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## Subsidiary Body for Scientific and Technological Advice

Forty-first session

Lima, 1–6 December 2014

Agenda item 11(a)

**Methodological issues under the Kyoto Protocol**

**Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Articles 5, 7 and 8 of the Kyoto Protocol**

### **Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Articles 5, 7 and 8 of the Kyoto Protocol**

#### **Draft conclusions proposed by the Chair**

1. At the request of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP),<sup>1</sup> the Subsidiary Body for Scientific and Technological Advice (SBSTA) continued its work on assessing and addressing the implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8, on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Articles 5, 7 and 8 of the Kyoto Protocol.
2. The SBSTA requested the secretariat to compile into a user-friendly document all reporting, review and accounting requirements relating to the second commitment period of the Kyoto Protocol as adopted by the CMP, in order to facilitate and ensure their implementation, and that this document be made available on the UNFCCC website by the end of May 2015.
3. The SBSTA agreed to consider, at its forty-second session (June 2015), the accounting, reporting and review requirements for Parties included in Annex I to the Convention without a quantified emission limitation and reduction commitment for the second commitment period, along with the updated training programme for members of expert review teams (ERTs) participating in annual reviews under Article 8 of the Kyoto Protocol.

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<sup>1</sup> FCCC/KP/CMP/2014/9, paragraph 36.

4. The SBSTA took note that an Annex I Party that is a Party to the Kyoto Protocol with a commitment inscribed in the second column, but not in the third column, of the table contained in Annex B in the Doha Amendment may request the expert review team (ERT) to review, as part of the review by the ERT of that Party's annual inventory for the first year of the second commitment period, information relating to that Party's base year.
5. The SBSTA recommended that such a request should be carried out as part of the annual review for the first year of the second commitment period.
6. The SBSTA took note of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in paragraph 2 above and requested that the actions called for in these conclusions be undertaken by the secretariat subject to the availability of financial resources.
7. The SBSTA advanced its work on the matters referred to in paragraph 1 above but was not able to conclude it. The SBSTA agreed to forward the draft decision texts, including their annexes, contained in the annex of this document for consideration at CMP 10.

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**Annex**

[English only]

**Draft decision text for consideration by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol****Draft decision -/CMP.10****Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol including those relating to Articles 5, 7 and 8 of the Kyoto Protocol: part I implications related to accounting and reporting and other related issues**

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

*Recalling* Articles 5, 7 and 8 of the Kyoto Protocol,

*Also recalling* decisions 2/CMP.6, 2/CMP.7, 3/CMP.7, 4/CMP.7, 1/CMP.8 and 2/CMP.8,

*Being aware* of decisions 11/CMP.1, 13/CMP.1, 15/CMP.1, 16/CMP.1, 18/CMP.1, 19/CMP.1 and 27/CMP.1,

1. *Decides* that, for the purpose of the second commitment period of the Kyoto Protocol and pending the entry into force of the Doha Amendment, contained in decision 1/CMP.8, annex I, any references in this decision and decision 2/CMP.8 to Annex A, Annex B, Article 3, paragraphs 1 bis, 1 ter, 1 quarter, 7 bis, 7 ter, 8, 8 bis, 12 bis and 12 ter, and Article 4, paragraphs 2 and 3, unless otherwise specified, shall be understood as referring to those Articles and Annexes as contained in the Doha Amendment, and that upon the entry into force of the Doha Amendment such references shall be read as references to the relevant Articles of the Kyoto Protocol as amended;

2. *Also decides* that, for the purpose of the second commitment period, decisions 13/CMP.1, 15/CMP.1, 18/CMP.1 and 19/CMP.1 shall apply *mutatis mutandis*, except where otherwise specified in decisions 1/CMP.8 and 2/CMP.8 and in this decision;

3. *Clarifies* that, for the purpose of the second commitment period, unless otherwise specified in this decision, any references in decision 13/CMP.1, and in annexes I and II to this decision, to Parties included in Annex I or to Parties shall be understood as referring to Parties included in Annex I with commitments inscribed in the third column of Annex B;

4. *Decides* that, for the purpose of the second commitment period, the following changes shall apply to decisions 13/CMP.1 and 15/CMP.1:

(a) All references to Article 3, paragraph 1, shall be read as references to Article 3, paragraph 1 bis, except those in paragraphs 12(e) and 47(h) of the annex to decision 13/CMP.1;

(b) All references to Article 3, paragraphs 7 and 8, shall be read as references to Article 3, paragraphs 7 bis, 8 and 8 bis, except that in paragraph 4 of decision 13/CMP.1;

(c) All references to the first commitment period shall be read as references to the second commitment period, except that in paragraph 3(e) of decision 15/CMP.1;

(d) All references to activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, shall be read as references to activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any elected activities under Article 3, paragraph 4;

(e) All references to the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* or the Intergovernmental Panel on Climate Change *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* in decision 15/CMP.1 shall be read as references to the *2006 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the 2006 IPCC Guidelines) as implemented through the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories” and the *2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol*. References to chapter 7 of the Intergovernmental Panel on Climate Change *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* shall be read as references to chapter 4 of volume 1 of the 2006 IPCC Guidelines;

(f) All references to decision 16/CMP.1 shall be read as references to decision 2/CMP.7;

5. For the purpose of the second commitment period, paragraph 3(b) of decision 15/CMP.1 shall be replaced by the following paragraph:

3(b) The Party concerned has failed to include an estimate for an Annex A source category (as defined in chapter 4 of Volume I of the 2006 IPCC Guidelines) 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;

6. *Also decides* that decisions 14/CMP.1, 17/CMP.1 and 6/CMP.3 shall not apply for the purpose of the second commitment period;

7. *Adopts* the revisions to the modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol<sup>1</sup> set out in annex I;

8. *Recalls* that, pursuant to Article 4, each Party to an agreement to fulfil their commitments under Article 3 jointly, shall, in the event that the aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A of the Parties to that agreement exceed their assigned amounts, be responsible for its own level of emissions set out in the agreement;

9. *Decides* that each of the Parties included in Annex I that have reached an agreement to fulfil their commitments under Article 3 jointly, in accordance with Article 4, shall clarify, in their reports to facilitate the calculation of the assigned amount submitted pursuant to decision 2/CMP.8, how the information listed in annex I to that decision, the application of Article 3, paragraph 7 ter, including its technical implementation, and section VI of decision 1/CMP.8 is determined. This clarification shall describe, in detail, methodologies and, if applicable, any relevant assumptions applied by those Parties for their joint fulfilment in relation to:

(a) The application of paragraphs 23–26 of decision 1/CMP.8;

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<sup>1</sup> Decision 13/CMP.1, annex.

(b) The calculation of base year emissions according to Article 3, paragraphs 5, 7 bis, 8 and 8 bis;

(c) The calculation of those Parties' assigned amounts in accordance with Article 3, paragraphs 7 bis, 8 and 8 bis, and the respective emission levels allocated to each of the Parties as set out in the agreement pursuant to Article 4, paragraph 1;

(d) The calculation of those Parties' commitment period reserves in accordance with decision 11/CMP.1, paragraph 18 of decision 1/CMP.8 and this decision;

(e) The application and calculation pursuant to paragraph 13 of decision 2/CMP.7;

10. *Adopts* the standard electronic format for reporting Kyoto Protocol units and the reporting instructions for the second commitment period contained in annex II for reporting in accordance with paragraph 11 of the annex to decision 15/CMP.1;

11. *Decides* that each Party included in Annex I with a quantified emission limitation or reduction commitment inscribed in the third column of Annex B shall annually report tables in a standard electronic format to the secretariat electronically; any related information of a non-quantitative character shall be submitted separately; unless otherwise indicated, Parties shall submit information for the previous calendar year (based on Coordinated Universal Time); this is referred to as the 'reported year' (e.g. in the 2017 standard electronic format submission, the 'reported year' will be the 2016 calendar year);

12. *Also decides* that, for the second commitment period, each Party included in Annex I with a quantified emission limitation or reduction commitment inscribed in the third column of Annex B shall submit its first standard electronic format for reporting Kyoto Protocol units for the second commitment period in conjunction with its first annual inventory submission for that commitment period in accordance with paragraph 5 of decision 2/CMP.8;

13. *Further decides* that the contribution of assigned amount units as a share of proceeds shall be executed in the most transparent manner taking into account environmental integrity at the international level;

14. *Decides* that, where a Party included in Annex I undertakes a corrective transaction to reflect a correction to the compilation and accounting database applied by the Compliance Committee, pursuant to chapter V, paragraph 5(b), of the annex to decision 27/CMP.1, the information in the compilation and accounting database shall be appropriately amended to avoid double counting, following the review of the corrective transaction in accordance with Article 8 of the Kyoto Protocol and the resolution of any questions of implementation;

15. *Also decides* to extend the code of practice for the treatment of confidential information for the reviews of inventories under Article 8 of the Kyoto Protocol to the review of assigned amount information under Article 8 of the Kyoto Protocol;

16. *Requests* the administrator of the international transaction log to develop an application to facilitate the submission of the standard electronic format referred to in paragraph 10 above and to report on progress in the development and testing of this application in its annual report for 2014;

17. *Adopts* the revisions to the "Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol"<sup>2</sup> for the second commitment period contained in annex III;

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<sup>2</sup> Decision 15/CMP.1, annex.

18. *Requests* the Subsidiary Body for Scientific and Technological Advice to continue to assess and address the implications of the implementation of decisions 2/CMP.7 to 4/CMP.7, 1/CMP.8 and 2/CMP.8 and this decision for Parties included in Annex I without commitments inscribed in the third column of Annex B in relation to the second commitment period of the Kyoto Protocol;

19. *Also requests* the Subsidiary Body for Scientific and Technological Advice to consider the implication of the implementation of decisions 2/CMP.7 to 4/CMP.7, 1/CMP.8, 2/CMP.8 and this decision for Annex I Parties without quantified emissions limitations and reduction objectives in Annex B of the Kyoto Protocol for the first commitment period and with commitments inscribed in the third column of Annex B with the aim of recommending a decision for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its tenth session (December 2014);

20. *Further requests* the Subsidiary Body for Scientific and Technological Advice to continue to assess and address the implications of the implementation of decisions 2/CMP.7 to 4/CMP.7, 1/CMP.8 and 2/CMP.8 and this decision for the relevant decisions adopted in the first commitment period, including in particular decisions 19/CMP.1, 20/CMP.1 and 22/CMP.1, and to continue to consider the implementation of Article 3, paragraph 7 ter, including in relation to Parties included in Annex I undergoing the process of transition to a market economy, with the aim of finalizing its consideration of these matters and proposing any changes to such decisions for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its tenth session (December 2014);

21. *[Requests* the Subsidiary Body for Scientific and Technological Advice, to consider, at its fortieth session, whether the reference to assigned amount in paragraph 25 in decision 1/CMP.8 for a Party included in Annex I undergoing the process of transition to a market economy should be understood as referring to the assigned amount for the second commitment period calculated pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, adjusted by the number of assigned amount units cancelled in accordance with paragraph 23 ter.]

