implementation of the commitments under the Kyoto Protocol
- (c) Possible recommendations by the expert review team on the conduct of the review in subsequent years, including which parts may need to be considered in more depth
- (d) Information on any other issue of concern deemed relevant by the expert review team
- (e) The sources of information used in the formulation of the final report.

49. Following their completion, all final review reports, including status reports on initial checks on annual inventories, shall be published and forwarded by the secretariat, together with any written comments on the final review report by the Party which is subject of the report, to the COP/MOP, the Compliance Committee and the Party concerned.

Part II: Review of annual inventories

A. Purpose

50. The purpose of the review of annual inventories of Parties included in Annex I is:
- (a) To provide an objective, consistent, transparent, thorough and comprehensive technical assessment of annual inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for conformity with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*⁵ as elaborated by the IPCC report entitled *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*⁶ and any good practice guidance adopted by the COP/MOP, and with section I of the guidelines for the preparation of the information required under Article 7;
 - (b) To assess if adjustments under Article 5, paragraph 2, may be needed and, if so, to calculate adjustments in accordance with relevant decisions of the COP/MOP relating to Article 5, paragraph 2, of the Kyoto Protocol;
 - (c) To ensure that the COP/MOP and the Compliance Committee have reliable information on the annual inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol of each Party included in Annex I.

⁵ In these guidelines, the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* are referred to as the IPCC Guidelines.

⁶ In these guidelines, the IPCC report entitled *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* is referred to as the IPCC good practice guidance.

B. General procedures

51. The review should cover:
- (a) The annual inventory, including the national inventory report and the common reporting format (CRF)
 - (b) Supplementary information under Article 7, paragraph 1, incorporated in the Party's national inventory according to section I.D, greenhouse gas inventory information, of the guidelines for the preparation of the information required under Article 7.
52. The annual inventory review shall consist of two elements:
- (a) Initial check by the expert review team, with the assistance of the secretariat
 - (b) Individual inventory review by the expert review team.
53. The individual inventory review shall occur in conjunction with the review of assigned amount, changes in national systems and changes in national registries as set out in part I of these guidelines.
54. The base year inventory shall be reviewed only once prior to the commitment period and adjusted if appropriate.
55. The annual inventory review should be conducted as a desk or centralized review. In addition, each Party included in Annex I shall be subject to at least one in-country visit by an expert review team during the commitment period as part of its annual review.
56. In-country visits should be scheduled, planned and take place with the consent of the Party included in Annex I subject to review.
57. In years when an in-country visit is not scheduled, an expert review team can request an in-country visit if it believes, based on the findings of the desk or centralized review, that such a visit is necessary to allow for fuller investigation of a potential problem that the team has identified, subject to the consent of the Party included in Annex I. The expert review team shall provide a rationale for the additional country visit and shall compile a list of questions and issues to be addressed during the in-country visit to be sent to the Party included in Annex I in advance of the visit. If such an in-country visit occurs, the expert review team may recommend that a pending scheduled in-country visit is not necessary.
58. If a Party included in Annex I fails to provide to the expert review team the data and information necessary for the assessment of conformity with the IPCC Guidelines as elaborated by the IPCC good practice guidance and any good practice guidance adopted by the COP/MOP, the expert review team shall assume that the estimate was not prepared in accordance with the IPCC Guidelines as elaborated by the IPCC good practice guidance and any good practice guidance adopted by the COP/MOP.

C. Initial checks of annual inventories

1. Scope of the review

59. The expert review team shall conduct an initial check as a desk or centralized review to examine that each Party included in Annex I has submitted a consistent, complete and timely annual inventory, including the national inventory report and the common reporting format (CRF), and that data contained in the CRF are complete by means of computerized analysis and checks and in the correct format to enable subsequent review stages to occur.

60. The initial check shall identify whether:
- (a) The submission is complete and information has been provided in the correct format in accordance with reporting guidelines on annual inventories;
 - (b) All sources, sinks and gases included in the IPCC Guidelines and any good practice guidance adopted by the COP/MOP are reported;
 - (c) Any gaps are explained by use of notation keys, such as NE (not estimated) and NA (not applicable), in the CRF and whether there is frequent use of these notation keys;
 - (d) Methodologies are documented with notations in the CRF;
 - (e) Estimates for carbon dioxide (CO₂) emissions from fossil fuel combustion are reported using the IPCC reference approach, in addition to estimates derived using national methods;
 - (f) Estimates for hydrofluorocarbon, perfluorocarbon and sulphur hexafluoride emissions are reported by individual chemical species;
 - (g) A Party included in Annex I has failed to submit an annual inventory or the national inventory report or the common reporting format by the due date, or within six weeks of the due date;
 - (h) A Party included in Annex I has failed to include an estimate for a source category (as defined in chapter 7 of the IPCC good practice guidance) that individually accounted for 7 per cent or more of the Party's aggregate emissions, defined as aggregate submitted emissions of the gases and from the sources listed in Annex A to the Kyoto Protocol, in the most recent of the Party's reviewed inventories in which the source was estimated;
 - (i) A Party included in Annex I has failed to provide the supplementary information in accordance with paragraphs 5 to 9 of the annex to decision 15/CMP.1.

2. Timing⁷

61. The initial check for each Party included in Annex I shall be performed and a draft status report shall be completed within four weeks after the submission date of the annual inventory and sent to the Party for comment. A delay in the preparation of the draft status report shall not shorten the time available for the Party concerned to comment on the draft status report. The secretariat shall immediately notify the Party concerned of any omissions or technical format problems identified in the initial check.

62. Any information, corrections, additional information or comments on the draft status report received from the Party included in Annex I within six weeks of the submission due date shall be subject to an initial check and shall be covered in the final status report. A delay in the submission of the annual inventory shortens the time available for the Party concerned to comment on the draft status report.

63. The status report on the initial check for each Party included in Annex I shall be finalized within 10 weeks from the submission due date to be used in the individual inventory review.

⁷ For the initial review, the time frames for the initial check may serve as an indication.

3. Reporting

64. The status report shall include:

- (a) The date of receipt of the inventory submission by the secretariat
- (b) An indication of whether the annual inventory, including the national inventory report and the CRF, has been submitted
- (c) An indication of whether any source category or gas of a source category is missing and, if so, an indication of the magnitude of the likely emissions of that source category or gas, if possible relative to the last inventory for which the review has been completed
- (d) Identification of any inventory problems according to the categories listed in paragraph 60 (g) to (i) above.

D. Individual inventory reviews

1. Scope of the review

65. The expert review team shall, inter alia:

- (a) Examine application of the requirements of the IPCC Guidelines as elaborated by any IPCC good practice guidance adopted by the COP/MOP and the reporting guidelines on annual inventories and relevant decisions of the COP/MOP, and identify any departure from these requirements;
- (b) Examine application of the reporting requirements of section I.D of the guidelines for the preparation of information required under Article 7;
- (c) Examine whether the IPCC good practice guidance and any other good practice guidance adopted by the COP/MOP was applied and documented, in particular noting the identification of key source categories, selection and use of methodologies and assumptions, development and selection of emission factors, collection and selection of activity data, reporting of consistent time-series, reporting of uncertainties relating to inventory estimates and methodologies used for estimating those uncertainties and identify any inconsistencies;
- (d) Compare emission or removal estimates, activity data, implied emission factors and any recalculations with data from previous submissions of the Party included in Annex I to identify any irregularities or inconsistencies;
- (e) Compare the activity data of the Party included in Annex I with relevant external authoritative sources, if feasible, and identify sources where there are significant differences;
- (f) Assess the consistency of information in the common reporting format with that in the national inventory report;
- (g) Assess the extent to which issues and questions raised by expert review teams in previous reports have been addressed and resolved;
- (h) Recommend possible ways for improving the estimation and the reporting of inventory information.

66. The expert review team may use relevant technical information in the review process, such as information from international organizations.

67. The secretariat shall, under the direction of the expert review team, conduct a standardized set of data comparisons to be performed on the electronic common reporting format submissions to be used in the review process.

2. Identification of problems

68. The individual inventory review shall identify any problems for which adjustments under Article 5, paragraph 2, would be appropriate and initiate procedures for calculation of adjustments.

69. Problems should be identified as a failure to follow agreed guidelines under Article 5, paragraph 2, in preparing greenhouse gas inventories, as a failure to follow section I of the guidelines for the preparation of the information required under Article 7, and as a failure to follow agreed methodologies for estimating and reporting activities under Article 3, paragraphs 3 and 4, as adopted by the COP/MOP. These may be further subdivided as problems of:

- (a) Transparency, as defined in the UNFCCC reporting guidelines on annual inventories,⁸ including:
 - (i) Inadequate documentation and description of methodologies, assumptions and recalculations;
 - (ii) Failure to disaggregate national activity data, emission factors and other factors used in national methods at the required level unless an issue of confidentiality exists;
 - (iii) Failure to provide justifications for recalculations, references and information sources for key factors and data;
- (b) Consistency, as defined in the UNFCCC reporting guidelines on annual inventories, including failure to provide consistent time-series in accordance with the IPCC good practice guidance;
- (c) Comparability, as defined in the UNFCCC reporting guidelines on annual inventories, including failure to use agreed reporting formats;
- (d) Completeness, as defined in the UNFCCC reporting guidelines on annual inventories, including:
 - (i) Gaps in the inventory estimates for source categories or gases;
 - (ii) Inventory data that do not provide full geographic coverage of sources and sinks of a Party included in Annex I;
 - (iii) Failure to provide full coverage of sources in a source category;
- (e) Accuracy, as defined in the UNFCCC reporting guidelines on annual inventories, including failure to provide estimates of uncertainty and address uncertainty through the application of the good practice guidance.

⁸ “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories” (FCCC/CP/1999/7) or any subsequent revision of these guidelines by the COP.

70. The expert review team shall calculate:
- (a) The percentage by which the aggregate adjusted greenhouse gas emissions for a Party included in Annex I exceed the aggregate submitted emissions, defined as aggregate submitted emissions of the gases and from the sources listed in Annex A to the Kyoto Protocol, for any single year;
 - (b) The sum of the numerical values of the percentages calculated in paragraph 70 (a) above for all years of the commitment period for which the review has been conducted.
71. The expert review team shall identify whether the same key source category as defined in chapter 7 of the IPCC good practice guidance was adjusted in previous reviews and, if so, the team shall indicate the number of reviews that identified and adjusted the problem previously and the percentage that the key source category contributes to the aggregate submitted emissions, defined as aggregate submitted emissions of the gases and from the sources listed in Annex A to the Kyoto Protocol.

3. Timing

72. The individual inventory review, including adjustment procedures, shall be concluded within one year of the due date of submission of the information to be reported under Article 7, paragraph 1.
73. The expert review team shall list all problems identified, indicating which would need an adjustment, and send this list to the Party included in Annex I no later than 25 weeks from the submission due date of the annual inventory, if the inventory was submitted at least six weeks after the submission due date.
74. The Party included in Annex I shall comment on these questions within six weeks and, where requested by the review team, may provide revised estimates.
75. The expert review team shall prepare a draft individual inventory review report, which includes, where appropriate, adjusted estimates calculated according to guidance under Article 5, paragraph 2, within eight weeks of the receipt of the comments on the questions posed and shall send the draft report to the Party concerned.
76. The Party included in Annex I shall be provided with four weeks to comment on the draft individual inventory review report and, where appropriate, on whether it accepts or rejects the adjustment.
77. The expert review team shall prepare a final individual inventory review report within four weeks of the receipt of the comments on the draft report.
78. If a Party included in Annex I, during the above steps, is able to comment earlier than in the time frames given above, the Party concerned may use the time saved to comment on the revised final report. A total of four additional weeks to comment may be granted to Parties included in Annex I whose national language is not one of the United Nations official languages.