## Annex I

[English only]

### **Modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol**

#### **General Provisions**

1. For the purpose of the second commitment period, paragraph 2 of decision 13/CMP.1 shall be replaced by the following paragraph:

2. For the purpose of the second commitment period, after completion of the initial review under Article 8 of the report to facilitate the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in accordance with , paragraphs 2–4 of decision 2/CMP.8 and resolution of any question of implementation relating to adjustments under Article 5, paragraph 2, or its assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, of each Party shall be recorded in the database for the compilation and accounting of emissions and assigned amounts referred to in paragraph 50 of the annex to decision 13/CMP.1, and shall remain fixed for the second commitment period.

#### **I. Modalities**

##### **B. Calculation of the assigned amounts pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis<sup>1</sup>**

2. For the purpose of the second commitment period, paragraph 5 of the annex to decision 13/CMP.1 shall be replaced with the following paragraph:

5. The assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, for the second commitment period, from 2013 to 2020, for each Party included in Annex I with a commitment inscribed in the third column of Annex B, shall be equal to the percentage inscribed for it in the third column of Annex B of its aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases, and from the sources, listed in Annex A to the Kyoto Protocol in the base year or period, multiplied by eight, taking into account the following:

(a) The base year shall be 1990 except for those Parties undergoing the process of transition to a market economy that have selected a historical base year or period other than 1990, in accordance with Article 3, paragraph 5, for those Parties that have selected 1995 as the base year for total emissions of hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride, in accordance with Article 3, paragraph 8, and 1995 or 2000 as the base year for total emissions of nitrogen trifluoride, in accordance with Article 3, paragraph 8 bis;

(b) Those Parties for which land-use change and forestry (all emissions by sources and removals by sinks under category 4 of the revised *Guidelines for the preparation of national communications by Parties included in Annex I to the*

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<sup>1</sup> Unless otherwise specified in this annex, hereinafter the section headings in the annex follow the numbering of the corresponding section headings in the annex to decision 13/CMP.1.

*Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories* (hereinafter referred to as the revised UNFCCC Annex I inventory reporting guidelines) as contained in the CRF tables) constituted a net source of greenhouse gas emissions in the base year or period shall include in their emissions during that year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in that year or period from land-use change (all emissions by sources minus removals by sinks reported in relation to the conversion of forests (deforestation));

(c) Those Parties that have reached an agreement in accordance with Article 4 to fulfil their commitments under Article 3 jointly shall use the respective emission level allocated to each of the Parties in that agreement instead of the percentage inscribed for it in the third column of Annex B.

3. Paragraphs 6, 7 and 8 of the annex to decision 13/CMP.1 shall not apply for the purpose of the second commitment period.

4. The following paragraphs and chapter heading shall be inserted after paragraph 8 of the annex to decision 13/CMP.1:

8 bis. The report to facilitate the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, referred to in paragraph 2 of decision 2/CMP.8 shall contain the following additional information, in addition to the list in annex I to decision 2/CMP.8:

(a) The calculation of the difference between the assigned amount of the second commitment period and average annual emissions for the first three years of the preceding commitment period multiplied by eight, pursuant to Article 3, paragraph 7 ter[, and in accordance with paragraphs 8 ter and 8 quarter below].

**[B. bis. Cancellation pursuant to Article 3, paragraph 7 ter**

8 ter. The reference to the assigned amount of the second commitment period referred to in Article 3, paragraph 7 ter, shall be understood as referring to the assigned amount for the second commitment period calculated pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis.

8 quarter. For the purpose of Article 3, paragraph 7 ter, the units cancelled shall be assigned amount units (AAUs) issued by the Party for the second commitment period.

8 quinquies. Where a Party applies the cancellation pursuant to Article 3, paragraph 7 ter, the commitment period reserve for the second commitment period under paragraph 6 of the annex to decision 11/CMP.1 for the Party shall not drop below 90 per cent of eight times its average annual emissions for the first three years of the first commitment period, or 100 per cent of eight times its most recently reviewed inventory, whichever is lower.

8 sexies. The reference to assigned amount in paragraph 25 in decision 1/CMP.8 for a Party included in Annex I undergoing the process of transition to a market economy shall be understood as referring to the assigned amount for the second commitment period calculated pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, adjusted by the number of AAUs cancelled in accordance with paragraph 23 ter.]

**C. Recording of the assigned amounts pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis**

5. For the purpose of the second commitment period, the following paragraphs shall be inserted after paragraphs 9 and 10 of the annex to decision 13/CMP.1, respectively:



9 bis. After initial review under Article 8 and resolution of any questions of implementation relating to adjustments or the calculation of its assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, any positive difference between the assigned amount of the second commitment period for a Party included in Annex I and average annual emissions for the first three years of the preceding commitment period multiplied by eight of each Party shall be recorded in the database for the compilation and accounting of emissions and assigned amounts referred to in paragraph 50 of the annex to decision 13/CMP.1.

10 bis. Once recorded in the compilation and accounting database referred to in paragraph 50 of the annex to decision 13/CMP.1, the quantity to cancel under Article 3, paragraph 7 ter, of each Party shall remain fixed for the second commitment period.

**D. Additions to, and subtractions from, the assigned amounts pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, for the accounting of the compliance assessment**

6. For the purpose of the second commitment period, the following shall be inserted after paragraph 11(d) of the annex to decision 13/CMP.1:

11(d) bis. Any acquisition by a Party of AAUs from previous period surplus reserve accounts of other Parties shall be in accordance with decision 1/CMP.8.

7. For the purpose of the second commitment period, paragraph 11(f) of the annex to decision 13/CMP.1 shall be replaced with the following:

11(f) Carry-over by the Party of ERUs, CERs and/or AAUs from the previous commitment period, in accordance with paragraphs 23–26 of decision 1/CMP.8.

8. For the purpose of the second commitment period, the following shall be added after the relevant subparagraphs of paragraph 12 of the annex to decision 13/CMP.1:

12(e) bis. For the second commitment period of the Kyoto Protocol, cancellation by the Party of AAUs under Article 3, paragraphs 1 ter and 1 quater;

12(e) ter. For the second commitment period of the Kyoto Protocol, cancellation by the Party of AAUs under Article 3, paragraph 7 ter;

12(g) Transfers by the Party of AAUs from its previous period surplus reserve account to the previous period surplus reserve accounts of other Parties in accordance with paragraph 26 of decision 1/CMP.8;

12(h) Transfer by the Party of AAUs from the previous period surplus reserve account to the retirement account in accordance with paragraphs 23–26 of decision 1/CMP.8;

12(i) Voluntary cancellation by the Party of any units under paragraph 21(e) of the annex to decision 13/CMP.1;

12(j) Cancellation of units that are remaining after the expiration of the additional period for fulfilment commitments and carry-overs under paragraph 36 of the annex to decision 13/CMP.1;

12(k) Cancellation of tCERs by the Party after their expiry under paragraph 53 of the annex to decision 5/CMP.1;

12(l) Cancellation of lCERs by the Party after their expiry under paragraph 53 of the annex to decision 5/CMP.1;

12(m) Cancellation of ICERs by the Party held in holding accounts where there has been a reversal of removals by sinks for the project activity concerned under paragraph 49 of the annex to decision 5/CMP.1 and paragraph 3 to appendix D to decision 5/CMP.1;

12(n) Cancellation of ICERs by the Party held in holding accounts where a certification report for the project activity concerned has not been provided under paragraph 50 of the annex to decision 5/CMP.1 and paragraph 3 to appendix D to decision 5/CMP.1;

12(o). Cancellation of AAUs, CERs, ERUs, RMUs and/or tCERs for the purpose of replacing tCERs prior to expiry under paragraphs 41–43 of the annex to decision 5/CMP.1;

12(p) Cancellation of AAUs, CERs, ERUs and/or RMUs for the purpose of replacing ICERs prior to expiry under paragraph 47(a) of the annex to decision 5/CMP.1;

12(q) Cancellation of AAUs, CERs, ERUs, RMUs and/or ICERs from the same project activity for the purpose of replacing ICERs where there has been a reversal of removals by sinks under paragraph 47(b) of the annex to decision 5/CMP.1;

12(r) Cancellation of AAUs, CERs, ERUs, RMUs and/or ICERs from the same project activity for the purpose of replacing ICERs where a certification report has not been provided under paragraph 47(c) of the annex to decision 5/CMP.1.

**E. Basis for the compliance assessment**

9. For the purpose of the second commitment period, the assessment referred to in paragraph 14 of the annex to decision 13/CMP.1, shall be carried out taking into account also paragraph 25 of decision 1/CMP.8.

**F. Carry-over**

10. For the purpose of the second commitment period, the following section heading and paragraphs shall be inserted after paragraph 16 of the annex to decision 13/CMP.1:

**F bis Share of proceeds**

16 bis The share of proceeds pursuant to paragraphs 20 and 21 of decision 1/CMP.8 shall be calculated in accordance with the following:

(a) The quantity of units levied as a share of the proceeds on the issuance of CERs from project activities, on the first international transfers of AAUs and on the issuance of ERUs, shall be calculated as 2 per cent of the amount of units issued or transferred in each transaction, rounded up to the next higher integer value;

(b) The quantity of units levied as a share of the proceeds on the first international transfer of AAUs shall be included in the quantity of AAUs transferred. The quantity of units levied as a share of the proceeds on the issuance of ERUs for Article 6 projects shall be included in the quantities of ERUs issued for the project concerned;

(c) The transfers to the Adaptation Fund account pursuant to paragraphs 20–22 of decision 1/CMP.8 shall not be subject to the share of proceeds;

(d) The first international transfers of units between previous period surplus reserve accounts shall not be subject to the share of proceeds;

(e) The term ‘first international transfer’ refers to the first external transfer of each individual AAU from the originating registry to the registry of another Party, tracked by its serial number.