4. Procedures for adjustments under Article 5, paragraph 2

79. Adjustments referred to in Article 5, paragraph 2, of the Kyoto Protocol shall be applied only when inventory data submitted by Parties included in Annex I are found to be incomplete and/or are prepared in a way that is not consistent with the IPCC Guidelines as elaborated by the IPCC good practice guidance and any good practice guidance adopted by the COP/MOP.
80. The procedure for the calculation of adjustments shall be as follows:

- (a) During the individual inventory review, the expert review team shall identify problems to which the criteria in the guidance for adjustments under Article 5, paragraph 2, apply. The expert review team shall officially notify the Party included in Annex I of the reason why an adjustment is considered necessary and provide advice on how the problem could be corrected;
- (b) The adjustment procedure should only commence after the Party included in Annex I has had opportunities to correct a problem and if the expert review team finds that the Party included in Annex I has not adequately corrected the problem through the provision of an acceptable revised estimate, in accordance with the time frames set out in paragraphs 73 to 78 above;
- (c) The expert review team shall calculate adjustments in accordance with any guidance under Article 5, paragraph 2, adopted by the COP/MOP, in consultation with the Party concerned and within the time frame set out in these guidelines;⁹
- (d) The expert review team shall officially notify the Party concerned of the calculated adjustment(s) within the time frame set out in these guidelines. This notification shall describe the assumptions, data and methodologies used to calculate the adjustment(s), as well as the value of the adjustment(s);
- (e) Within the time frame set out in these guidelines, the Party concerned shall notify the secretariat of its intention to accept or reject the adjustment(s), with its rationale. Failure to respond by this date shall be considered as acceptance of the adjustment(s), as follows:
 - (i) If the Party concerned accepts the adjustment(s), the adjustment(s) shall be applied for the purpose of compilation and accounting of emissions inventories and assigned amounts;
 - (ii) If the Party concerned disagrees with the proposed adjustment(s), it should send a notification to the expert review team, including its rationale, and the expert review team should send the notification along with its recommendation in its final report to the COP/MOP and the Compliance Committee, which will resolve the disagreement in accordance with the procedures and mechanisms on compliance.

81. A Party included in Annex I may submit a revised estimate for a part of its inventory for a year of the commitment period to which an adjustment was previously applied, provided that the revised estimate is submitted, at the latest, in conjunction with the inventory for the year 2012.

82. Subject to a review under Article 8 and the acceptance of the revised estimate by the expert review team, the revised estimate shall replace the adjusted estimate. In the event of a disagreement between the Party included in Annex I and the expert review team regarding the revised estimate, the procedure set out in paragraph 80 (e) (ii) above shall be followed. The option for a Party included in Annex I to submit a revised estimate for a part of its inventory to which an adjustment was previously applied should not prevent Parties included in Annex I from making best efforts to correct the problem at the time it was initially identified and in accordance with the time frame set forth in the guidelines for review under Article 8.

⁹ Special arrangements in the composition of the expert review teams may be needed for the case where an adjustment needs to be calculated.

5. Reporting

83. The following specific elements shall be included in the reports referred to in paragraph 46 (a) and (b) above:

- (a) A summary of the results of the inventory review, including a description of emission trends, key sources and methodologies and a general assessment of the inventory
- (b) Identification of any inventory problems according to the categories listed in paragraph 69 above and a description of factors influencing the fulfilment of the inventory-related obligations of the Party included in Annex I
- (c) Information on adjustments, if applicable, including, inter alia,
 - (i) The original estimate, if applicable
 - (ii) The underlying problem
 - (iii) The adjusted estimate
 - (iv) The rationale for the adjustment
 - (v) The assumptions, data and methodology used to calculate the adjustment
 - (vi) A description of how the adjustment is conservative
 - (vii) The expert review team's identification of possible ways for the Party included in Annex I to address the underlying problem
 - (viii) The magnitude of the numerical values relating to an adjusted problem as identified under paragraph 70 above
 - (ix) Recurrence of adjustments as identified under paragraph 71 above
 - (x) An indication of whether the adjustment was agreed upon by the Party included in Annex I and the expert review team.

Part III: Review of information on assigned amounts pursuant to Article 3, paragraphs 7 and 8, emission reduction units, certified emission reductions, assigned amount units and removal units

A. Purpose

84. The purpose of this review is:

- (a) To provide an objective, consistent, transparent and comprehensive technical assessment of annual information on assigned amounts pursuant to Article 3, paragraphs 7 and 8, emission reduction units (ERUs), certified emission reductions (CERs), temporary certified emission reductions (tCERs), long-term certified emission reductions (lCERs), assigned amount units (AAUs) and removal units (RMUs) for conformity with the

provisions of the annexes to decision 13/CMP.1¹⁰ and decision 5/CMP.1, with the technical standards for data exchange between registry systems and any further guidance adopted by the COP/MOP, and with section I.E of the annex to decision 15/CMP.1;

- (b) To ensure that the COP/MOP and the Compliance Committee have reliable information on assigned amounts pursuant to Article 3, paragraphs 7 and 8, ERUs, CERs, tCERs, ICERs, AAUs and RMUs of each Party included in Annex I.

B. General procedures

85. The review of information on assigned amounts pursuant to Article 3, paragraphs 7 and 8, ERUs, CERs, tCERs, ICERs, AAUs and RMUs, shall comprise the following procedures:

- (a) A thorough review of the calculation of assigned amounts pursuant to Article 3, paragraphs 7 and 8, as reported in accordance with paragraph 6 of the annex to decision 13/CMP.1 as part of the initial review of each Party included in Annex I performed in accordance with the procedures contained in part I of these guidelines
- (b) An annual review of the information on ERUs, CERs, tCERs, ICERs, AAUs and RMUs and of information on discrepancies reported in accordance with section I.E of the annex to decision 15/CMP.1 for each Party included in Annex I
- (c) A desk or centralized review of the information of each Party included in Annex I to be reported upon expiration of the additional period for fulfilment of commitments in accordance with paragraph 49 of the annex to decision 13/CMP.1 and of the information referred to in paragraph 20 of the annex to decision 15/CMP.1.

C. Scope of the review

86. For each Party:

- (a) The initial review shall cover the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, as reported in accordance with paragraph 6 of the annex to decision 13/CMP.1;
- (b) The annual review shall cover the:
 - (i) Information on ERUs, CERs, tCERs, ICERs, AAUs and RMUs reported in accordance with section I.E of the annex to the decision 15/CMP.1
 - (ii) Transaction log records, including records of any discrepancies forwarded to the secretariat by the transaction log pursuant to paragraph 43 of the annex to decision 13/CMP.1, and any records of non-replacement forwarded by the transaction log in accordance with paragraph 56 of the annex to decision 5/CMP.1, including records of any discrepancies or non-replacement that were forwarded to the secretariat since the start of the previous review and until the start of the review
 - (iii) Information contained in the national registry that substantiates or clarifies the information reported. For this purpose Parties included in Annex I shall provide the expert review team with effective access to their national registry during the

¹⁰ In accordance with paragraph 40 of the annex to decision 5/CMP.1, unless otherwise stated in that annex, all other provisions that pertain to certified emission reductions in the guidelines under Articles 7 and 8, as well as the modalities for the accounting of assigned amounts under Article 7, paragraph 4, also apply to tCERs and ICERs.

review. The relevant parts of paragraphs 9 and 10 of part I of these guidelines shall also apply to this information

- (c) The review upon expiration of the additional period for fulfilling commitments shall cover the report upon expiration of the additional period for fulfilling commitments in accordance with paragraph 49 of the annex to decision 13/CMP.1 and paragraph 59 of decision 5/CMP.1, including the information reported under paragraph 20 of the annex to decision 15/CMP.1, and shall include oversight of the preparation of the final compilation and accounting report for that Party published by the secretariat.

Identification of problems

87. During the initial review the expert review team shall assess whether:
- (a) The information is complete and submitted in accordance with the relevant provisions of paragraphs 6, 7 and 8 of the annex to decision 13/CMP.1, section I of the annex to decision 15/CMP.1, and relevant decisions of the COP/MOP;
 - (b) The assigned amount pursuant to Article 3, paragraphs 7 and 8, is calculated in accordance with the annex to decision 13/CMP.1, and is consistent with reviewed and adjusted inventory estimates;
 - (c) The calculation of the required level of the commitment period reserve is in accordance with paragraph 6 of the annex to decision 18/CP.7.
88. During the annual review the expert review team shall assess whether:
- (a) The information is complete and submitted in accordance with section I.E of the annex to decision 15/CMP.1 and relevant decisions of the COP/MOP;
 - (b) The information relating to issuance, cancellations, retirement, transfers, acquisitions, replacement and carry-over is consistent with information contained in the national registry of the Party concerned and with the records of the transactions log;
 - (c) The information relating to transfers and acquisitions between national registries is consistent with the information contained in the national registry of the Party concerned and with the records of the transaction log, and with information reported by the other Parties involved in the transactions;
 - (d) The information relating to acquisitions of CERs, tCERs, and ICERs from the CDM registry is consistent with the information contained in the national registry of the Party concerned and with the records of the transaction log, and with the clean development mechanism (CDM) registry;
 - (e) ERUs, CERs, AAUs and RMUs have been issued, acquired, transferred, cancelled, retired, or carried over to the subsequent or from the previous commitment period in accordance with the annex to decision 13/CMP.1;
 - (f) tCERs and ICERs have been issued, acquired, transferred, cancelled, retired and replaced, in accordance with the annex to decision 13/CMP.1 and the annex to decision 5/CMP.1;
 - (g) The information reported under paragraph 11 (a) of section I.E. in the annex to decision 15/CMP.1 on the quantities of units in accounts at the beginning of the year is consistent with information submitted the previous year, taking into account any

corrections made to such information, on the quantities of units in accounts at the end of the previous year;

- (h) The required level of the commitment period reserve, as reported, is calculated in accordance with paragraph 6 of the annex to decision 18/CP.7;
- (i) The assigned amount is calculated to avoid double accounting in accordance with paragraph 9 of the annex to decision 16/CMP.1;
- (j) Any discrepancy has been identified by the transaction log relating to transactions initiated by the Party, and if so the expert review team shall:
 - (i) Verify that the discrepancy has occurred and been correctly identified by the transaction log;
 - (ii) Assess whether the same type of discrepancy has occurred previously for that Party;
 - (iii) Assess whether the transaction was completed or terminated;
 - (iv) Examine the cause of the discrepancy and whether the Party or Parties has or have corrected the problem that caused the discrepancy;
 - (v) Assess whether the problem that caused the discrepancy relates to the capacity of the national registry to ensure the accurate accounting, issuance, holding, transfer, acquisition, cancellation and retirement of ERUs, CERs, tCERS, ICERs, AAUs and RMUs, the replacement of tCERs and ICERs, and the carry-over of ERUs, CERs and AAUs, and if so, initiate a thorough review of the registry system in accordance with part V of these guidelines.
- (k) Any record of non-replacement has been sent to the Party by the transaction log in relation to tCERs or ICERs held by the Party, and if so the expert review team shall:
 - (i) Verify that the non-replacement has occurred and been correctly identified by the transaction log;
 - (ii) Assess whether non-replacement has occurred previously for that Party;
 - (iii) Assess whether the replacement was subsequently undertaken;
 - (iv) Examine the cause of the non-replacement and whether the Party has corrected the problem that caused the non-replacement;
 - (v) Assess whether the problem that caused the non-replacement relates to the capacity of the national registry to ensure the accurate accounting, holding, transfer, acquisition, cancellation, and retirement of ERUs, CERs, tCERS, ICERs, AAUs and RMUs, and the replacement of tCERs and ICERs, and if so, initiate a thorough review of the registry system in accordance with part V of these guidelines.

89. During the review upon expiration of the additional period for fulfilling commitments, the expert review team shall review the information submitted by the Party under Article 7, paragraph 1, to assess whether:

- (a) The information is reported in accordance with paragraph 49 of the annex to decision 13/CMP.1;
- (b) The information is consistent with the information contained in the compilation and accounting database maintained by the secretariat and with the information contained in the Party's registry;
- (c) There are any problems or inconsistencies in the information provided by the Party in accordance with paragraph 88 above;
- (d) The quantity of AAUs, CERs, tCERs, ERUs and RMUs transferred into the tCER replacement account for the commitment period is equal to the quantity of tCERs in the retirement account, and in the tCER replacement account, that expired at the end of the commitment period;
- (e) The quantity of AAUs, CERs, ICERs, ERUs and RMUs transferred into the ICER replacement account for the commitment period is equal to the sum of the quantity of ICERs in the retirement account, and the quantity of ICERs in the ICER replacement account, that expired at the end of the commitment period, and the quantity of ICERs identified by the Executive Board of the CDM as requiring replacement within the registry for the commitment period.

90. During the review upon expiration of the additional period for fulfilling commitments, the expert review team shall review the information submitted in accordance with paragraph 20 of the annex to decision 15/CMP.1 in accordance with paragraph 88 above.

91. Following the completion of the steps set out in paragraph 89 above and, if possible, resolution of any problems relating to the reported information, and taking account of the information contained in the compilation and accounting database maintained by the secretariat, the expert review team shall assess whether aggregate anthropogenic carbon dioxide equivalent emissions for the commitment period exceed the quantities of ERUs, CERs, tCERs, ICERs, AAUs, and RMUs in the retirement account of the Party for the commitment period.

D. Timing

92. The review of the calculation of assigned amount pursuant to Article 3, paragraphs 7 and 8, as part of the initial review shall be concluded within one year of the due date for submission of the report to facilitate the calculation of the assigned amount pursuant to Article 3, paragraphs 7 and 8, referred to in paragraph 6 of the annex to decision 13/CMP.1 and shall follow the time frames and procedures established in paragraph 93 below.

93. The annual review of the information on ERUs, CERs, tCERs, ICERs, AAUs and RMUs reported in accordance with section I.E of the annex to decision 15/CMP.1 shall be concluded within one year of the due date for the submission of the information under Article 7, paragraph 1, and include the following steps:

- (a) The expert review team shall list all problems identified, indicating which problems would need corrections to previous accounting of AAUs, ERUs, CERs, tCERs, ICERs or RMUs, and send this list to the Party included in Annex I no later than 25 weeks from the due date for submission of the annual inventory, if the information was submitted within six weeks after the submission due date
- (b) The Party included in Annex I shall comment on these questions within six weeks and, where requested by the review team, may provide revisions to the accounting of AAUs,

ERUs, CERs, tCERs, ICERs or RMUs. The expert review team shall prepare a draft review report within eight weeks of the receipt of the comments on the questions posed and shall send the draft report to the Party concerned for comments

- (c) The Party included in Annex I shall provide its comments on the draft review report within four weeks of receipt of the report. The expert review team shall prepare a final review report within four weeks of the receipt of the comments on the draft report.

94. The review of the report upon expiration of the additional period for fulfilling commitments and of the information submitted in accordance with paragraph 20 of the annex to decision 15/CMP.1 shall be completed within 14 weeks of the due date for the submission of the information. The expert review team shall prepare a draft report within eight weeks of the due date for submission of the information. The Party concerned may comment on the draft report within four weeks of its receipt. The expert review team shall prepare a final review report within two weeks of receipt of comments on the draft report by the Party.

E. Reporting

95. The final review reports referred to in paragraphs 93 and 94 above shall include an assessment of the specific problems identified in accordance with paragraphs 87 to 91 above and shall follow the format and outline contained in paragraph 48 of part I of these guidelines, as appropriate.

Part IV: Review of national systems

A. Purpose

96. The purpose of the review of national systems is:
- (a) To provide a thorough and comprehensive technical assessment of the capacity of a national system and the adequacy of its institutional, legal and procedural arrangements to produce an inventory of anthropogenic emissions by sources and removals by sinks in conformity with Article 5, paragraph 2;
 - (b) To assess the extent to which the guidelines for national systems under Article 5, paragraph 1, have been adhered to, and to assist Parties included in Annex I in meeting their commitments under Article 5, paragraph 1;
 - (c) To provide the COP/MOP and the Compliance Committee with reliable information on national systems established under Article 5, paragraph 1.

B. General procedures

97. The review of national systems shall take place in two parts:
- (a) A thorough review of the national system, as part of the review prior to the commitment period and its in-country visit
 - (b) A desk or centralized review of any reported changes in the national system reported since the first thorough review, conducted in conjunction with the annual inventory review.

98. The review of national systems shall be conducted, as appropriate, through interviews with personnel involved in inventory planning, preparation and management, and through examination of

relevant records and documentation, including use of the inventory CRF and preparation of the national inventory report.

99. Based on any findings during the individual inventory review and on findings relating to reported changes in national systems considered by the expert review team to be potentially significant in relation to an identified problem in the inventory of the Party included in Annex I, the expert review team may request an additional country visit to review the relevant components of the national system in conjunction with an in-country inventory review.

C. Scope of the review

1. In-country review

100. The expert review team shall conduct a thorough and comprehensive review of the national system of each Party included in Annex I. The review of national systems should cover:

- (a) Activities undertaken by the Party included in Annex I to implement, and performance of, the general functions described in paragraph 10 of the guidelines for national systems,¹¹ and the specific functions relating to inventory planning, preparation and management in accordance with paragraphs 12 to 17 of those guidelines;
- (b) Reported and archived information on national systems in accordance with guidelines under Article 5, paragraph 1, and Article 7, including plans and internal documentation relating to the functions mentioned in paragraph 100 (a) above.

2. Review of changes in national systems

101. Any significant changes in the functions of the national systems reported by Parties included in Annex I or identified by the expert review team during the in-country visit that may affect the preparation of greenhouse gas inventories in conformity with Article 5, paragraph 2, and the guidelines for national systems should be reviewed annually in conjunction with the annual inventory review. The scope of such a review shall follow the scope set out for the in-country review according to paragraph 100 above.

3. Identification of problems

102. The expert review team shall assess whether the Party included in Annex I has established and maintained the specific inventory planning components covered in paragraph 12 of the guidelines for national systems, on the basis of a review of the information provided on the national system under Article 7 and any additional information gathered.

103. The expert review team shall assess whether the Party included in Annex I has completed the inventory preparation components covered in paragraph 14 (a) and (d) of the guidelines for national systems, on the basis of the review of the information provided on the national system under Article 7 and any additional information gathered.

104. The expert review team shall assess whether the inventory preparation components covered in paragraph 14 (c), (e) and (g) of the guidelines for national systems are functioning adequately, on the basis of an assessment of the most recent annual inventory, its consistency with good practice, and any additional information gathered.

¹¹ The guidelines for national systems for the estimation of anthropogenic greenhouse gas emissions by sources and removals by sinks under Article 5, paragraph 1, of the Kyoto Protocol are referred to as “guidelines for national systems” in the present annex. The full text of the guidelines can be found attached to decision 19/CMP.1.

105. The expert review team shall assess whether the Party included in Annex I has archived inventory information according to the provisions of paragraphs 16 and 17 of the guidelines for national systems as part of its inventory management. The expert review team shall assess whether the archiving is functioning adequately on the basis of an assessment of:

- (a) The completeness of archived information for a sample of source categories as chosen by the expert review teams, including key source categories, as defined in accordance with IPCC Guidelines and IPCC good practice guidance;
- (b) The ability of the Party included in Annex I to respond in a timely manner to requests for clarifying inventory information resulting from the different stages of the review process of the most recent inventory.

106. Based on the assessment carried out in accordance with paragraphs 102 to 105 above, expert review teams shall identify any potential problems in, and factors influencing, the fulfilment of commitments relating to the functions of national systems according to paragraphs 10, 12, 14 and 16 of the guidelines for national systems. In addition, the expert review teams shall recommend how deficiencies of functions described in paragraphs 13, 15 and 17 of the guidelines for national systems could be improved. These provisions shall apply to both in-country reviews and reviews of changes in national systems.

D. Timing

107. During the process of in-country visit, the expert review team shall list all problems identified, and notify the Party included in Annex I not later than six weeks after the country visit on the problems identified. The Party included in Annex I shall comment on these problems not later than within six weeks. The expert review team shall prepare a draft of a review report on the national system, within six weeks of the receipt of the comments on the questions posed. Any corrections, additional information or comments on the draft report received from the Party included in Annex I within four weeks after the report has been sent to the Party included in Annex I shall be subject to review and shall be included in the final inventory review report. The expert review team shall prepare a final report on the review of the national system within four weeks of the receipt of the comments on the draft report. The review of national systems shall be concluded within one year of the date of submission of the information.

108. The process of review of changes in national systems shall follow the timetable for the review of annual inventories defined in part II of these guidelines. If either the annual inventory review or the review of changes in national systems recommends an in-depth review of national systems, the process of inventory review of national systems should be conducted together with the following in-country review either of the annual inventory or of the periodic national communication, whichever is earlier.

E. Reporting

109. The following specific elements shall be included in the reports referred to in paragraph 46 (a) and (b) above:

- (a) An evaluation of the overall organization of the national system, including a discussion of the effectiveness and reliability of the institutional, procedural and legal arrangements for estimating greenhouse gas emissions
- (b) A technical assessment of the performance of each of the national system functions defined in paragraphs 10 to 17 of the guidelines for national systems, including an assessment of the system's strengths and weaknesses

- (c) Any recommendations by the review team for further improvement of the national system of the Party included in Annex I.

Part V: Review of national registries

A. Purpose

110. The purpose of the review of national registries is:
- (a) To provide a thorough and comprehensive technical assessment of the capacity of a national registry to ensure the accurate accounting of the issuance, holding, transfer, acquisition, cancellation and retirement of ERUs, CERs, tCERs, ICERs, AAUs and RMUs, the replacement of tCERs and ICERs, and the carry-over of ERUs, CERs and AAUs;
 - (b) To assess the extent to which the registry requirements contained in the annex to decision 13/CMP.1,¹² and the annex to decision 5/CMP.1 and any decisions by the COP/MOP have been adhered to, and to assist Parties included in Annex I in meeting their commitments;
 - (c) To assess the extent to which the national registry conforms to the technical standards for data exchange between registry systems adopted by the COP/MOP;
 - (d) To provide the COP/MOP and the Compliance Committee with reliable information on national registries.