## II. Registry requirements

### A. National registries

11. For the purpose of the second commitment period, the following shall be inserted after paragraph 21(d) of the annex to decision 13/CMP.1:21(d) bis One cancellation account for each commitment period for the purpose of cancelling AAUs under Article 3, paragraphs 1 ter and 1 quater;

21(d) ter. One cancellation account for the second commitment period for the purpose of cancelling AAUs pursuant to Article 3, paragraph 7 ter;

21(d) quater. One previous period surplus reserve account for holdings of AAUs, in accordance with paragraphs 23–26 of decision 1/CMP.8;

12. For the purpose of the second commitment period, the following shall be inserted after paragraph 21(f) of the annex to decision 13/CMP.1:

21(g). One cancellation account for voluntary cancellation by the Party of any units under paragraph 21(e) of the annex to decision 13/CMP.1;

21(h). One cancellation account for the purpose of cancelling units that are remaining after the expiration of the additional period for fulfilment commitments and carry-overs under paragraph 36 of the annex to decision 13/CMP.1;

21(i). One cancellation account for the purpose of cancelling tCERs by the Party after their expiry under paragraph 53 of the annex to decision 5/CMP.1;

21(j). One cancellation account for the purpose of cancelling ICERs by the Party after their expiry under paragraph 53 of the annex to decision 5/CMP.1;

21(k). One cancellation account for the purpose of cancelling ICERs by the Party held in holding accounts where there has been a reversal of removals by sinks for the project activity concerned under paragraph 49 of the annex to decision 5/CMP.1 and paragraph 3 of appendix D to decision 5/CMP.1;

21(l). One cancellation account for the purpose of cancelling ICERs by the Party held in holding accounts where a certification report for the project activity concerned has not been provided under paragraph 50 of the annex to decision 5/CMP.1 and paragraph 3 of appendix D to decision 5/CMP.1;

21(m). One replacement account for the purpose of cancelling AAUs, CERs, ERUs, RMUs and/or tCERs for the purpose of replacing tCERs prior to expiry under paragraph 43 of the annex to decision 5/CMP.1;

21(n). One replacement account for the purpose of cancelling AAUs, CERs, ERUs and/or RMUs for the purpose of replacing ICERs prior to expiry under paragraph 47(a) of the annex to decision 5/CMP.1;

21(o). One replacement account for the purpose of cancelling AAUs, CERs, ERUs, RMUs and/or ICERs from the same project activity for the purpose of replacing ICERs where there has been a reversal of removals by sinks under paragraph 47(b) of the annex to decision 5/CMP.1;

21(p). One replacement account for the purpose of cancelling AAUs, CERs, ERUs, RMUs and/or ICERs from the same project activity for the purpose of replacing ICERs where a certification report has not been provided under paragraph 47(c) of the annex to decision 5/CMP.1.

**B. Issuance of ERUs, AAUs and RMUs**

13. Paragraph 23 of the annex to decision 13/CMP.1 shall not apply for the second commitment period and the following paragraph shall be inserted after paragraph 23 of the annex to decision 13/CMP.1:

23 bis. For the purpose of the second commitment period, each Party included in Annex I shall issue in its national registry a quantity of AAUs equivalent to the assigned amount of that Party pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, calculated and reported in accordance with paragraph 5 bis of the annex to decision 13/CMP.1, as revised in accordance with the provisions of the present annex, and paragraph 3 of decision 2/CMP.8.

23 ter. For the purpose of the second commitment period, the transfer of units for cancellation in accordance with Article 3, paragraph 7 ter shall occur immediately upon issuance of the assigned amount units referred to in the previous paragraph.

**C. Transfer, acquisition, cancellation, retirement and carry-over**

14. For the purpose of the second commitment period, paragraphs 30, 34 and 36 of the annex to decision 13/CMP.1 shall be replaced by the following paragraphs and paragraph 33 bis shall be inserted after paragraphs 33 and 35, respectively, as follows:

30. For the purpose of the second commitment period, ERUs, CERs, AAUs and RMUs may be transferred between registries in accordance with decisions 3/CMP.1, 9/CMP.1, 11/CMP.1 and 1/CMP.8, and may be transferred within registries.

33 bis. Each Party included in Annex I may cancel AAUs under Article 3, paragraphs 1 ter and 1 quater, so they cannot be used in fulfilment of commitments under Article 3, paragraph 1 bis, in accordance with paragraph 12(e) bis above, by transferring them to the appropriate cancellation account in its national registry. Legal entities, where authorized by the Party, may also transfer AAUs into the cancellation account.

33 ter. Each Party included in Annex I shall cancel AAUs pursuant to Article 3, paragraph 7 ter, in accordance with paragraph 12(e) ter above, to the appropriate cancellation account in its national registry.

34. For the purpose of the second commitment period, prior to the end of the additional period for fulfilling commitments, each Party included in Annex I shall retire ERUs, CERs, AAUs and/or RMUs valid for that commitment period for use towards meeting its commitments under Article 3, paragraph 1 bis, in accordance with paragraph 13 of the annex to decision 13/CMP.1 and paragraph 25 of decision 1/CMP.8 by transferring ERUs, CERs, AAUs and/or RMUs to the retirement account for that commitment period in its national registry.

36. For the purpose of the second commitment period, each Party included in Annex I may carry over to the subsequent commitment period, in accordance with paragraph 15 of the annex to decision 13/CMP.1 and paragraphs 23–26 of decision 1/CMP.8, ERUs, CERs and/or AAUs held in its registry that have not been cancelled or retired for a commitment period or that are not held in its previous period surplus reserve account. Each ERU, CER and/or AAU carried over in this

manner shall maintain its original serial number and shall be valid in the subsequent commitment period. ERUs, CERs, AAUs and RMUs held in the national registry of a Party that have not been carried over in this manner or retired for the commitment period shall be cancelled in accordance with paragraph 12(f) of the annex to decision 13/CMP.1, once the additional period for fulfilling commitments has ended.

#### **D. Transaction procedures**

15. For the purpose of the second commitment period, the following paragraph shall replace paragraph 42 of the annex to decision 13/CMP.1:

42. Upon receipt of the record, for the second commitment period the transaction log shall conduct an automated check to verify that there is no discrepancy:

(a) All transactions: units previously retired or cancelled; units existing in more than one registry; units for which a previously identified discrepancy has not been resolved; units improperly carried over or improperly transferred to previous period surplus reserve accounts; units improperly issued, including those that infringe the limits contained in decision 2/CMP.7; and the authorization of legal entities involved to participate in the transaction;

(b) In the case of transfers between registries: the eligibility of Parties involved in the transaction to participate in the joint implementation, clean development mechanism and international emissions trading under Articles 6, 12 and 17 of the Kyoto Protocol; infringement of the commitment period reserve of the transferring Party; and infringements of the limits to transfer units between previous period surplus reserve accounts of different Parties as set out in paragraph 26 of decision 1/CMP.8;

(d) In the case of acquisitions of CERs from land use, land-use change and forestry projects under Article 12: infringement of the limits contained in decision 2/CMP.7;

(e) In the case of a retirement of CERs: the eligibility of the Party in accordance with paragraph 14 of decision 1/CMP.8 to use CERs to contribute to its compliance under Article 3, paragraph 1 bis.

#### **E. Publicly accessible information**

16. For the purpose of the second commitment period, paragraph 45(e) of the annex to decision 13/CMP.1 shall not apply.

17. For the purpose of the second commitment period, the following shall be added after the respective subparagraphs of paragraph 47 of the annex to decision 13/CMP.1:

47(a) bis. The total quantity of AAUs in the previous period surplus reserve account at the beginning of the year;

47(h) bis. The total quantity of AAUs cancelled under Article 3, paragraph 1 ter and 1 quater;

47(h) ter. The total quantity of AAUs cancelled under Article 3, paragraph 7 ter.

### **III. Compilation and accounting of emission inventories and assigned amounts**

#### **A. Compilation and accounting database**

18. For the purpose of the second commitment period, the following shall be added after the respective subparagraphs of paragraph 52 of the annex to decision 13/CMP.1:

52(c). For the purpose of the second commitment period, any positive difference between the assigned amount of the second commitment period for a Party included in Annex I and average annual emissions for the first three years of the preceding commitment period multiplied by eight, pursuant to Article 3, paragraph 7 ter;

52(d). For the purpose of the second commitment period, the forest management reference level inscribed in the appendix to the annex to decision 2/CMP.7;

52(e). For the purpose of the second commitment period, any cancellations of Kyoto Protocol units pursuant to paragraph 5(a) of section XV of the annex to decision 27/CMP.1 arising from non-compliance in the first commitment period;

19. For the purpose of the second commitment period, the following shall be added after paragraph 55(e) of the annex to decision 13/CMP.1:

55(f). Technical corrections in accordance with paragraph 15 of decision 2/CMP.7;

55(g). For those activities for which the Party has elected to account annually, the net anthropogenic emissions and removals of greenhouse gases in accordance with decision 2/CMP.7 and the related accounting quantity for the calendar year;

55(h). For those activities for which the Party has elected to account for the entire commitment period, the net anthropogenic emissions and removals of greenhouse gases in accordance with decision 2/CMP.7 and the related accounting quantity at the end of the commitment period;

55(i). In the second commitment period, any changes to the total allowable issuance of RMUs resulting from forest management activities under Article 3, paragraph 4, due to technical corrections to forest management reference levels reported by a Party in accordance with paragraphs 14 and 15 of decision 2/CMP.7 and reviewed under Article 8 in accordance with decision 2/CMP.7.

20. For the purpose of the second commitment period, the following shall be added after the respective subparagraphs of paragraph 58 of the annex to decision 13/CMP.1:

58(h) bis. For the purpose of the second commitment period, total cancellations of AAUs cancelled under Article 3, paragraph 1 ter and 1 quater;

58(h) ter. For the purpose of the second commitment period, total cancellations of AAUs cancelled under Article 3, paragraph 7 ter.

## Annex II

[English only]

### **Standard electronic format for reporting information on Kyoto Protocol units<sup>1</sup>**

#### **I. General reporting instructions**

1. Each Party included in Annex I with a quantified emissions limitation or reduction commitment inscribed in the third column of Annex B shall annually report tables in a standard electronic format (SEF) to the secretariat electronically. Any related information of a non-quantitative character shall be submitted separately. Unless otherwise indicated, Parties shall submit information for the previous calendar year (based on Coordinated Universal Time). This is referred to as the 'reported year' (e.g. in the 2017 SEF submission, the 'reported year' will be the 2016 calendar year).
2. For the second commitment period, each Party included in Annex I shall submit its first SEF for reporting Kyoto Protocol units for the second commitment period in conjunction with its first annual inventory submission for that commitment period.<sup>2</sup>
3. Each Party included in Annex I shall submit the SEF annually until the expiration of the additional period for fulfilment of commitments for the relevant commitment period.
4. If an Party included in Annex I is undertaking transactions for two or more commitment periods simultaneously, then the Party shall provide a separate, complete report for each commitment period. Each report shall contain information on only those Kyoto Protocol units valid for that commitment period.<sup>3</sup>
5. All values recorded in SEF tables shall be positive, whole units. Negative values shall not be entered.
6. Not all unit types are relevant for each account, transaction or event type. Where a cell is shaded in a table, the information or transaction does not apply for that particular unit type.
7. All tables shall be filled in completely. If no units of a particular type occurred for a transaction in the previous year, the Party shall enter NO in the cell for 'not occurring'.
8. In the interest of readability, descriptive titles are used in the SEF to refer to specific account and transaction types. Explanations of these descriptive titles and references to the pertinent provisions under the Kyoto Protocol are provided in the instructions on individual tables contained in section II below.

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<sup>1</sup> Assigned amount units (AAUs), emission reduction units (ERUs), removal units (RMUs), certified emission reductions (CERs), including temporary certified emission reductions (tCERs) and long-term certified emission reductions (lCERs).

<sup>2</sup> In accordance with decision 2/CMP.8, paragraph 5.