B. General procedures

111. The review of national registries shall take place in two parts:
- (a) A thorough review of the national registry as part of the initial review in accordance with paragraphs 11 to 14 in part I of these guidelines and in conjunction with its periodic review;
 - (b) A desk or centralized review of any changes of the national registry reported in accordance with section I.G of the annex to decision 15/CMP.1 in conjunction with the annual review;

112. A thorough review of the national registry shall also be conducted if the final review reports under paragraph 48 in part I of these guidelines recommend a thorough review of the national registry or if findings relating to reported changes in national registries considered by the expert review team lead to the recommendation of a thorough review in the final review report. The expert review team shall use the standard set of electronic tests described in paragraph 116 below for this purpose. An in-country visit shall be conducted only if standardized electronic tests are not sufficient to identify the problems.

C. Scope of the review

113. The expert review team shall conduct a thorough and comprehensive review of the national registry of each Party included in Annex I. The review of the national registry should cover the extent to which the registry requirements contained in the annex to decision 13/CMP.1, the annex to

¹² In accordance with paragraph 40 of the annex to decision 5/CMP.1, unless otherwise stated in that annex, all other provisions that pertain to certified emission reductions in the guidelines under Articles 7 and 8, as well as the modalities for the accounting of assigned amounts under Article 7, paragraph 4, also apply to tCERs and ICERs.

decision 5/CMP.1 and the technical standards for data exchange between registry systems adopted by the COP/MOP have been adhered to.

1. Review of changes in the national registry

114. The expert review team shall review the information submitted as supplementary information under Article 7, paragraph 1, and shall identify any significant changes in the national registry reported by the Party or any problems identified by the expert review team in the course of the review of ERUs, CERs, tCERs, ICERs, AAUs and RMUs and transaction log records that may affect the performance of the functions contained in the annex to decision 13/CMP.1, the annex to decision 5/CMP.1 and the adherence to the technical standards for data exchange between registry systems in accordance with relevant COP/MOP decisions. This review should take place in conjunction with the annual review in accordance with the relevant procedures in paragraphs 115 to 117 below.

2. Identification of problems

115. The expert review team shall review the national registry, including the information provided on it, to assess whether:

- (a) The information on the national registry is complete and submitted in accordance with section I of the annex to decision 15/CMP.1, and with relevant decisions of the COP and the COP/MOP;
- (b) The registry conforms to the technical standards for data exchange between registry systems for the purpose of ensuring accurate, transparent and efficient exchange of data between national registries, the clean development registry and the international transaction log;
- (c) The transaction procedures, including those relating to the transaction log, are in accordance with the modalities for the accounting of assigned amounts under Article 7, paragraph 4, contained in the annex to decision 13/CMP.1 and the annex to decision 5/CMP.1;
- (d) There are adequate procedures to minimize discrepancies in the issuance, transfer, acquisition, cancellation and retirement of ERUs, CERs, tCERs, ICERs, AAUs and RMUs, and in the replacement of tCERs and ICERs, and to take steps to terminate transactions where a discrepancy is notified, and to correct problems in the event of a failure to terminate the transactions;
- (e) There are adequate security measures to prevent and resolve unauthorized manipulations and minimize operator error, and procedures for updating them;
- (f) Information is publicly available in accordance with the annex to decision 13/CMP.1;
- (g) There are adequate measures to safeguard, maintain and recover data in order to ensure the integrity of data storage and the recovery of registry services in the event of a disaster.

116. During the thorough review, the expert review team shall use a test version of the transaction log and a standard set of electronic tests and sample data to assess the capacity of the registry to perform its functions, including all types of transactions, referred to in the annex to decision 13/CMP.1 and the annex to decision 5/CMP.1, and to assess the adherence to the technical standards for data exchange between registry systems adopted by the COP/MOP. The expert review team may draw upon the results of any other testing relevant to the review of the registry.

117. Based on the assessments carried out in accordance with paragraphs 115 and 116 above, expert review teams shall identify any potential problems in, and factors influencing, the fulfilment of commitments relating to the performance of the functions of the national registry and the adherence to technical standards for data exchange between registry systems. In addition, the expert review team shall recommend how problems could be addressed.

D. Timing

118. During the thorough review, the expert review team shall list all the problems identified and shall notify the Party included in Annex I of the problems identified no later than six weeks after the start of the review or after the in-country visit, as appropriate. The Party included in Annex I shall comment on these problems within six weeks of the notification. The expert review team shall prepare a draft review report on the national registry within six weeks of the receipt of the comments on the questions posed. Any corrections, additional information or comments on the draft report received from the Party included in Annex I within four weeks after the report has been sent to that Party shall be subject to review and shall be included in the final inventory review report. The expert review team shall prepare a final report on the review of the national registry within four weeks of the receipt of the comments on the draft report. The review of the national registry shall be concluded within one year of the due date for submission of the information.

119. The review of changes in the national registry shall follow the time frames and procedures for the annual review of the information to be submitted in accordance with section I.E of the annex to decision 15/CMP.1 established in part III of these guidelines. If either the annual review or the review of changes in the national registry recommends a thorough review of the national registry, and if a country visit is considered necessary, this thorough review should be conducted together with the subsequent in-country visit of either the annual inventory or the periodic national communication, whichever is earlier.

E. Reporting

120. The final review reports shall include an evaluation of the overall functioning of the national registry and an assessment of the specific problems identified in accordance with paragraphs 115 to 117 above, and shall follow the format and outline in accordance with paragraph 48 of part I of these guidelines.

Part VI: Review of information on the minimization of adverse impacts in accordance with Article 3, paragraph 14

A. Purpose

121. The purpose of the review of information of each Party included in Annex I in relation to Article 3, paragraph 14, is:

- (a) To provide a thorough objective and comprehensive technical assessment of the information submitted relating to how the Party included in Annex I is striving to implement its commitments under Article 3, paragraph 14;
- (b) To assess trends and the extent to which the Party included in Annex I is striving to implement action to minimize adverse impacts on developing countries in accordance with Article 3, paragraph 14, and taking into account any relevant decisions by the COP and the COP/MOP;
- (c) To assist Parties included in Annex I to improve their reporting of information under Article 3, paragraph 14;

- (d) To ensure that the COP/MOP and the Compliance Committee have reliable information on the review of minimization of adverse impacts in accordance with Article 3, paragraph 14.

B. General procedures

122. The review of the information on the minimization of adverse impacts in accordance with Article 13, paragraph 14, shall take place in two parts:

- (a) An annual desk or centralized review of additional information submitted by Parties included in Annex I, conducted in conjunction with the annual inventory review
- (b) A thorough and comprehensive review through in-country visits, conducted in conjunction with the review of national communications.

C. Scope of the review

1. Annual review

123. The expert review team shall, inter alia:

- (a) Check whether the Party included in Annex I submitted the supplementary information in accordance with paragraphs 23 and 25 of the annex to decision 15/CMP.1 on action relating to the minimization of adverse effects under Article 3, paragraph 14;
- (b) For the first year that the Party included in Annex I provides the information mentioned in paragraph 123 (a) above, conduct a desk or centralized review to assess whether each Party included in Annex I has submitted consistent, complete and timely information. For subsequent years, conduct a desk or centralized review to assess whether Parties included in Annex I have submitted information on any changes that have occurred, compared with the information reported in their last submission;
- (c) Notify the Party concerned of any questions the team has regarding information on actions relating to minimization of adverse effects under Article 3, paragraph 14, and relevant decisions of the COP and the COP/MOP;
- (d) Assess the extent to which issues and questions raised by previous reports have been addressed and resolved;
- (e) Recommend possible ways to improve the reporting of information, including possible recommendations to the workshop on reporting methodologies mentioned in decision 9/CP.7.

2. In-country visit

124. Each Party included in Annex I shall be subject to at least one in-country visit by an expert review team during the commitment period in conjunction with the review of the national communication.

125. The in-country review shall provide a detailed examination of supplementary information incorporated in the annual inventory, in accordance with paragraphs 23 and 25 of the annex to decision 15/CMP.1 compiled by the secretariat and reviewed in paragraph 124 above for all years since the initial review.

126. Based on the assessment carried out in accordance with paragraphs 123 and 124 above, expert review teams shall identify any potential problems in, and factors influencing, the fulfilment of commitments under Article 3, paragraph 14, and relevant decisions of the COP and the COP/MOP.

3. Identification of problems

127. The problems identified during the assessment relating to the supplementary information reported in accordance with paragraphs 23 and 25 of the annex to decision 15/CMP.1 shall be identified as relating to:

- (a) Transparency
- (b) Completeness
- (c) Timeliness.

128. Failure to submit supplementary information reported in accordance with paragraphs 23 and 25 of the annex to decision 15/CMP.1 shall be considered as a potential problem.

D. Timing

129. The process of the in-country review shall follow the timetable for the review of the national communication of the Party included in Annex I defined in part VII of these guidelines. The annual review process shall follow the timetable for the review of annual inventories defined in part II of these guidelines. The preparation of the reports should also follow these respective timetables.

E. Reporting

130. The following specific elements shall be included in the report referred to in paragraph 46 (a) and (b) above:

- (a) A technical assessment of the elements specified in paragraphs 123 and 125 above
- (b) An identification of problems in accordance with paragraphs 127 and 128 above
- (c) Any recommendations by the review team for further improvement of reporting by a Party included in Annex I.

Part VII: Review of national communications and information on other commitments under the Kyoto Protocol

A. Purpose

131. The purpose of the guidelines on the review of national communications of Parties included in Annex I, including information reported under Article 7, paragraph 2, is:

- (a) To provide a thorough and comprehensive technical assessment of national communications and information reported under Article 7, paragraph 2, of the Kyoto Protocol;
- (b) To examine in an objective and transparent manner whether quantitative and qualitative information was submitted by Parties included in Annex I in accordance with section II of the guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol;

- (c) To promote consistency in the review of the information contained in the national communications of Parties included in Annex I, including information reported under Article 7, paragraph 2;
- (d) To assist Parties included in Annex I to improve reporting of information under Article 7, paragraph 2, and the implementation of their commitments under the Protocol;
- (e) To ensure that the COP/MOP and the Compliance Committee have reliable information on the implementation of commitments under the Kyoto Protocol by each Party included in Annex I.

B. General procedures

132. Supplementary information under Article 7, paragraph 2, shall be incorporated into the national communications and shall be reviewed as part of the review of the communications. Each national communication submitted under the Kyoto Protocol by a Party included in Annex I shall be subject to a scheduled in-country periodic review.

133. Prior to the in-country visit, the expert review team shall conduct a desk or centralized review of the national communication of the Party included in Annex I. The review team shall notify the Party concerned of any questions the team has regarding the national communication and of any focal areas for the in-country visit.

C. Scope of the review

134. The review of the national communication shall also cover supplementary information reported under Article 7, paragraph 2.

135. The individual review shall:

- (a) Provide an assessment of the completeness of the national communication, including supplementary information reported under Article 7, paragraph 2, in accordance with the reporting requirements under Article 7, paragraph 2, and an indication of whether it was submitted on time;
- (b) Provide a detailed examination of each part of the national communication, as well as procedures and methodologies used in the preparation of the information, such as:
 - (i) National circumstances relevant to greenhouse gas emissions and removals;
 - (ii) Policies and measures;
 - (iii) Projections and the total effect of policies and measures;
 - (iv) Vulnerability assessment, climate change impacts and adaptation measures;
 - (v) Financial resources;
 - (vi) Transfer of technology;
 - (vii) Research and systematic observation;¹³
 - (viii) Education, training and public awareness;

¹³ Information provided under this heading includes a summary of the information provided on global climate observation systems.

- (c) Provide a detailed examination of supplementary information provided under Article 7, paragraph 2:
 - (i) Supplimentarity relating to the mechanisms pursuant to Articles 6, 12 and 17;
 - (ii) Policies and measures in accordance with Article 2;
 - (iii) Domestic and regional programmes and/or legislative arrangements and enforcement and administrative procedures;
 - (iv) Information under Article 10;
 - (v) Financial resources;
- (d) Identify any potential problems in and factors influencing, the fulfilment of commitments relating to each part of the national communication and to the reporting of supplementary information under Article 7, paragraph 2.

136. All common elements in paragraph 135 (b) and (c) above are to be reviewed in conjunction.

Identification of problems

137. The problems identified during the assessment relating to individual sections of the national communication, including supplementary information reported under Article 7, paragraph 2, shall be identified as relating to:

- (a) Transparency
- (b) Completeness
- (c) Timeliness.

138. Failure to submit any section of the national communication shall be considered as a potential problem.

D. Timing

139. If a Party included in Annex I expects difficulties with the timeliness of its national communication submission, it should inform the secretariat before the due date of the submission. If the national communication is not submitted within six weeks after the due date, the delay shall be brought to the attention of the COP/MOP and the Compliance Committee and made public.

140. The expert review teams shall make every effort to complete the individual review of national communications within two years of the national communication submission for each Party included in Annex I.

141. If additional information is requested during the in-country visit, it should be provided by the Party included in Annex I within six weeks after the visit.

142. The expert review team for each Party included in Annex I shall, under its collective responsibility, produce a draft of the national communication review report following the format below to be finalized within eight weeks after the in-country visit.

143. The draft of each national communication review report will be sent to the Party included in Annex I subject to review for comment. The Party concerned shall be provided with four weeks of receipt of the draft report to provide comments on it.

144. The expert review team shall produce the finalized national communication review report taking into account comments of the Party included in Annex I within four weeks of receipt of the comments.

E. Reporting

145. The following specific elements shall be included in the report referred to in paragraph 46 (c) above:

- (a) A technical assessment of the elements specified in paragraph 135 (b) and (c) above
- (b) An identification of problems in accordance with paragraphs 137 and 138 above.

146. The secretariat shall produce a report on the compilation and synthesis of national communications for all Parties included in Annex I in accordance with the decisions of the COP/MOP.

Part VIII: Expedited procedure for the review for the reinstatement of eligibility to use the mechanisms

A. Purpose

147. The purpose of the review of information relating to a request, by a Party included in Annex I, for reinstatement of eligibility to use the mechanisms established under Articles 6, 12 and 17, pursuant to paragraph 2 of chapter X of the procedures and mechanisms relating to compliance, is:

- (a) To provide an objective, transparent, thorough and comprehensive technical assessment of information provided by a Party on matters relating to Articles 5 and 7 which led to the suspension of its eligibility to use the mechanisms;
- (b) To provide for an expedited review procedure for the reinstatement of eligibility to use the mechanisms for a Party included in Annex I which is able to demonstrate that it is no longer failing to meet eligibility requirements under Articles 6, 12 and 17;
- (c) To ensure that the enforcement branch of the Compliance Committee has reliable information to enable it to consider the request of a Party for the reinstatement of its eligibility to use the mechanisms.

B. General procedure

148. The review for the reinstatement of eligibility to use the mechanisms shall be an expedited procedure limited to the review of the matter or matters which led to the suspension of the eligibility. However, the expedited nature of this review procedure shall not compromise the thoroughness of the examination by the expert review team.

149. Any Party included in Annex I that has been suspended from eligibility to use the mechanisms may, at any time following suspension, submit information to the secretariat on the matter or matters which led to the suspension of eligibility. To enable the expert review team to perform its tasks, the information submitted by the Party concerned shall be additional to information previously submitted prior to or during the review that led to the suspension of eligibility. However, information previously submitted by the Party may also be included in the submission, if relevant. The information submitted by the Party shall be reviewed expeditiously in accordance with these guidelines.

150. The secretariat shall organize the review in the most expeditious way possible following the procedures established in these guidelines and taking into account the planned review activities in the regular review cycle. The secretariat shall convene an expert review team for conducting the expedited

review procedures established in these guidelines in accordance with the relevant provisions of section E of part I of these guidelines and shall forward the information referred to in paragraph 149 above to this expert review team.

151. To ensure objectivity, the expert review team for the reinstatement of eligibility shall not be composed of the same members and lead reviewers who formed part of the expert review team that conducted the review which led to the suspension of eligibility of the Party concerned, and shall be composed of members with the necessary expertise for addressing the matter or matters contained in the Party's submission.

152. Depending on the issue that led to the suspension of the eligibility to participate in the mechanisms, the review shall be performed as a centralized review or an in-country review as provided for in parts II, III, IV and V of these guidelines, as deemed appropriate by the secretariat.¹⁴

C. Scope of the review

153. The review shall cover the information submitted by the Party. The expert review team may also consider any other information, including information previously submitted by the Party and any information relating to the Party's subsequent inventory, which the expert review team considers necessary in order to complete its task. The expert review team shall assess, consistent with the applicable provisions in parts II, III, IV or V of these guidelines, whether the question or questions of implementation that led to suspension of eligibility have been addressed and resolved.

154. If the expedited review for reinstatement of eligibility relates to the submission of a revised estimate for a part of its inventory to which an adjustment was previously applied, the expert review team shall assess whether the revised estimate is prepared in accordance with the IPCC Guidelines as elaborated by the IPCC good practice guidance or whether the new information substantiates the original emission estimate provided by the Party.

D. Timing

155. A Party included in Annex I that intends to submit information under paragraph 149 above to the secretariat on the matter or matters which led to its suspension of eligibility should provide the secretariat with at least six weeks notice of the date on which it intends to submit such information. The secretariat, on receipt of such notice, should undertake the necessary preparations with the aim of ensuring that an expert review team is convened and ready to start consideration of the information within two weeks of the receipt of the submission of information under paragraph 149 above from the Party concerned.

156. For the expedited procedure for the review for reinstatement of eligibility, the following time frames shall apply from the date of receipt of the information:

- (a) The expert review team shall prepare a draft expedited review report within five weeks of the receipt of information from the Party concerned
- (b) The Party concerned shall be provided with up to three weeks to comment upon the draft expedited review report. If the Party concerned notifies the expert review team, within that period of time, that it does not intend to provide comments, then the draft expedited review report becomes the final expedited review report upon receipt of such notification. If the Party concerned does not provide any comments within that period of time, the draft expedited review report becomes the final expedited review report

¹⁴ For example, if the failure to have in place a national system for the estimation of anthropogenic emissions led to loss of eligibility and such a system has not previously been reviewed, the national system shall be reviewed in accordance with part IV of these guidelines, and such a review to include an in-country visit.

- (c) If comments by the Party are received within the time frame indicated above, the expert review team shall prepare a final expedited review report within three weeks of the receipt of comments on the draft report.

157. The time periods in paragraph 156 (a) to (c) above are considered maximum time periods. The expert review team and the Party should strive to complete the review in the shortest time possible. However, the expert review team may, with the agreement of the Party, extend the time periods in paragraph 156 (a) to (c) above for the expedited review procedure for an additional four weeks.

158. Where the start of the consideration of information by the expert review team is delayed due to the Party giving shorter notice than provided in paragraph 155 above, the expert review team may extend the time in paragraph 156 (a) up to the difference in time between the period for notification in paragraph 155 and the actual notification given by the Party.

E. Reporting

159. The expert review team shall, under its collective responsibility, produce a final review report on the reinstatement of eligibility in accordance with the relevant provisions of paragraph 48 of these guidelines and in accordance with the relevant provisions for review reports in parts II, III, IV or V of these guidelines depending on the specific reason for the suspension of eligibility.

160. The expert review team shall include a statement whether the team considered thoroughly all questions of implementation that led to the suspension of the eligibility in the time available for the reinstatement procedure and shall indicate whether there is or is not any longer a question of implementation with respect to the eligibility of the Party concerned to use the mechanisms established under Articles 6, 12 and 17.

*2nd plenary meeting
30 November 2005*

Decision 23/CMP.1

Terms of service for lead reviewers

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling Article 8 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change,

Having considered decisions 23/CP.7 and 23/CP.8, adopted by the Conference of the Parties at its seventh and eighth sessions, respectively,

Decides that lead reviewers referred to in the guidelines under Article 8 of the Kyoto Protocol (decision 22/CMP.1) will be based in their home country or their country of residence for the period of their assignment and will attend regularly scheduled meetings and planned review activities outside their home country or their country of residence to perform the duties described in these guidelines.

*2nd plenary meeting
30 November 2005*

Decision 24/CMP.1

Issues relating to the implementation of Article 8 of the Kyoto Protocol – 1

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Having considered decisions 23/CP.7, 23/CP.8 and 21/CP.9,

1. *Requests* the secretariat, subject to the availability of resources, to develop and implement the training programme for members of expert review teams participating in the initial reviews under Article 8 of the Kyoto Protocol, in accordance with the provisions in annex I to this decision, including requirements for testing of experts, and to give priority to implementation of a final seminar for the course on application of adjustments;
2. *Encourages* Parties included in Annex II to the Convention that are Parties to the Kyoto Protocol to provide financial support for implementation of the training programme;
3. *Requests* the Subsidiary Body for Scientific and Technological Advice, at its first session in 2006, to assess the results of the training programme and to make recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on the further development and implementation of the training programme for members of expert review teams participating in reviews under Article 8 of the Kyoto Protocol;
4. *Requests* the secretariat to prepare a report on information on the training programme, in particular on examination procedures and the selection of trainees and instructors, to be provided to the Subsidiary Body for Scientific and Technological Advice for the assessment mentioned in paragraph 3 above;
5. *Decides* to apply and give full effect to the code of practice for the treatment of confidential information, as contained in annex II to decision 12/CP.9, for the reviews of inventories under Article 8 of the Kyoto Protocol;
6. *Decides* that all members of expert review teams participating in the reviews under Article 8 of the Kyoto Protocol shall be required to sign an agreement for expert review services, in accordance with paragraph 6 of decision 12/CP.9;
7. *Adopts* the criteria for selection of lead reviewers contained in annex II to this decision;
8. *Requests* the secretariat, in organizing reviews:
 - (a) To apply the provisions resulting from paragraphs 5, 6 and 7 above;
 - (b) To ensure that an inventory submission by a Party included in Annex I to the Convention is not reviewed by the same lead reviewers in two successive years.