<sup>3</sup> Assigned amount units (AAUs), emission reduction units (ERUs), removal units (RMUs), certified emission reductions (CERs), including temporary certified emission reductions (tCERs) and long-term certified emission reductions (lCERs).

## II. Instructions on individual tables

### A. Table 1. Total quantities of Kyoto Protocol units by account type at beginning of reported year

9. In table 1, each Party included in Annex I shall provide information on the total quantities of Kyoto Protocol units contained in its national registry, by account type and by unit type, as of 1 January of the reported year.

10. Each Party included in Annex I shall report on the total quantities of Kyoto Protocol units, by unit type, held in each of the following account types:

(a) 'Party holding accounts' (paragraph 21(a) of the annex to decision 13/CMP.1);

(b) 'Entity holding accounts' (paragraph 21(b) of the annex to decision 13/CMP.1);

(c) 'Retirement account' (paragraph 21(f) of the annex to decision 13/CMP.1);

(d) 'Previous period surplus reserve account' (paragraph 23 of decision 1/CMP.8);

(e) 'Article 3.3/3.4 net source cancellation accounts', for cancellation of Kyoto Protocol units as a result of emissions from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol (paragraph 21(c) of the annex to decision 13/CMP.1 and decision 2/CMP.7);

(f) 'Non-compliance cancellation account', for cancellation of Kyoto Protocol units following a determination by the Compliance Committee that the Party included in Annex I is not in compliance with its commitment under Article 3, paragraph 1 (paragraphs 12(e) and 21(d) of the annex to decision 13/CMP.1);

(g) 'Voluntary cancellation account', for voluntary cancellations (paragraph 21(e) of the annex to decision 13/CMP.1);

(h) 'Cancellation account for remaining units after carry-over', to cancel units that are remaining after expiration of the additional period for fulfilling commitments and carry-overs, if any, have been undertaken (paragraph 36 of the annex to decision 13/CMP.1);

(i) 'Article 3.1 ter and quater ambition increase cancellation account', for cancellations pursuant to paragraph 8 of decision 1/CMP.8;

(j) 'Article 3.7 ter cancellation account', for cancellations pursuant to Article 3, paragraph 7 ter;

(k) 'tCER cancellation account for expiry', to cancel tCERs after their expiry (paragraph 53 of the annex to decision 5/CMP.1);

(l) 'iCER cancellation account for expiry', to cancel iCERs after their expiry (paragraph 53 of the annex to decision 5/CMP.1);

(m) 'iCER cancellation account for reversal in storage', to cancel iCERs held in holding accounts where there has been a reversal of removals by sinks for the project activity concerned (paragraph 49 of the annex to decision 5/CMP.1 and paragraph 3 of appendix D to decision 5/CMP.1);

(n) 'iCER cancellation account for non-submission of certification report', to cancel iCERs held in holding accounts where a certification report for the project activity



concerned has not been provided (paragraph 50 of the annex to decision 5/CMP.1 and paragraph 3 of appendix D to decision 5/CMP.1).

11. In addition, each Party included in Annex I shall report on the total quantities of Kyoto Protocol units, by type, held in each of the replacement account types specified in the following paragraphs of the annex to decision 5/CMP.1:

(a) ‘tCER replacement account for expiry’, to cancel AAUs, CERs, ERUs, RMUs and/or tCERs for the purpose of replacing tCERs prior to expiry (paragraph 43);

(b) ‘lCER replacement account for expiry’, to cancel AAUs, CERs, ERUs and/or RMUs for the purpose of replacing lCERs prior to expiry (paragraph 47(a));

(c) ‘lCER replacement account for reversal in storage’, to cancel AAUs, CERs, ERUs, RMUs and/or lCERs from the same project activity for the purpose of replacing lCERs where there has been a reversal of removals by sinks (paragraph 47(b));

(d) ‘lCER replacement account for non-submission of certification report’, to cancel AAUs, CERs, ERUs, RMUs and/or lCERs from the same project activity for the purpose of replacing lCERs where a certification report has not been provided (paragraph 47(c)).

**B. Table 2(a). Annual internal transactions**

12. In table 2(a), Annex I Parties shall report information on the total quantities of Kyoto Protocol units involved in internal transactions (those that did not involve another registry) that occurred between 1 January and 31 December of the reported year, as described below, including any corrective transactions.

13. Under the ‘Article 6 issuance and conversion’ section, Annex I Parties shall report information relating to joint implementation projects under the Kyoto Protocol in accordance with the following paragraphs of the annex to decision 9/CMP.1:

(a) For ‘Party-verified projects’ (also referred to as ‘track one’ projects) Annex I Parties shall report information pertaining to projects where emission reductions or enhancement of removals have been verified by the host Party in accordance with paragraph 23 of the annex to decision 9/CMP.1:

(i) Each Party included in Annex I shall report under ‘Additions’ the total quantity of ERUs issued pursuant to paragraph 29 of the annex to decision 13/CMP.1;

(ii) The Party shall report under ‘Subtractions’ the corresponding quantity of AAUs converted, or, in the case of land use, land-use change and forestry (LULUCF) projects, the corresponding quantity of RMUs converted, pursuant to paragraph 29 of the annex to decision 13/CMP.1;

(b) For ‘Independently verified projects’ (also referred to as ‘track two’ projects), Annex I Parties shall report information pertaining to projects where emission reductions or enhancement of removals have been verified through the procedure under the Article 6 Supervisory Committee in accordance with paragraphs 30–45 of the annex to decision 9/CMP.1:

(i) Each Party included in Annex I shall report under ‘Additions’ the total quantity of ERUs issued pursuant to paragraph 29 of the annex to decision 13/CMP.1;

(ii) The Party shall report under ‘Subtractions’ the corresponding quantity of AAUs converted, or, in the case of LULUCF projects, the corresponding quantity of RMUs converted, pursuant to paragraph 29 of the annex to decision 13/CMP.1.

14. Under the section ‘Article 3.3 and 3.4 issuance or cancellation’, each Party included in Annex I shall report the quantity of RMUs issued or the units cancelled for its LULUCF activities under Article 3, paragraphs 3 and 4, by individual activity, in accordance with the annex to decision 16/CMP.1 and decision 2/CMP.7, and with its election of activities pursuant to paragraph 8(c) and (d) of the annex to decision 13/CMP.1 and paragraphs 7 and 8 of the annex to decision 2/CMP.7:

(a) For any activity that resulted in a net removal, each Party included in Annex I shall report under ‘Additions’ the total quantity of RMUs issued pursuant to paragraph 25 of the annex to decision 13/CMP.1 and decision 2/CMP.7;

(b) For any activity resulting in net emissions, each Party shall report under ‘Subtractions’ the total quantities of AAUs, ERUs, RMUs and/or CERs cancelled pursuant to paragraph 32 of the annex to decision 13/CMP.1 and decision 2/CMP.7.

15. Under the section ‘Article 12 afforestation and reforestation’, each Party included in Annex I shall report information relating to afforestation and reforestation project activities under the CDM specified in the following paragraphs of the annex to decision 5/CMP.1:<sup>4</sup>

(a) ‘Replacement of expired tCERs’, the total quantities of AAUs, CERs, ERUs, RMUs and/or tCERs that were transferred to the tCER replacement account (paragraph 44);

(b) ‘Replacement of expired ICERs’, the total quantities of AAUs, CERs, ERUs and/or RMUs that were transferred to the ICER replacement account for expiry (paragraph 47(a));

(c) ‘Replacement for reversal of storage’, the total quantities of AAUs, CERs, ERUs, RMUs and/or ICERs that were transferred to the ICER replacement account for reversal of storage (paragraph 47(b));

(d) ‘Cancellation for reversal of storage’, the total quantities of ICERs that were cancelled following a reversal of storage (paragraph 49 and appendix D, paragraph 3);

(e) ‘Replacement for non-submission of certification report’, the total quantities of AAUs, CERs, ERUs, RMUs and/or ICERs that were transferred to the ICER replacement account for non-submission of certification report (paragraph 50 and appendix D, paragraph 3);

(f) ‘Cancellation for non-submission of certification report’, the total quantities of ICERs that were cancelled following a non-submission of certification report (paragraph 47(c)).

16. Under ‘Other cancellation’, each Party included in Annex I shall report the total quantities of Kyoto Protocol units, by type, that were cancelled for the following reasons:<sup>5</sup>

(a) ‘Voluntary cancellation’, for voluntary cancellations (paragraph 21(e) of the annex to decision 13/CMP.1);

(b) ‘Article 3.1 ter and quater ambition increase cancellation’, for cancellations pursuant to paragraph 8 of decision 1/CMP.8;<sup>6</sup>

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<sup>4</sup> Additional information relating to afforestation and reforestation project activities is reported in table 3.

<sup>5</sup> Cancellations following determination of non-compliance are reported in table 5(a).

<sup>6</sup> Cancellations to increase ambition in accordance with paragraph 8 of decision 1/CMP.8 are also reported in table 5(a).

17. Each Party included in Annex I shall sum the quantities of Kyoto Protocol units in each column and report these under ‘Sub-total’.

18. In the box ‘Retirement’, each Party included in Annex I shall report the following information:

(a) Under the line ‘Retirement’, the total quantities of Kyoto Protocol units, by type, that were transferred from its national holding account to its retirement account. These values shall not be included in the main body of table 2(a);

(b) Under the line ‘Retirement from PPSR’, the total quantities of AAUs that were transferred from its previous period surplus reserve (PPSR) account to its retirement account. These values shall not be included in the main body of table 2(a);

(c) Under the line ‘Total’, the total quantities of units that were transferred to its retirement account.

**C. Table 2(b). Total annual external transactions**

19. In table 2(b), Annex I Parties shall report information on the total quantities of Kyoto Protocol units involved in external transactions (those that involved another registry) that occurred between 1 January and 31 December of the reported year, including any corrective transactions.

20. Under ‘Total transfers and acquisitions’ each Party included in Annex I shall include a separate row for each registry (Party or CDM registry) to which it transferred, from which it acquired or from which it was forwarded, Kyoto Protocol units during the previous year:

(a) Each Party shall report the quantities of all Kyoto Protocol units acquired from a registry, including any units transferred from the Adaptation Fund account or forwarded from the CDM registry, by type, under ‘Additions’;

(b) Each Party shall report the total quantities of Kyoto Protocol units transferred to that registry, including transfers to the share of proceeds pursuant to paragraph 21 of decision 1/CMP.8, cancellations for excess issuance of a CDM project activity<sup>7</sup> and cancellations of units following a reversal of storage<sup>8</sup> or non-submission of certification report<sup>9</sup> for a carbon dioxide capture and storage (CCS) project activity, under ‘Subtractions’ on the same line.

21. Each Party included in Annex I shall sum the quantities of Kyoto Protocol units in each column and report these under ‘Sub-total’.

**D. Table 2(c). Annual transactions between PPSR accounts**

22. Under ‘Transfers and acquisitions between PPSR accounts’, each Party included in Annex I shall include a separate row for each registry to which it transferred AAUs from its PPSR account or from which it acquired AAUs located in a PPSR account during the previous year:

(a) The quantity of AAUs acquired shall be reported under ‘Additions’. This quantity shall also be reported under the ‘Total transfers and acquisitions’ section of table 2(b);

<sup>7</sup> Paragraph 52 of the annex to decision 5/CMP.1.

<sup>8</sup> Paragraph 24(b) of the annex to decision 10/CMP.7.

<sup>9</sup> Paragraph 27 of the annex to decision 10/CMP.7.

(b) The quantity of AAUs transferred shall be reported under 'Subtractions'. This quantity shall also be reported under the 'Total transfers and acquisitions' section of table 2(b).

23. Each Party included in Annex I shall sum the quantities of Kyoto Protocol units in each column and report these under 'Sub-total'.

**E. Table 2(d). Share of proceeds transactions under decision 1/CMP.8, paragraph 21 Adaptation Fund**

24. The term 'first international transfer' refers to the first external transfer of each individual AAU from the originating registry to the registry of another Party, tracked by its serial number.

25. Each Party included in Annex I shall report the quantity of units transferred and of units issued for which a share of the proceeds levy applies and the related quantity of units contributed to the Adaptation Fund in accordance with paragraph 21 of decision 1/CMP.8 as follows:

(a) Under 'First international transfers of AAUs', 'Amount transferred or converted', each Party shall report the total quantity of AAUs transferred for the first time from its registry to another registry tracked by serial number. Under 'First international transfers of AAUs', 'Amount contributed as Share of Proceeds (SoP) to the Adaptation Fund', each Party shall report the total quantity of AAUs contributed to the Adaptation Fund. These transfers shall also be included in the 'Transfers and acquisitions' section of table 2(b);

(b) Under 'Issuance of ERUs from Party-verified projects', 'Amount transferred or converted', each Party shall report the total quantity of ERUs relating to projects where emission reductions or enhancements of removals have been verified by the host Party in accordance with paragraph 23 of the annex to decision 9/CMP.1. Under 'Issuance of ERUs from Party-verified projects', 'Amount contributed as SoP to the Adaptation Fund', each Party shall report the total quantity of ERUs issued relating to projects where emission reductions or enhancements of removals have been verified by the host Party in accordance with paragraph 23 of the annex to decision 9/CMP.1 and contributed to the Adaptation Fund. These transfers shall also be included under the 'Transfers and acquisitions' section of table 2(b);

(c) Under 'Issuance of independently verified ERUs', 'Amount transferred or converted', each Party shall report the total quantity of ERUs that had been independently verified by the Article 6 Supervisory Committee. Under 'Issuance of independently verified ERUs', 'Amount contributed as SoP to the Adaptation Fund', each Party shall report the total quantity of ERUs issued that were independently verified by the Article 6 Supervisory Committee and contributed to the Adaptation Fund. These transfers shall also be included under the 'Transfers and acquisitions' section of table 2(b).

**F. Table 2(e). Total annual transactions**

26. Each Party included in Annex I shall add the subtotals of table 2(a) and table 2(b) and report the corresponding quantities under 'Total' in table 2(e).

**G. Table 3. Annual expiry, cancellation and replacement**

27. In table 3, Annex I Parties shall report information on the expiry, cancellation and replacement of tCERs, ICERs and CERs from CCS project activities in accordance with the modalities and procedures for afforestation and reforestation project activities under the CDM (decision 5/CMP.1) and the modalities and procedures for carbon dioxide capture

and storage in geological formations as CDM project activities (decision 10/CMP.7). Annex I Parties shall include all transactions that occurred between 1 January and 31 December of the reported year, including any corrective transactions.

28. Each Party included in Annex I shall report the following information under the section 'Temporary CERs':

(a) 'Expired in retirement and replacement accounts': the quantity of tCERs that expired in the reported year in the retirement and tCER replacement account for the previous commitment period and the quantity of units that were used to replace them. These tCERs will have been valid for the previous commitment period and will expire in the final year of the commitment period;

(b) 'Expired in holding accounts': the quantity of tCERs that expired in the reported year in all Party and entity holding accounts for the previous commitment period and the quantity of units that were cancelled as a result.

29. Each Party included in Annex I shall report the following information under the section 'Long-term CERs':

(a) 'Expired in retirement and replacement accounts', the quantity of ICERs that expired in the reported year in the retirement and ICER replacement account for previous commitment periods and the quantity of units that were used to replace them. These ICERs will have been valid for a previous commitment period;

(b) 'Expired in holding accounts', the quantity of ICERs that expired in all Party and entity holding accounts and the quantity of units that were cancelled as a result. These ICERs will have been valid for a previous commitment period;

(c) 'Subject to reversal of storage', in the event that the Party has received notification(s) of a reversal of removals from a project activity from the Executive Board of the CDM, the quantity of ICERs that the Party is required to replace pursuant to that notification and the quantity of units that the Party included in Annex I used for replacement or cancellation as a result of these notifications;

(d) 'Subject to non-submission of certification report', in the event that the Party included in Annex I has received notification(s) of non-submission of certification report from the Executive Board of the CDM, the quantity of ICERs that the Party included in Annex I is required to replace pursuant to the notification(s) and the quantity of units that the Party included in Annex I used for replacement or cancellation as a result of the notification(s).

30. Each Party included in Annex I shall report the following information under the section 'Carbon Capture and Storage CERs':

(a) 'Subject to net reversal of storage', in the event that the Party has received notification(s) of a net reversal of storage of a CCS project activity from the Executive Board of the CDM, the quantity of units that the Party included in Annex I is required to cancel pursuant to that notification and the quantity of units that the Party included in Annex I used for cancellation as a result of these notifications. The units used to meet this requirement are transferred to the CDM registry and are therefore not reported in table 2(a). These units used to meet this requirement shall also be reported in table 2(b);

(b) 'Subject to non-submission of certification report', in the event that the Party included in Annex I has received notification(s) of non-submission of certification report for a CCS project activity from the Executive Board of the CDM, the quantity of units that the Party included in Annex I is required to replace pursuant to the notification(s) and the quantity of units that the Party included in Annex I used for cancellation as a result of the notification(s). The units used to meet this requirement are transferred to the CDM registry

and are therefore not reported in table 2(a). These units used to meet this requirement shall also be reported in table 2(b).

31. Annex I Parties shall sum the quantities of Kyoto Protocol units in each column and report these under 'Total'.

**H. Table 4. Total quantities of Kyoto Protocol units by account type at end of reported year**

32. In table 4, Annex I Parties shall include information on the total quantities of Kyoto Protocol units in each account type, by unit type, in the national registry as of 31 December of the reported year.

33. The structure of table 4 follows the structure of table 1.

**I. Table 5(a). Summary information on additions and subtractions**

34. In table 5(a), Annex I Parties shall report cumulative information for the reported year and previously reported years to facilitate the recording of information for the commitment period in the compilation and accounting database in accordance with the annex to decision 13/CMP.1 and this decision.

35. Each Party included in Annex I shall report the following information:

(a) 'Assigned amount units issued', 'Additions', the total quantity of AAUs issued on the basis of its assigned amount under Article 3, paragraphs 7 bis, 8 and 8 bis;

(b) 'Article 3, paragraph 7 ter, cancellations', 'Subtractions', the total quantity of AAUs cancelled in accordance with Article 3, paragraph 7 ter;

(c) 'Cancellation following increase in ambition', the total quantity of AAUs cancelled in accordance with paragraph 8 of decision 1/CMP.8;

(d) 'Cancellation of remaining units after carry-over', the total quantity of units, per unit type, cancelled after expiration of the additional period for fulfilling commitments and carry-overs, if any, have been undertaken (decision 13/CMP.1, annex, paragraph 36);

(e) 'Non-compliance cancellation', if applicable, the quantities of Kyoto Protocol units, by type, that the Party cancelled pursuant to a determination by the Compliance Committee that the Party is not in compliance with its commitment under Article 3.1 for the previous commitment period pursuant to paragraph 37 of the annex to decision 13/CMP.1;<sup>10</sup>

(f) 'Carry-over', under 'Additions' and if applicable, the total quantities of ERUs and/or CERs that were carried over from the previous commitment period; under 'Subtractions' the total quantities of ERUs and/or CERs that were carried over to the subsequent commitment period;

(g) 'Carry-over to PPSR', under 'Additions' and if applicable, the total quantities of AAUs that were carried over from the previous commitment period to the PPSR account; under 'Subtractions' the total quantities of AAUs were carried over to the subsequent commitment period from the PPSR account.

**J. Table 5(b). Summary information on annual transactions**

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<sup>10</sup> This information will not be available until completion of the compliance assessment for the previous commitment period, following the expiration of the additional period for fulfilment of commitments.

36. In table 5(b), each Party included in Annex I shall provide summary information on annual transactions for the reported year and previously reported years for the commitment period:

- (a) For the reported year, each Party shall report the total quantities of Kyoto Protocol units, by type, from table 2(e);
- (b) For all years prior to the reported year, the Party shall report the total quantities of Kyoto Protocol units, as reported in table 5(b) in the previous SEF tables;
- (c) Under 'Total', each Party shall report the sum to date of all transactions.

**K. Table 5(c). Summary information on annual transactions between PPSR accounts**

37. In table 5(c), each Party included in Annex I shall provide summary information on annual transactions between PPSR accounts for the reported year and for all previously reported years for the commitment period:

- (a) For the reported year, each Party shall report the total quantities of AAUs, from table 2(c);
- (b) For all years prior to the reported year, the Party shall report the total quantities of AAUs, as reported in table 5(c) in the previous SEF tables;
- (c) Under 'Total', each Party shall report the sum to date of all transactions.

**L. Table 5(d). Summary information on expiry, cancellation and replacement**

38. In table 5(d), Annex I Parties shall provide summary information relating to the replacement and cancellations of tCERs, ICERs and CERs from CCS project activities for each reported year for the commitment period.

39. For the reported year, each Party included in Annex I shall report:

- (a) Under 'Requirement to replace or cancel', the total quantities of tCERs, ICERs or CERs from CCS project activities that expired, were subject to a reversal of storage or to a non-submission of certification report in that year;
- (b) Under 'Replacement', the total quantities of Kyoto Protocol units, by type, cancelled to replace tCERs or ICERs. These quantities should match those reported under 'Total' in table 3;
- (c) Under 'Cancellation', the total quantities of Kyoto Protocol units, by type, cancelled to replace tCERs, ICERs or to respond to a reversal of storage or non-submission of certification report for CCS project activities. These quantities should match those reported under 'Total' in table 3.

40. For all years prior to the reported year, the Party included in Annex I shall repeat the information under 'Requirement to replace or cancel' and under 'Replacement' and 'Cancellation' as reported in the previous SEF.

41. Under 'Total', each Party included in Annex I shall report the sum of each column. At the end of the commitment period, the total quantities of tCERs, ICERs and CERs from CCS project activities should match the total quantities of Kyoto Protocol units under 'Replacement' and 'Cancellation'.