ANNEX I

Training programme for members of expert review teams for the initial review under the guidelines for review under Article 8 of the Kyoto Protocol**I. Premises of the training programme**

1. All courses will be available, without instructor, to reviewers all year round. At the request of a Party, the courses will also be made available to others interested in the review process, provided this does not require additional resources.
2. All courses will include an examination. For courses which have a final seminar, the examination will generally take place during the seminar. In exceptional circumstances, other arrangements for examination will be made, provided that the examinations take place under the supervision of the secretariat. For other courses the examination will take place on-line.
3. Experts who do not pass an examination for a course at the first attempt may re-take the examination one additional time, provided that the expert has fulfilled all the tasks assigned to the trainees in the course in a timely manner, and that the re-take does not require the secretariat to incur additional costs.
4. Examination procedures should be standardized, objective and transparent.
5. All courses will be available on-line. The courses will be distributed on CD-ROM to trainees without easy access to the Internet; in such cases, and for courses that are facilitated by an instructor, trainees will communicate with the instructor by e-mail.
6. Final seminars for courses may be offered in conjunction with lead reviewers' meetings to complete the training for lead reviewers.
7. The development and implementation of the courses of this training programme depend on the availability of resources.
8. Experts with relevant expertise will be selected as instructors for courses of the training programme, in such a way that their skills cover the subjects addressed in each course. The secretariat will seek geographic balance among the instructors participating in the training programme.

II. Courses of the training programme**A. National systems**

Description: This course covers guidelines for review of national systems under Article 5, paragraph 1, and related parts of guidelines under Articles 7 and 8 of the Kyoto Protocol

Preparation: 2004 or 2005

Implementation: 2005 and 2006

Target audience: 50 experienced reviewers and reviewers who have successfully completed the basic course for review of greenhouse gas inventories, and lead reviewers

Type of course: E-learning, facilitated by an instructor, with a final seminar, subject to the availability of resources, that could be held jointly for the three courses of this programme

Examination requirements: All reviewers who will review national systems or serve as lead reviewers must pass the examination

B. Application of adjustments

Description: This course covers decisions by the Conference of the Parties and technical guidance on methodologies for adjustments under Article 5, paragraph 2, and related parts of guidelines under Articles 7 and 8 of the Kyoto Protocol

Preparation: 2004 or 2005

Implementation: 2005 and 2006

Target audience: 50 experienced inventory reviewers per year, and lead reviewers

Type of course: E-learning, facilitated by an instructor, with a final seminar, subject to the availability of resources, that could be held jointly for the three courses of this programme

Examination requirements: Any reviewers who may apply adjustments or will serve as lead reviewers must pass the examination

C. Modalities for the accounting of assigned amounts under Article 7.4

Description: The exact content of this course will be determined following completion of the work on technical standards for data exchange between registry systems, as required by decision 24/CP.8

Preparation: 2004 or 2005

Implementation: 2005 and 2006

Target audience: Reviewers of national registries and assigned amount information, and lead reviewers

Type of course: E-learning, facilitated by an instructor, with a final seminar, subject to the availability of resources, that could be held jointly for the three courses of this programme

Examination requirements: Any reviewers who will review information relating to accounting of assigned amounts or serve as lead reviewers must pass the examination

Note: More information on general characteristics of the training programme can be found in document FCCC/SBSTA/2003/3.

ANNEX II

Criteria for selection of lead reviewers

1. Experts selected as lead reviewers:
 - (a) Shall have extensive experience in the preparation of greenhouse gas inventories (of emissions by sources and removals by sinks) and/or the management of national institutional arrangements for greenhouse gas inventory preparation;
 - (b) Shall have previously participated in at least two different review activities, including one in-country review;¹
 - (c) Shall have a strong general understanding of the overall process for the development and compilation of the entire inventory and, preferably, strong technical expertise in at least one of the Intergovernmental Panel on Climate Change (IPCC) sectors;
 - (d) Shall have proficiency in the use of the guidelines developed under the Convention and the Kyoto Protocol and procedures for reporting and review of inventories and assigned amount information, specifically:
 - (i) The guidelines for review under Article 8 of the Kyoto Protocol and the UNFCCC guidelines for the technical review of greenhouse gas inventories under the Convention;
 - (ii) The guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol and the UNFCCC reporting guidelines on annual inventories;
 - (iii) The modalities for the accounting of assigned amounts under Article 7, paragraph 4, including the requirements for national registries, and the technical standards for data exchange between registry systems under the Kyoto Protocol;
 - (e) Shall have knowledge of methodologies and technical guidance relating to the preparation and review of inventories, specifically:
 - (i) The *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*, and any other good practice guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP);
 - (ii) The technical guidance on methodologies for adjustments under Article 5, paragraph 2, of the Kyoto Protocol;
 - (iii) Other relevant technical guidance adopted by the COP/MOP;
 - (f) Shall have sufficient fluency in English to communicate with other members of the team and Party representatives;
 - (g) Shall have successfully completed any specific training and required examination as requested by the COP/MOP, and laid out in annex I to decision 24/CMP.1;

¹ Such review activities could have been conducted under the Convention or the Kyoto Protocol.

- (h) Shall have completed any specific training as requested by the Conference of the Parties (COP) and laid out in annex I to decision 12/CP.9, i.e. handling of confidential information and improving communication and facilitating consensus in expert review teams.
2. Other desirable criteria for lead reviewers include:
- (a) Experience in a management role;
 - (b) Knowledge of any other technical guidance and related review activities under the Convention and the Kyoto Protocol adopted by the COP and/or the COP/MOP.

*2nd plenary meeting
30 November 2005*

Decision 25/CMP.1

Issues relating to the implementation of Article 8 of the Kyoto Protocol – 2

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling decisions 23/CP.7, paragraph 9 of the annex to decision 22/CMP.1, 12/CP.9 and 21/CP.9,

Having considered decision 18/CP.10,

1. *Decides* that the content of paragraphs 1 to 4 of decision 18/CP.10 relating to access to confidential information by inventory expert review teams for the technical review of greenhouse gas inventories of Parties included in Annex I to the Convention (Annex I Parties), shall apply and be given full effect for the reviews of inventories under Article 8 of the Kyoto Protocol;
2. *Decides* that the expert review team shall note in the review report the relevant information requested by the expert review team, that was designated as confidential by the Annex I Party, to which it did not have access;
3. *Decides* that, as an exception to paragraph 11 of the “Technical guidance on methodologies for adjustments under Article 5, paragraph 2, of the Kyoto Protocol” annexed to decision 20/CMP.1, an expert review team may recommend, on the basis of review of inventory information of an Annex I Party that is designated as confidential by this Party, the retroactive application of an adjustment for the relevant years of the commitment period for which a review team was not given opportunities to access the confidential information in question, as noted in previous review reports;
4. *Decides* that, with respect to any adjustments applied retroactively in accordance with paragraph 3 above, only the adjustment applied for the current inventory year under review shall be relevant for the eligibility requirements laid out in paragraph 3 (e) of decision 15/CMP.1;
5. *Decides* that, for the inventory submitted for the final year of the commitment period, all Annex I Parties shall be subject to in-country or centralized reviews.

*2nd plenary meeting
30 November 2005*

Decision 26/CMP.1

Review processes during the period 2006–2007 for Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling decisions 19/CP.7, 22/CP.7, 23/CP.7, 4/CP.8, 19/CP.8, 25/CP.8 and 7/CP.11,

Recognizing that the establishment of the assigned amount of Parties included in Annex B to the Kyoto Protocol pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol is of critical importance for the successful implementation of the Protocol,

Noting that Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol will be subject to an in-country visit as part of the review of their initial reports which are submitted to facilitate, in accordance with decision 13/CMP.1, the calculation of their assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol,

1. *Requests* the secretariat to organize, in accordance with the corresponding guidelines, the initial reviews under Article 8 of the Kyoto Protocol, in conjunction with the review of the greenhouse gas inventories submitted in 2006, while exercising a certain degree of flexibility in applying the agreed timelines, provided that each initial review is completed no later than one year from the date of the submission of the initial report and that Parties are accorded the time to comment on the draft review report as inscribed in the guidelines under Article 8 of the Kyoto Protocol;

2. *Requests* the secretariat to prepare the compilation and synthesis of supplementary information incorporated in fourth national communications submitted in accordance with Article 7, paragraph 2, of the Kyoto Protocol by Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol, for consideration at its third session (December 2007).

*9th plenary meeting
9–10 December 2005*

Decision 27/CMP.1

Procedures and mechanisms relating to compliance under the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling decision 24/CP.7 containing an annex on procedures and mechanisms relating to compliance under the Kyoto Protocol,

Recalling also Articles 18 and 20 of the Kyoto Protocol,

Noting the recommendation in decision 24/CP.7, paragraph 2, and the prerogative of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to decide on the legal form of the procedures and mechanisms relating to compliance in terms of Article 18,

Noting also the proposal by Saudi Arabia to amend the Kyoto Protocol in this regard,

Emphasizing the need for Parties to do their utmost for an early resolution of this issue,

1. *Approves and adopts* the procedures and mechanisms relating to compliance under the Kyoto Protocol, as contained in the annex to this decision, without prejudice to the outcome of the process outlined in paragraph 2 of this decision;
2. *Decides* to commence consideration of the issue of an amendment to the Kyoto Protocol in respect of procedures and mechanisms relating to compliance in terms of Article 18, with a view to making a decision by the third session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;
3. *Requests* the Subsidiary Body for Implementation to commence consideration of the issue noted in paragraph 2 above at its twenty-fourth session (May 2006) and report on the outcome to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its third session (December 2007);
4. *Also decides* that the first meeting of the Compliance Committee shall be held in Bonn, Germany, early in 2006, and requests the secretariat to organize the meeting.

ANNEX

Procedures and mechanisms relating to compliance under the Kyoto Protocol

In pursuit of the ultimate objective of the United Nations Framework Convention on Climate Change, hereinafter referred to as “the Convention”, as stated in its Article 2,

Recalling the provisions of the United Nations Framework Convention on Climate Change, and the Kyoto Protocol to the Convention, herein after referred to as “the Protocol”,

Being guided by Article 3 of the Convention,

Pursuant to the mandate adopted in decision 8/CP.4 by the Conference of the Parties at its fourth session,

The following procedures and mechanisms *have been adopted*:

I. Objective

The objective of these procedures and mechanisms is to facilitate, promote and enforce compliance with the commitments under the Protocol.

II. Compliance Committee

1. A compliance committee, hereinafter referred to as “the Committee”, is hereby established.
2. The Committee shall function through a plenary, a bureau and two branches, namely, the facilitative branch and the enforcement branch.
3. The Committee shall consist of twenty members elected by the Conference of the Parties serving as the meeting of the Parties to the Protocol, ten of whom are to be elected to serve in the facilitative branch and ten to be elected to serve in the enforcement branch.
4. Each branch shall elect, from among its members and for a term of two years, a chairperson and a vice-chairperson, one of whom shall be from a Party included in Annex I and one from a Party not included in Annex I. These persons shall constitute the bureau of the Committee. The chairing of each branch shall rotate between Parties included in Annex I and Parties not included in Annex I in such a manner that at any time one chairperson shall be from among the Parties included in Annex I and the other chairperson shall be from among the Parties not included in Annex I.
5. For each member of the Committee, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect an alternate member.
6. Members of the Committee and their alternates shall serve in their individual capacities. They shall have recognized competence relating to climate change and in relevant fields such as the scientific, technical, socio-economic or legal fields.
7. The facilitative branch and the enforcement branch shall interact and cooperate in their functioning and, as necessary, on a case-by-case basis, the bureau of the Committee may designate one or more members of one branch to contribute to the work of the other branch on a non-voting basis.
8. The adoption of decisions by the Committee shall require a quorum of at least three fourths of the members to be present.

9. The Committee shall make every effort to reach agreement on any decisions by consensus. If all efforts at reaching consensus have been exhausted, the decisions shall as a last resort be adopted by a majority of at least three fourths of the members present and voting. In addition, the adoption of decisions by the enforcement branch shall require a majority of members from Parties included in Annex I present and voting, as well as a majority of members from Parties not included in Annex I present and voting. "Members present and voting" means members present and casting an affirmative or a negative vote.

10. The Committee shall, unless it decides otherwise, meet at least twice each year, taking into account the desirability of holding such meetings in conjunction with the meetings of the subsidiary bodies under the Convention.

11. The Committee shall take into account any degree of flexibility allowed by the Conference of the Parties serving as the meeting of the Parties to the Protocol, pursuant to Article 3, paragraph 6, of the Protocol and taking into account Article 4, paragraph 6, of the Convention, to the Parties included in Annex I undergoing the process of transition to a market economy.

III. Plenary of the Committee

1. The plenary shall consist of the members of the facilitative branch and the enforcement branch. The chairpersons of the two branches shall be the co-chairpersons of the plenary.

2. The functions of the plenary shall be:

- (a) To report on the activities of the Committee, including a list of decisions taken by the branches, to each ordinary session of the Conference of the Parties serving as the meeting of the Parties to the Protocol;
- (b) To apply the general policy guidance referred to in section XII (c) below, received from the Conference of the Parties serving as the meeting of the Parties to the Protocol;
- (c) To submit proposals on administrative and budgetary matters to the Conference of the Parties serving as the meeting of the Parties to the Protocol for the effective functioning of the Committee;
- (d) To develop any further rules of procedure that may be needed, including rules on confidentiality, conflict of interest, submission of information by intergovernmental and non-governmental organizations, and translation, for adoption by the Conference of the Parties serving as the meeting of the Parties to the Protocol by consensus; and
- (e) To perform such other functions as may be requested by the Conference of the Parties serving as the meeting of the Parties to the Protocol for the effective functioning of the Committee.

IV. Facilitative Branch

1. The facilitative branch shall be composed of:

- (a) One member from each of the five regional groups of the United Nations and one member from the small island developing States, taking into account the interest groups as reflected by the current practice in the Bureau of the Conference of the Parties;
- (b) Two members from Parties included in Annex I; and

- (c) Two members from Parties not included in Annex I.
2. The Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five members for a term of two years and five members for a term of four years. Each time thereafter, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five new members for a term of four years. Members shall not serve for more than two consecutive terms.
3. In electing the members of the facilitative branch, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall seek to reflect competences in a balanced manner in the fields referred to in section II, paragraph 6, above.
4. The facilitative branch shall be responsible for providing advice and facilitation to Parties in implementing the Protocol, and for promoting compliance by Parties with their commitments under the Protocol, taking into account the principle of common but differentiated responsibilities and respective capabilities as contained in Article 3, paragraph 1, of the Convention. It shall also take into account the circumstances pertaining to the questions before it.
5. Within its overall mandate, as specified in paragraph 4 above, and falling outside the mandate of the enforcement branch, as specified in section V, paragraph 4, below, the facilitative branch shall be responsible for addressing questions of implementation:
- (a) Relating to Article 3, paragraph 14, of the Protocol, including questions of implementation arising from the consideration of information on how a Party included in Annex I is striving to implement Article 3, paragraph 14, of the Protocol; and
 - (b) With respect to the provision of information on the use by a Party included in Annex I of Articles 6, 12 and 17 of the Protocol as supplemental to its domestic action, taking into account any reporting under Article 3, paragraph 2, of the Protocol.
6. With the aim of promoting compliance and providing for early warning of potential non-compliance, the facilitative branch shall be further responsible for providing advice and facilitation for compliance with:
- (a) Commitments under Article 3, paragraph 1, of the Protocol, prior to the beginning of the relevant commitment period and during that commitment period;
 - (b) Commitments under Article 5, paragraphs 1 and 2, of the Protocol, prior to the beginning of the first commitment period; and
 - (c) Commitments under Article 7, paragraphs 1 and 4, of the Protocol prior to the beginning of the first commitment period.
7. The facilitative branch shall be responsible for applying the consequences set out in section XIV below.

V. Enforcement Branch

1. The enforcement branch shall be composed of:
- (a) One member from each of the five regional groups of the United Nations and one member from the small island developing States, taking into account the interest groups as reflected by the current practice in the Bureau of the Conference of the Parties;
 - (b) Two members from Parties included in Annex I; and

- (c) Two members from Parties not included in Annex I.
2. The Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five members for a term of two years and five members for a term of four years. Each time thereafter, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five new members for a term of four years. Members shall not serve for more than two consecutive terms.
3. In electing the members of the enforcement branch, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall be satisfied that the members have legal experience.
4. The enforcement branch shall be responsible for determining whether a Party included in Annex I is not in compliance with:
 - (a) Its quantified emission limitation or reduction commitment under Article 3, paragraph 1, of the Protocol;
 - (b) The methodological and reporting requirements under Article 5, paragraphs 1 and 2, and Article 7, paragraphs 1 and 4, of the Protocol; and
 - (c) The eligibility requirements under Articles 6, 12 and 17 of the Protocol.
5. The enforcement branch shall also determine whether to apply:
 - (a) Adjustments to inventories under Article 5, paragraph 2, of the Protocol, in the event of a disagreement between an expert review team under Article 8 of the Protocol and the Party involved; and
 - (b) A correction to the compilation and accounting database for the accounting of assigned amounts under Article 7, paragraph 4, of the Protocol, in the event of a disagreement between an expert review team under Article 8 of the Protocol and the Party involved concerning the validity of a transaction or such Party's failure to take corrective action.
6. The enforcement branch shall be responsible for applying the consequences set out in section XV below for the cases of non-compliance mentioned in paragraph 4 above. The consequences of non-compliance with Article 3, paragraph 1, of the Protocol to be applied by the enforcement branch shall be aimed at the restoration of compliance to ensure environmental integrity, and shall provide for an incentive to comply.

VI. Submissions

1. The Committee shall receive, through the secretariat, questions of implementation indicated in reports of expert review teams under Article 8 of the Protocol, together with any written comments by the Party which is subject to the report, or questions of implementation submitted by:
 - (a) Any Party with respect to itself; or
 - (b) Any Party with respect to another Party, supported by corroborating information.
2. The secretariat shall forthwith make available to the Party in respect of which the question of implementation is raised, hereinafter referred to as "the Party concerned", any question of implementation submitted under paragraph 1 above.
3. In addition to the reports referred to in paragraph 1 above, the Committee shall also receive, through the secretariat, other final reports of expert review teams.

VII. Allocation and preliminary examination

1. The bureau of the Committee shall allocate questions of implementation to the appropriate branch in accordance with the mandates of each branch set out in section IV, paragraphs 4–7, and Section V, paragraphs 4–6.
2. The relevant branch shall undertake a preliminary examination of questions of implementation to ensure that, except in the case of a question raised by a Party with respect to itself, the question before it:
 - (a) Is supported by sufficient information;
 - (b) Is not *de minimis* or ill-founded; and
 - (c) Is based on the requirements of the Protocol.
3. The preliminary examination of questions of implementation shall be completed within three weeks from the date of receipt of these questions by the relevant branch.
4. After the preliminary examination of questions of implementation, the Party concerned shall, through the secretariat, be notified in writing of the decision and, in the event of a decision to proceed, be provided with a statement identifying the question of implementation, the information on which the question is based and the branch that will consider the question.
5. In the event of the review of eligibility requirements for a Party included in Annex I under Articles 6, 12 and 17 of the Protocol, the enforcement branch shall also, through the secretariat, notify forthwith the Party concerned, in writing, of the decision not to proceed with questions of implementation relating to eligibility requirements under those articles.
6. Any decision not to proceed shall be made available by the secretariat to other Parties and to the public.
7. The Party concerned shall be given an opportunity to comment in writing on all information relevant to the question of implementation and the decision to proceed.

VIII. General procedures

1. Following the preliminary examination of questions of implementation, the procedures set out in this section shall apply to the Committee, except where otherwise provided in these procedures and mechanisms.
2. The Party concerned shall be entitled to designate one or more persons to represent it during the consideration of the question of implementation by the relevant branch. This Party shall not be present during the elaboration and adoption of a decision of the branch.
3. Each branch shall base its deliberations on any relevant information provided by:
 - (a) Reports of the expert review teams under Article 8 of the Protocol;
 - (b) The Party concerned;
 - (c) The Party that has submitted a question of implementation with respect to another Party;
 - (d) Reports of the Conference of the Parties, the Conference of the Parties serving as the meeting of the Parties to the Protocol, and the subsidiary bodies under the Convention and the Protocol; and

- (e) The other branch.
- 4. Competent intergovernmental and non-governmental organizations may submit relevant factual and technical information to the relevant branch.
- 5. Each branch may seek expert advice.
- 6. Any information considered by the relevant branch shall be made available to the Party concerned. The branch shall indicate to the Party concerned which parts of this information it has considered. The Party concerned shall be given an opportunity to comment in writing on such information. Subject to any rules relating to confidentiality, the information considered by the branch shall also be made available to the public, unless the branch decides, of its own accord or at the request of the Party concerned, that information provided by the Party concerned shall not be made available to the public until its decision has become final.
- 7. Decisions shall include conclusions and reasons. The relevant branch shall forthwith, through the secretariat, notify the Party concerned in writing of its decision, including conclusions and reasons therefor. The secretariat shall make final decisions available to other Parties and to the public.
- 8. The Party concerned shall be given an opportunity to comment in writing on any decision of the relevant branch.
- 9. If the Party concerned so requests, any question of implementation submitted under section VI, paragraph 1; any notification under section VII, paragraph 4; any information under paragraph 3 above; and any decision of the relevant branch, including conclusions and reasons therefor, shall be translated into one of the six official languages of the United Nations.

IX. Procedures for the Enforcement Branch

- 1. Within ten weeks from the date of receipt of the notification under section VII, paragraph 4, the Party concerned may make a written submission to the enforcement branch, including rebuttal of information submitted to the branch.
- 2. If so requested in writing by the Party concerned within ten weeks from the date of receipt of the notification under section VII, paragraph 4, the enforcement branch shall hold a hearing at which the Party concerned shall have the opportunity to present its views. The hearing shall take place within four weeks from the date of receipt of the request or of the written submission under paragraph 1 above, whichever is the later. The Party concerned may present expert testimony or opinion at the hearing. Such a hearing shall be held in public, unless the enforcement branch decides, of its own accord or at the request of the Party concerned, that part or all of the hearing shall take place in private.
- 3. The enforcement branch may put questions to and seek clarification from the Party concerned, either in the course of such a hearing or at any time in writing, and the Party concerned shall provide a response within six weeks thereafter.
- 4. Within four weeks from the date of receipt of the written submission of the Party concerned under paragraph 1 above, or within four weeks from the date of any hearing pursuant to paragraph 2 above, or within fourteen weeks from the notification under section VII, paragraph 4, if the Party has not provided a written submission, whichever is the latest, the enforcement branch shall:
 - (a) Adopt a preliminary finding that the Party concerned is not in compliance with commitments under one or more of the articles of the Protocol referred to in section V, paragraph 4; or

- (b) Otherwise determine not to proceed further with the question.
5. The preliminary finding, or the decision not to proceed, shall include conclusions and reasons therefor.
6. The enforcement branch shall forthwith, through the secretariat, notify the Party concerned in writing of its preliminary finding or decision not to proceed. The secretariat shall make the decision not to proceed available to the other Parties and to the public.
7. Within ten weeks from the date of receipt of the notification of the preliminary finding, the Party concerned may provide a further written submission to the enforcement branch. If the Party concerned does not do so within that period of time, the enforcement branch shall forthwith adopt a final decision confirming its preliminary finding.
8. If the Party concerned provides a further written submission, the enforcement branch shall, within four weeks from the date it received the further submission, consider it and adopt a final decision, indicating whether the preliminary finding, as a whole or any part of it to be specified, is confirmed.
9. The final decision shall include conclusions and reasons therefor.
10. The enforcement branch shall forthwith, through the secretariat, notify the Party concerned in writing of its final decision. The secretariat shall make the final decision available to the other Parties and to the public.
11. The enforcement branch, when the circumstances of an individual case so warrant, may extend any time frames provided for in this section.
12. Where appropriate, the enforcement branch may, at any time, refer a question of implementation to the facilitative branch for consideration.