**M. Table 5(e). Summary information on retirement**

42. In table 5(e), Annex I Parties shall provide summary information on retirement to facilitate the compliance assessment at the end of the additional period for fulfilling commitments.

43. For the reported year, each Party included in Annex I shall report under 'Retirement', the total quantities of Kyoto Protocol units, by type, retired in that year for the purpose of demonstrating its compliance with its commitment under Article 3, paragraph 1, of the Kyoto Protocol. These quantities should match those reported under 'Retirement', 'Total', in table 2(a).

44. For all years prior to the reported year, the Party included in Annex I shall repeat the information as reported in the previous SEF.

45. Under 'Total', each Party included in Annex I shall report the sum of each column.

**N. Table 6. Memo item: Corrective transactions undertaken in the reported year**

46. In tables 6(a) to (c), Annex I Parties shall report any corrective transactions undertaken in the reported year relating to previously reported years, including transactions to address a correction to the compilation and accounting database applied by the compliance committee, pursuant to paragraph 5(b) in chapter V of the annex to decision 27/CMP.1. Note that quantities of Kyoto Protocol units reported here are included in the annual transactions reported in tables 2 and 3 and are reported in tables 6(a) to (c) as a memo item for the purpose of transparency. Parties shall provide explanations for these transactions in accompanying text, as required by paragraph 8 of section E of the guidelines for reporting under Article 7 of the Kyoto Protocol.

**I. Standard electronic format tables**

47. The SEF tables are not included in this document but can be downloaded from the UNFCCC website at:

<[http://unfccc.int/national\\_reports/accounting\\_reporting\\_and\\_review\\_under\\_the\\_kyoto\\_protocol/items/7969.php](http://unfccc.int/national_reports/accounting_reporting_and_review_under_the_kyoto_protocol/items/7969.php)>.



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## Annex III

[English only]

### **Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol**

1. For the purpose of the second commitment period, paragraph 11 of the annex to decision 15/CMP.1 shall not apply and Parties shall report Kyoto Protocol units in accordance with the standard electronic format and reporting instructions as contained in annex II.
2. For the purpose of the second commitment period, paragraph 18 of the annex to decision 15/CMP.1 shall be replaced with the following paragraph:
  18. For the purpose of the second commitment period, each Party included in Annex I shall report the calculation of its commitment period reserve in accordance with the annex to decision 18/CP.7, 11/CMP.1 and paragraph 18 of decision 2/CMP.8;
3. For the purpose of the second commitment period, paragraph 19 of the annex to decision 15/CMP.1 shall be replaced with the following paragraph:
  19. For the purpose of the second commitment period, each Party included in Annex I shall provide access, upon the request of expert review teams, to information held in the national registry relating to the holding accounts referred to in paragraph 21(b) of the annex to decision 13/CMP.1, and other types of accounts and transactions for the previous calendar year, that substantiates the supplementary information reported under paragraph 1 above and paragraph 12 of the annex to decision 15/CMP.1.]

**Draft decision -/CMP.10****Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol including those relating to Articles 5, 7 and 8 of the Kyoto Protocol: part II implications related to review and adjustments and other related issues<sup>1</sup>**

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

*Recalling* Articles 5, 7 and 8 of the Kyoto Protocol,

*Also recalling* decisions 2/CMP.6, 2/CMP.7, 3/CMP.7, 4/CMP.7, 1/CMP.8, 2/CMP.8 and 6/CMP.9,

*Being aware* of decisions 11/CMP.1, 13/CMP.1, 15/CMP.1, 16/CMP.1, 18/CMP.1, 19/CMP.1, 20/CMP.1, 21/CMP.1, 22/CMP.1, 23/CMP.1, 24/CMP.1, 25/CMP.1, 27/CMP.1 and 8/CMP.5,

1. *Decides* that, for the purpose of the second commitment period of the Kyoto Protocol and pending the entry into force of the Doha Amendment, contained in decision 1/CMP.8, annex I, any references in this decision to Annex A, Annex B, Article 3, paragraphs 1 bis, 1 ter, 1 quater, 7 bis, 7 ter, 8, 8 bis, 12 bis and 12 ter, and Article 4, paragraphs 2 and 3, unless otherwise specified, shall be understood as referring to those Articles and annexes as contained in the Doha Amendment, and that upon the entry into force of the Doha Amendment such references shall be read as references to the relevant Articles of the Kyoto Protocol as amended;

2. *Also decides* that, for the purpose of the second commitment period, decisions 20/CMP.1 and 22/CMP.1 shall apply *mutatis mutandis*, except where otherwise specified in decisions 1/CMP.8 and 2/CMP.8 and in this decision;

3. *Further decides* that, for the purpose of the second commitment period, the following changes shall apply to decisions 18/CMP.1, 19/CMP.1, 20/CMP.1 and 22/CMP.1:

(a) All references to Article 3, paragraphs 7 and 8, shall be read as references to Article 3, paragraphs 7 bis, 8 and 8 bis;

(b) All references to the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (hereinafter referred to as the Revised 1996 IPCC Guidelines) as elaborated by the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (hereinafter referred to as the IPCC good practice guidance), the IPCC Guidelines as elaborated by the IPCC good practice

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<sup>1</sup> Within this decision, all references to -/CMP.10 refer to the decision “Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol including those relating to Articles 5, 7 and 8 of the Kyoto Protocol: part I implications related to accounting and reporting and other related issues” contained in the annex, expected to be adopted at the same session of the CMP.

guidance, the IPCC Guidelines and any good practice guidance or the IPCC good practice guidance, shall be read as references to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (hereinafter referred to as the 2006 IPCC Guidelines) as implemented through the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories” and the 2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol and the 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands, as implemented in accordance with decisions 24/CP.19 and 6/CMP.9, except references in paragraph 1 of decision 20/CMP.1;

(c) All references to chapter 7 of the IPCC good practice guidance shall be read as references to chapter 4 of volume 1 of the 2006 IPCC Guidelines;

(d) All references to “source categories” shall be read as references to “categories”;

(e) All references to “initial review” shall be read as references to “review of the report to facilitate the calculation of the assigned amount”; except that in paragraph 125 of the annex to decision 22/CMP.1;

(f) All references to “industrial processes, solvent and other product use” shall be read as references to “industrial processes and product use”;

(g) All references to decision 13/CMP.1 shall be read as references to decision 13/CMP.1 in conjunction with decision -/CMP.10, except those in paragraphs 2 and 5 of decision 22/CMP.1 and paragraphs 85 (b) and (c), 86 (a), and (c), 87 (a) and (b), 89 (a) and 92 of the annex to decision 22/CMP.1;

(h) All references to paragraphs 6, 7 and 8 of the annex to decision 13/CMP.1 shall be read as references to paragraph 2 of and annex I to decision 2/CMP.8, except those in paragraphs 2 and 5 of decision 22/CMP.1;

(i) All references to activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, shall be read as references to activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any elected activities under Article 3, paragraph 4;

(j) All references to decision 16/CMP.1 shall be read as references to decision 2/CMP.7;

(k) Reference to “section I of the guidelines for the preparation of the information required under Article 7” in paragraphs 50 (a) and 69 of the annex to decision 22/CMP.1 shall be read as a reference to “the guidance included in annex II to decision 2/CMP.8 and in decision 6/CMP.9”;

(l) Reference to “section I.D, greenhouse gas inventory information, of the guidelines for the preparation of the information required under Article 7” in paragraph 51 of the annex to decision 22/CMP.1 shall be read as reference to “guidance included in annex II to decision 2/CMP.8 and in decision 6/CMP.9”;

(m) Reference to “section I.E of the annex to decision 15/CMP.1” in paragraphs 88(a) and 93 of the annex to decision 22/CMP.1 shall be read as a reference to “guidance included in section I.E of the annex to decision 15/CMP.1 and in annex III to decision -/CMP.10”;

(n) References to “section 7.3.2.2 of the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories” and to “section 5.6 of the Good Practice Guidance for Land Use, Land-Use Change and Forestry” shall be

read as references to “section 5.3 of Chapter 5 of volume 1 of the 2006 IPCC Guidelines”;

(o) References to “paragraph 21 of the annex to decision 16/CMP.1” shall be read as references to “paragraph 26 of the annex to decision 2/CMP.7”;

(p) Reference to “chapter 7, paragraph 7.2, of the IPCC good practice guidance” in paragraph 14(a) of the annex to decision 19/CMP.1 shall be read as reference to “chapter 4.3 of the 2006 IPCC Guidelines”;

(q) For the purpose of the second commitment period, all references to decision 15/CMP.1 in part III of the annex to decision 22/CMP.1 shall be read as references to decision 15/CMP.1 in conjunction with annex III to decision -/CMP.10;

(r) References to “as reported in accordance with paragraph 6 of the annex to decision 13/CMP.1” in paragraph 85(a) of the annex to decision 22/CMP.1 shall be read as references to “as submitted through the report to facilitate the calculation of the assigned amount of each Party included in Annex I with a commitment inscribed in the third column of Annex B to the Doha Amendment in accordance with paragraph 2 of decision 2/CMP.8”;

(s) The definition of key source category in paragraph 3(d) of decision 19/CMP.1 shall be read as “Key category is one that is prioritized within the national inventory because its estimate has a significant influence on a country’s total inventory of greenhouse gases in terms of the absolute level of emissions, the trend in emissions and removals, or uncertainty in emissions or removals. Whenever the term key category is used, it includes both source and sink categories”.

4. *Adopts* the revisions to the “Guidelines for review under Article 8 of the Kyoto Protocol” for the second commitment period contained in annex I to this decision;

5. *Also adopts* the revisions to the “Good practice guidance and adjustments under Article 5, paragraph 2, of the Kyoto Protocol” for the second commitment period set out in annex II to this decision;

6. *Requests* the secretariat, in view of the revision of the “Guidelines for review under Article 8 of the Kyoto Protocol”, to modify the relevant information technology tools, as needed, so as to support the implementation of the review process;

7. *Recognizes* that the deadline of June 2014, set out in decision 6/CMP.9, paragraph 4, for providing the upgraded CRF Reporter to Parties in order to enable them to submit their inventories, was not met;

8. *Notes* that the current software version of the CRF Reporter is not functioning<sup>2</sup> in such a manner as to enable Annex I Parties to prepare their inventory submissions;

9. *Reiterates* that in 2015, Annex I Parties may submit the CRF tables after 15 April, but no longer than the corresponding delay in the CRF Reporter availability;

10. *Notes* that a delay in submission of CRF tables by a Party also delays the submission of the report to facilitate the calculation of its assigned amount referred to in decision 2/CMP.8, paragraph 2;

11. *Acknowledges* that Annex I Parties may submit the report to facilitate the calculation of the assigned amount referred to in paragraph 10 above and make the annual inventory submission after 15 April, but no longer than the corresponding delay in the CRF Reporter availability;

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<sup>2</sup> Functioning software means that the data on GHG emissions/removals are reported accurately both in terms of CRF tables and xml format.

12. *Urges* Annex I Parties to submit the report to facilitate the calculation of the assigned amount referred to in decision 2/CMP.8, paragraph 2, as soon as practically possible.

## Annex I

[English only]

### **Revisions to the guidelines for review under Article 8 of the Kyoto Protocol**

#### **General approach to review**

1. For the purpose of the second commitment period of the Kyoto Protocol, footnote 1 to the title of the annex to decision 22/CMP.1 shall be replaced by the following footnote: “Article” in these guidelines refers to an Article of the Kyoto Protocol or an Article in the Doha Amendment to the Kyoto Protocol (annex I to decision 1/CMP.8), unless otherwise specified.
2. For the purpose of the second commitment period, footnotes 5 and 6 of the annex to decision 22/CMP.1 shall not apply.

#### **Review of report to facilitate the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis**

3. For the purpose of the second commitment period, paragraphs 11 and 12 of the annex to the decision 22/CMP.1 shall be replaced by the following:
  11. Each Party included in Annex I with a commitment inscribed in the third column of the table contained in Annex B in the Doha Amendment shall be subject to a review of the report to facilitate the calculation of its assigned amount pursuant to paragraph 2 of decision 2/CMP.8 for the second commitment period together with the inventory submission for the first year of the second commitment period.-
  12. The expert review team shall review the following information contained or referenced in the report to facilitate the calculation of assigned amount referred to in paragraph 2 of decision 2/CMP.8:
    - (a) The calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in accordance with paragraph 2 of annex I to decision -/CMP.10, and the calculation of 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,<sup>1</sup>
    - (b) The information provided in accordance with paragraphs 1(f k) in annex I to decision 2/CMP.8 related to the accounting of activities under Article 3, paragraphs 3 and 4,
    - (c) With regard to Parties included in Annex I with a commitment inscribed in the third column of the table contained in Annex B in the Doha

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<sup>1</sup> References to “these guidelines” hereinafter shall be understood as referring to the guidelines contained in the annex to decision 22/CMP.1, as amended by the current decision.

Amendment which did not have a quantified emission limitation and reduction target in the first commitment period:

- i. The national system pursuant to Article 5, paragraph 1, in accordance with the procedures contained in part IV of these guidelines;
- ii. The national registry pursuant to Article 7, paragraph 4, in accordance with the procedures contained in part V of these guidelines;

(d) This review shall replace the review of the same elements in the annual inventory review conducted in conjunction with this review. For Parties that have reached an agreement to fulfil their commitments under Article 3 jointly, in accordance with Article 4, the completeness of information referred to in paragraph 9 of decision -/CMP.10.

4. Paragraph 14 of the annex to decision 22/CMP.1 shall be replaced by the following:

14. For Parties included in Annex I with a commitment inscribed in the third column of the table contained in Annex B in the Doha Amendment which did not have a quantified emission limitation and reduction target in the first commitment period, the review of the report to facilitate the calculation of the assigned amount for the second commitment period shall be conducted as an in-country visit. For other Parties included in Annex I the review shall be conducted either as a centralized review or as an in-country visit, giving priority to in-country visits for those Parties that have not been reviewed in such a way in recent years.

### **Annual review of national systems and national registries**

5. For the purpose of the second commitment period, paragraphs 15 (b) (iii) and (iv) of the annex to the decision 22/CMP.1 shall be replaced by the following:

15 (b) (iii). Information provided on national systems or changes thereof in accordance with the procedures contained in part V of these guidelines;

15 (b) (iv). Information provided on national registries or changes thereof in accordance with the procedures contained in part V of these guidelines.

6. Paragraph 17 of the annex to the decision 22/CMP.1 shall not apply for the purpose of the second commitment period.

7. For the purpose of the second commitment period, paragraph 97 of the annex to the decision 22/CMP.1 shall be replaced by the following:

97. The review of the national system shall be conducted in conjunction with the annual inventory review.

### **Annual review of standard independent assessment reports**

8. For the purpose of the second commitment period, paragraphs 86 (b) (ii) and (iii) of the annex to the decision 22/CMP.1 shall be replaced by the following:

86 (b) (ii) Standard independent assessment reports (SIAR) prepared by the secretariat, including information of any discrepancies or non-replacements indicated by these reports;

86 (b) (iii) Information contained in the national registry that substantiates or clarifies the issues raised in the SIAR, if the SIAR prepared by the secretariat indicates any issues related to accounting, transactions, and reporting of units under the Kyoto Protocol. In such cases Parties included in Annex I shall provide the expert review team with effective access to their national registry during the review. The relevant parts of paragraphs 9 and 10 of part I of these guidelines shall also apply to this information.

9. For the purpose of the second commitment period, the reference in paragraph 87 (c) of the annex to the decision 22/CMP.1 shall be updated as follows:

87 (c) The calculation of the required level of the commitment period reserve is in accordance with decision -/CMP.10.

10. For the purpose of the second commitment period, paragraph 88 (b) of the annex to the decision 22/CMP.1 shall be replaced by the following:

88 (b) The information contained in the SIAR identifies any issues related to accounting, transactions and reporting of units under the Kyoto Protocol, whether these issues still exist and whether recommendations from previous reviews have been implemented by the Party.

11. Paragraphs 88 (c–g), and (i) of the annex to decision 22/CMP.1 shall not apply for the purpose of the second commitment period.

12. For the purpose of the second commitment period, paragraph 88 (h) of the annex to the decision 22/CMP.1 shall be replaced by the following:

88 (h) The required level of the commitment period reserve as reported, is calculated in accordance with decision -/CMP.10.

13. For the purpose of the second commitment period, paragraph 88 (j) (v) of the annex to the decision 22/CMP.1 shall be replaced by the following:

88 (j) (v) Assess whether any discrepancy has been identified in the SIAR by the transaction log relating to transactions initiated by the Party, and if so the expert review team shall:

i. Examine the cause of the discrepancy and whether the Party or Parties has or have corrected the problem that caused the discrepancy;

ii. 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.



14. For the purpose of the second commitment period, paragraph 88 (k) of the annex to the decision 22/CMP.1 shall be replaced by the following:

88. (k) Any non-replacement of units has been identified in the SIAR, and if so the expert review team shall:

(i) Examine the cause of the non-replacement and whether the Party has corrected the problem that caused the non-replacement;

(ii) 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.

### **Consistency with the revised review guidelines under the Convention**

15. For the purpose of the second commitment period, paragraphs 52, 55, 56 and 57 of the annex to decision 22/CMP.1 shall be replaced by the following paragraph:

“Related to the organization of the inventory review in different phases and the scheduling of desk, centralized and in-country reviews, the same provisions as agreed in the “UNFCCC guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention” contained in the annex to decision -/CP.20 shall apply.”

16. For the purpose of the second commitment period, the following paragraph shall replace paragraphs 59 and 60 of decision 22/CMP.1:

60. The initial check shall be conducted consistent with the initial assessment included in part III of the “UNFCCC guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention” contained in the annex to decision -/CP.20. The initial check shall in addition cover whether:

(a) A Party included in Annex I to the Convention has failed to include an estimate for a source category (as defined in chapter 4 of volume 1 of the 2006 IPCC Guidelines) that individually accounted for 7 per cent or more of the Party’s aggregate emissions, defined as the aggregated submitted emissions of the gases from the sources listed in annex A to the Kyoto Protocol as contained in the Doha Amendment, in the most recent of the Party’s reviewed inventories in which the source was estimated;

(b) An Annex I Party has failed to provide supplementary information in accordance with Annex II to decision 2/CMP.8 and decision 6/CMP.9.

17. For the purpose of the second commitment period, paragraphs 61-63 of the annex to decision 22/CMP.1 shall be replaced by the following paragraph: For the scope of the individual review, the same provisions as included in the “UNFCCC guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention”, contained in the annex to decision -/CP.20 shall apply.

18. For the purpose of the second commitment period, paragraphs 65 -67 of the annex to decision 22/CMP.1 shall be replaced by the following:

65. For the scope of the individual review, the same provisions as those included in the “UNFCCC Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention” included in the annex to decision -/CP.20 shall apply. In addition, the inventory review shall:

(a) Examine the application of the requirement of the 2006 *IPCC Guidelines, the 2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol and the Wetlands Supplement* as adopted by the COP/MOP and the “UNFCCC Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention” contained in the annex to decision -/CP.20 and relevant decisions of the Conference Of the Parties on those requirements, and identify any divergence from these requirements;

(b) Assess whether the functions of the national system have been established to facilitate the continuous improvement of the greenhouse gas inventory and whether Quality Assurance/Quality Control procedures in accordance with guidelines for national systems in accordance with decision 19/CMP.1 have been implemented;

(c) Assess the completeness and transparency of supplementary information in accordance with reporting under Article 7 of the Kyoto Protocol;

(d) Assess whether the supplementary information reported for activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4 and any elected activities under Article 3, paragraph 4, of the Kyoto Protocol has been estimated, reported and accounted in line with the Kyoto Protocol Supplement, decision 2/CMP.7, annex II to decision 2/CMP.8 and decision 6/CMP.9.”

19. For the purpose of the second commitment period, paragraph 69(d) (i) of the annex to decision 22/CMP.1 shall be read as “Gaps in the inventory estimates for source categories or gases for which methods are provided in the IPCC guidelines, and the Wetlands Supplement, for Parties that have elected to account for wetland drainage and rewetting”.

## Annex II

[English only]

### **I. Revisions to the good practice guidance and adjustments under Article 5, paragraph 2, of the Kyoto Protocol**

1. Paragraphs 1 and 2 of decision 20/CMP.1 shall not apply for the purpose of the second commitment period of the Kyoto Protocol.
2. For the purpose of the second commitment period, paragraph 11 of decision 20/CMP.1 shall be replaced by the following:
  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 final year of the commitment period. 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.
3. Footnote 3 in paragraph 4 of the annex to decision 20/CMP.1 shall not apply for the purpose of the second commitment period.
4. For the purpose of the second commitment period, paragraph 13 (c) of the annex to decision 20/CMP.1 shall be replaced by the following:
  13. (c) For cropland management, grazing land management, revegetation and wetland drainage and rewetting 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.
5. For the purpose of the second commitment period, the following paragraph shall be inserted after paragraph 13 of the annex to decision 20/CMP.1:
  13. bis Adjustments shall be applied to technical corrections to forest management reference levels when reported data on forest management or forest land remaining

forest land used to establish the reference level are recalculated, and the recalculations have not resulted in a technical correction to the reference level which ensures methodological consistency between the corrected forest management reference level and the reported estimates for forest management. The methods and conservativeness factors shall be applied to adjustments to technical corrections for forest management using the guidance in the appendix of this annex. When an adjustment to a forest management emission/removals estimate also results in an adjustment to the technical correction, conservativeness factors should not be applied to the technical correction.