X. Expedited procedures for the Enforcement Branch

1. Where a question of implementation relates to eligibility requirements under Articles 6, 12 and 17 of the Protocol, sections VII to IX shall apply, except that:
- (a) The preliminary examination referred to in section VII, paragraph 2, shall be completed within two weeks from the date of receipt of the question of implementation by the enforcement branch;
 - (b) The Party concerned may make a written submission within four weeks from the date of receipt of the notification under section VII, paragraph 4;
 - (c) If so requested in writing by the Party concerned within two weeks from the date of receipt of the notification under section VII, paragraph 4, the enforcement branch shall hold a hearing as referred to in section IX, paragraph 2, that shall take place within two weeks from the date of receipt of the request or of the written submission under subparagraph (b) above, whichever is the later;
 - (d) The enforcement branch shall adopt its preliminary finding or a decision not to proceed within six weeks of the notification under section VII, paragraph 4, or within two weeks of a hearing under section IX, paragraph 2, whichever is the shorter;
 - (e) The Party concerned may make a further written submission within four weeks from the date of receipt of the notification referred to in section IX, paragraph 6;

- (f) The enforcement branch shall adopt its final decision within two weeks from the date of receipt of any further written submission referred to in section IX, paragraph 7; and
- (g) The periods of time stipulated in section IX shall apply only if, in the opinion of the enforcement branch, they do not interfere with the adoption of decisions in accordance with subparagraphs (d) and (f) above.

2. Where the eligibility of a Party included in Annex I under Articles 6, 12 and 17 of the Protocol has been suspended under section XV, paragraph 4, the Party concerned may submit a request to reinstate its eligibility, either through an expert review team or directly to the enforcement branch. If the enforcement branch receives a report from the expert review team indicating that there is no longer a question of implementation with respect to the eligibility of the Party concerned, it shall reinstate that Party's eligibility, unless the enforcement branch considers that there continues to be such a question of implementation, in which case the procedure referred to in paragraph 1 above shall apply. In response to a request submitted to it directly by the Party concerned, the enforcement branch shall decide as soon as possible, either that there no longer continues to be a question of implementation with respect to that Party's eligibility in which case it shall reinstate that Party's eligibility, or that the procedure referred to in paragraph 1 above shall apply.

3. Where the eligibility of a Party to make transfers under Article 17 of the Protocol has been suspended under section XV, paragraph 5 (c), the Party may request the enforcement branch to reinstate that eligibility. On the basis of the compliance action plan submitted by the Party in accordance with section XV, paragraph 6, and any progress reports submitted by the Party including information on its emissions trends, the enforcement branch shall reinstate that eligibility, unless it determines that the Party has not demonstrated that it will meet its quantified emission limitation or reduction commitment in the commitment period subsequent to the one for which the Party was determined to be in non-compliance, hereinafter referred to as "the subsequent commitment period". The enforcement branch shall apply the procedure referred to in paragraph 1 above, adapted insofar as necessary for the purposes of the procedure in the present paragraph.

4. Where the eligibility of a Party to make transfers under Article 17 of the Protocol has been suspended under section XV, paragraph 5 (c), the enforcement branch shall reinstate that eligibility forthwith if the Party demonstrates that it has met its quantified emission limitation or reduction commitment in the subsequent commitment period, either through the report of the expert review team under Article 8 of the Protocol for the final year of the subsequent commitment period or through a decision of the enforcement branch.

5. In the event of a disagreement whether to apply adjustments to inventories under Article 5, paragraph 2, of the Protocol, or whether to apply a correction to the compilation and accounting database for the accounting of assigned amounts under Article 7, paragraph 4, of the Protocol, the enforcement branch shall decide on the matter within twelve weeks of being informed in writing of such disagreement. In doing so, the enforcement branch may seek expert advice.

XI. Appeals

1. The Party in respect of which a final decision has been taken may appeal to the Conference of the Parties serving as the meeting of the Parties to the Protocol against a decision of the enforcement branch relating to Article 3, paragraph 1, of the Protocol if that Party believes it has been denied due process.

2. The appeal shall be lodged with the secretariat within 45 days after the Party has been informed of the decision of the enforcement branch. The Conference of the Parties serving as the meeting of the Parties to the Protocol shall consider the appeal at its first session after the lodging of the appeal.

3. The Conference of the Parties serving as the meeting of the Parties to the Protocol may agree by a three-fourths majority vote of the Parties present and voting at the meeting to override the decision of the enforcement branch, in which event the Conference of the Parties serving as the meeting of the Parties to the Protocol shall refer the matter of the appeal back to the enforcement branch.

4. The decision of the enforcement branch shall stand pending the decision on appeal. It shall become definitive if, after 45 days, no appeal has been made against it.

XII. Relationship with the Conference of the Parties serving as the meeting of the Parties to the Protocol

The Conference of the Parties serving as the meeting of the Parties to the Protocol shall:

- (a) In considering the reports of the expert review teams in accordance with Article 8, paragraphs 5 and 6 of the Protocol, identify any general problems that should be addressed in the general policy guidance referred to in subparagraph (c) below;
- (b) Consider the reports of the plenary on the progress of its work;
- (c) Provide general policy guidance, including on any issues regarding implementation that may have implications for the work of the subsidiary bodies under the Protocol;
- (d) Adopt decisions on proposals on administrative and budgetary matters; and
- (e) Consider and decide appeals in accordance with section XI.

XIII. Additional period for fulfilling commitments

For the purpose of fulfilling commitments under Article 3, paragraph 1, of the Protocol, a Party may, until the hundredth day after the date set by the Conference of the Parties serving as the meeting of the Parties to the Protocol for the completion of the expert review process under Article 8 of the Protocol for the last year of the commitment period, continue to acquire, and other Parties may transfer to such Party, emission reduction units, certified emission reductions, assigned amount units and removal units under Articles 6, 12 and 17 of the Protocol, from the preceding commitment period, provided the eligibility of any such Party has not been suspended in accordance with section XV, paragraph 4.

XIV. Consequences applied by the Facilitative Branch

The facilitative branch, taking into account the principle of common but differentiated responsibilities and respective capabilities, shall decide on the application of one or more of the following consequences:

- (a) Provision of advice and facilitation of assistance to individual Parties regarding the implementation of the Protocol;
- (b) Facilitation of financial and technical assistance to any Party concerned, including technology transfer and capacity building from sources other than those established under the Convention and the Protocol for the developing countries;
- (c) Facilitation of financial and technical assistance, including technology transfer and capacity building, taking into account Article 4, paragraphs 3, 4 and 5, of the Convention; and

- (d) Formulation of recommendations to the Party concerned, taking into account Article 4, paragraph 7, of the Convention.

XV. Consequences applied by the Enforcement Branch

1. Where the enforcement branch has determined that a Party is not in compliance with Article 5, paragraph 1 or paragraph 2, or Article 7, paragraph 1 or paragraph 4, of the Protocol, it shall apply the following consequences, taking into account the cause, type, degree and frequency of the non-compliance of that Party:

- (a) Declaration of non-compliance; and
- (b) Development of a plan in accordance with paragraphs 2 and 3 below.

2. The Party not in compliance under paragraph 1 above, shall, within three months after the determination of non-compliance, or such longer period that the enforcement branch considers appropriate, submit to the enforcement branch for review and assessment a plan that includes:

- (a) An analysis of the causes of non-compliance of the Party;
- (b) Measures that the Party intends to implement in order to remedy the non-compliance; and
- (c) A timetable for implementing such measures within a time frame not exceeding twelve months which enables the assessment of progress in the implementation.

3. The Party not in compliance under paragraph 1 above shall submit to the enforcement branch progress reports on the implementation of the plan on a regular basis.

4. Where the enforcement branch has determined that a Party included in Annex I does not meet one or more of the eligibility requirements under Articles 6, 12 and 17 of the Protocol, it shall suspend the eligibility of that Party in accordance with relevant provisions under those articles. At the request of the Party concerned, eligibility may be reinstated in accordance with the procedure in section X, paragraph 2.

5. Where the enforcement branch has determined that the emissions of a Party have exceeded its assigned amount, calculated pursuant to its quantified emission limitation or reduction commitment inscribed in Annex B to the Protocol and in accordance with the provisions of Article 3 of the Protocol as well as the modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Protocol, taking into account emission reduction units, certified emission reductions, assigned amount units and removal units the Party has acquired in accordance with section XIII, it shall declare that that Party is not in compliance with its commitments under Article 3, paragraph 1, of the Protocol, and shall apply the following consequences:

- (a) Deduction from the Party's assigned amount for the second commitment period of a number of tonnes equal to 1.3 times the amount in tonnes of excess emissions;
- (b) Development of a compliance action plan in accordance with paragraphs 6 and 7 below; and
- (c) Suspension of the eligibility to make transfers under Article 17 of the Protocol until the Party is reinstated in accordance with section X, paragraph 3 or paragraph 4.

6. The Party not in compliance under paragraph 5 above shall, within three months after the determination of non-compliance or, where the circumstances of an individual case so warrant, such

longer period that the enforcement branch considers appropriate, submit to the enforcement branch for review and assessment a compliance action plan that includes:

- (a) An analysis of the causes of the non-compliance of the Party;
- (b) Action that the Party intends to implement in order to meet its quantified emission limitation or reduction commitment in the subsequent commitment period, giving priority to domestic policies and measures; and
- (c) A timetable for implementing such action, which enables the assessment of annual progress in the implementation, within a time frame that does not exceed three years or up to the end of the subsequent commitment period, whichever occurs sooner. At the request of the Party, the enforcement branch may, where the circumstances of an individual case so warrant, extend the time for implementing such action for a period which shall not exceed the maximum period of three years mentioned above.

7. The Party not in compliance under paragraph 5 above shall submit to the enforcement branch a progress report on the implementation of the compliance action plan on an annual basis.

8. For subsequent commitment periods, the rate referred to in paragraph 5 (a) above shall be determined by an amendment.

XVI. Relationship with Articles 16 and 19 of the Protocol

The procedures and mechanisms relating to compliance shall operate without prejudice to Articles 16 and 19 of the Protocol.

XVII. Secretariat

The secretariat referred to in Article 14 of the Protocol shall serve as the secretariat of the Committee.

*9th plenary meeting
9–10 December 2005*