6. For the purpose of the second commitment period, paragraph 17 of the annex to decision 20/CMP.1 shall be replaced by the following:

17. If the expert review team finds that an estimate submitted by a Party leads to an underestimation of emissions or overestimation of removals in the base year or in the forest management reference level after any technical correction, or an overestimation of emissions or underestimation of removals in a year of the commitment period or forest management reference level after any technical correction, an adjustment calculated in accordance with paragraph 54 below should not be applied.

7. For the purpose of the second commitment period, paragraph 18 of the annex to decision 20/CMP.1 shall be replaced by the following:

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 and wetland drainage and rewetting), 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.

8. Reference to “paragraph 21 of the annex to decision 16/CMP.1” in paragraph 21 of the annex to decision 20/CMP.1 shall be read as a reference to “paragraph 26 of the annex to decision 2/CMP.7”.

9. For the purpose of the second commitment period, paragraph 28 of the annex to decision 20/CMP.1 shall be replaced by the following:

28. In the 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.

10. For the purpose of the second commitment period, sub paragraph 34 (a) of the annex to decision 20/CMP.1 shall be replaced by the following sub paragraph, including the additional footnote:

34. (a) IPCC default values from the 2006 *IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the 2006 IPCC Guidelines), the, *2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol and the 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands* (hereinafter referred to as the Wetlands Supplement)<sup>1</sup> 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.

11. For the purpose of the second commitment period, paragraph 38 of the annex to decision 20/CMP.1 shall be replaced by the following:

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 2006 *IPCC Guidelines, the 2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol and the Wetlands Supplement, as applicable*, 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.

12. For the purpose of the second commitment period, paragraph 42 of the annex to decision 20/CMP.1 shall be replaced by the following:

42. This basic adjustment method refers to tier 1 methods in the 2006 *IPCC Guidelines, , the 2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol and the Wetlands Supplement, .* The Wetlands Supplement should be consulted only in cases where the Party has elected the activity wetland drainage and rewetting and in cases where the Party applies methods from the Wetlands Supplement on a voluntary basis. This adjustment method will be applicable only 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.

13. Paragraphs 61, 64, 68, and 74 of the annex to decision 20/CMP.1 shall not apply for the purpose of the second commitment period.

14. For the purpose of the second commitment period, paragraph 63 of the annex to decision 20/CMP.1 shall be replaced by the following paragraph:

63. If adjusting hydrofluorocarbon (HFC), perfluorocarbon (PFC), nitrogen trifluoride (NF<sub>3</sub>) and sulphur hexafluoride (SF<sub>6</sub>) estimates from the consumption of halocarbons, NF<sub>3</sub> and SF<sub>6</sub>, consideration should be given to the uncertainty of sales figures (e.g. for sales of these chemicals to the foam blowing industry) and other

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<sup>1</sup> When wetland drainage and rewetting has been elected, the Wetlands Supplement should have the highest order of preference for applicable categories.

parameters (such as the composition of the mix in coolants) as given in the 2006 IPCC Guidelines.

15. For the purpose of the second commitment period, paragraph 69 of the annex to decision 20/CMP.1 shall be replaced by the following:

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, revegetation and wetland drainage and rewetting 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.

16. For the purpose of the second commitment period, sub paragraph 1(a) of appendix III to the annex to decision 20/CMP.1 shall be replaced by the following:

1. (a) For Annex A sources, one for use in the calculation of adjustments for an base year emission estimate and a commitment period recovery estimate (e.g. landfill gas recovery) and one for the calculation of adjustments of emissions for a year of the commitment period and base year's recovery estimates.

17. For the purpose of the second commitment period, paragraph 3 of appendix III to the annex to decision 20/CMP.1 shall be replaced by the following:

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 energy, industrial processes and other product use, agriculture, LULUCF and waste.

## **II. Procedures for adjustments under Article 5, paragraph 2, of the Kyoto Protocol**

18. For the purpose of the second commitment period, paragraph 80(b) of the annex to decision 22/CMP.1 shall be replaced with the following:

80(b) The adjustment procedure should only commence after the Party had an opportunity to correct a problem and if the expert review team finds that the Party has not adequately corrected the problem through the provision of an acceptable revised estimate, within the time frames set out in paragraphs 74 and 76 above and if the expert review team assumes that the change resulting from the adjustment will be above the threshold given in paragraph 37 of the annex to decision 24/CP.19.

19. For the purpose of the second commitment period, tables 1 to 4b in the appendix III to the annex to decision 20/CMP.1 shall be replaced by the tables in the appendix to this document.

## Appendix

[English only]

## Tables of conservativeness factors

Table 1

Conservativeness factors for adjustments to emission estimates in the base year or recovery estimates in the commitment period (for sources in Annex A to the Kyoto Protocol)

	Emission factors							Activity data	Emission estimates						
	CO2	CH4	N2O	HFCs	PFCs	SF6	NF3		CO2	CH4	N2O	HFCs	PFCs	SF6	NF3
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.a Domestic aviation and navigation	0.98	0.89	0.82					0.82	0.82	0.73	0.73				
3.b-c Road transport and railways	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)		0.82	0.82					0.82		0.73	0.73				
Off-road vehicles	0.98	0.73	0.73					0.89	0.82	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				
C. CO <sub>2</sub> Transport and storage	0.82							0.98	0.73						
2. Industrial processes and product use															
A. Mineral industry	0.94							0.94	0.94						
B. Chemical industry	0.98	0.73	0.89	0.89	0.82	0.82	0.82	0.94	0.94	0.73	0.89	0.89	0.73	0.73	0.73
C. Metal industry	0.98	0.82		0.98	0.82	0.82		0.98	0.94	0.73		0.94	0.82	0.82	
D. Non-energy products from fuels and solvent use	0.89							0.94	0.82						
E. Electronics industry					0.73	0.73	0.73	0.94					0.73	0.73	0.73
F. Product uses as substitutes for ozone depleting substances				0.82	0.82			0.82				0.82	0.82		
G. Other product manufacture and use			0.98		0.89	0.89		0.89			0.94		0.82	0.82	
H. Other															
3. 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			0.73					0.82			0.73				
E. Prescribed burning of savannas		0.94	0.94					0.82		0.82	0.82				
F. Field burning of agricultural residues		0.94	0.94					0.82		0.82	0.82				
G. Liming	0.98							0.94	0.94						
H. Urea application	0.89							0.94	0.82						
I. Other															
5. Waste															
A. Solid waste disposal	0.89	0.89						0.82		0.73					
B. Biological treatment of solid waste		0.73	0.73					0.94		0.73	0.73				
C. Incineration and open burning of waste	0.89	0.82	0.89					0.82	0.73	0.73	0.73				
D. Wastewater treatment and discharge		0.89	0.89					0.98		0.82	0.82				
E. Other															

Table 2  
**Conservativeness factors for adjustments to emission estimates in the commitment year or recovery estimates in the base year (for sources in Annex A to the Kyoto Protocol)**

	Emission factors							Activity data	Emission estimates						
	CO2	CH4	N2O	HFCs	PFCs	SF6	NF3		CO2	CH4	N2O	HFCs	PFCs	SF6	NF3
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.a Domestic aviation and navigation	1.02	1.12	1.21					1.21	1.21	1.37	1.37				
3.b-c Road transport and railways	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)		1.21	1.21					1.21		1.37	1.37				
Off-road vehicles	1.02	1.37	1.37					1.12	1.21	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				
C. CO <sub>2</sub> Transport and storage	1.21							1.02	1.37						
2. Industrial processes and product use															
A. Mineral industry	1.06							1.06	1.06						
B. Chemical industry	1.02	1.37	1.12	1.12	1.21	1.21	1.21	1.06	1.06	1.37	1.12	1.12	1.37	1.37	1.37
C. Metal industry	1.02	1.21		1.02	1.21	1.21		1.02	1.06	1.37		1.06	1.21	1.21	
D. Non-energy products from fuels and solvent use	1.12							1.06	1.21						
E. Electronics industry					1.37	1.37	1.37	1.06					1.37	1.37	1.37
F. Product uses as substitutes for Ozone Depleting Substances				1.21	1.21			1.21				1.21	1.21		
G. Other product manufacture and use			1.02		1.12	1.12		1.12			1.06		1.21	1.21	
H. Other															
3. 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			1.37					1.21			1.37				
E. Prescribed burning of savannas		1.06	1.06					1.21		1.21	1.21				
F. Field burning of agricultural residues		1.06	1.06					1.21		1.21	1.21				
G. Liming	1.02							1.06	1.06						
H. Urea application	1.12							1.06	1.21						
I. Other															
5. Waste															
A. Solid waste disposal	1.12	1.12						1.21		1.37					
B. Biological treatment of solid waste		1.37	1.37					1.06		1.37	1.37				
C. Incineration and open burning of waste	1.12	1.21	1.12					1.21	1.37	1.37	1.37				
D. Wastewater treatment and discharge		1.12	1.12					1.02		1.21	1.21				
E. Other															



Table 3

Conservativeness factors for net emissions 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, of the Kyoto Protocol<sup>a</sup>

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
4. Land use, land-use change and forestry															
A.1. Forest land remaining forest land															
Carbon stock change in living biomass	0.89							0.98	0.89						
Carbon stock change in dead wood	0.73							0.98	0.73						
Carbon stock change in litter	0.82							0.98	0.82						
Net carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.73							0.94	0.73						
A.2. Land converted to forest land															
Carbon stock change in living biomass	0.89							0.94	0.89						
Carbon stock change in dead wood	0.73							0.94	0.73						
Carbon stock change in litter	0.82							0.94	0.82						
Net carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net carbon stock change in soils: organic soils	0.73							0.94	0.73						
B.1. Cropland land remaining cropland															
carbon stock change in living biomass	0.82							0.98	0.82						
carbon stock change in dead organic matter	0.73							0.98	0.73						
carbon stock change in litter	0.82							0.98	0.82						
Net carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.82							0.94	0.82						
B.2. Land converted to crop land															
Carbon stock change in living biomass	0.82							0.94	0.82						
Carbon stock change in dead wood	0.73							0.94	0.73						
Carbon stock change in litter	0.82							0.94	0.82						
Net carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.82							0.94	0.82						
C.1. Grassland remaining grass land															
Carbon stock change in living biomass															
(Root-to-shoot ratio)	0.73							0.98	0.73						
(All other parameters)	0.82							0.98	0.82						
Carbon stock change in dead organic matter	0.73							0.98	0.73						
Carbon stock change in litter	0.82							0.98	0.82						
Net carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.82							0.94	0.82						
C.2. Land converted to grassland															
Carbon stock change in living biomass															
(Root-to-shoot ratio)	0.73							0.94	0.73						
(All other parameters)	0.82							0.94	0.82						
Carbon stock change in dead organic matter	0.73							0.94	0.73						
Carbon stock change in litter	0.82							0.94	0.82						
Net carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.82							0.94	0.82						

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
D.1. Wetlands remaining wetlands															
D.1.1 Peat extraction remaining peat extraction															
Carbon stock change in dead organic matter	0.73							0.82	0.73						
carbon stock change in litter	0.73							0.82	0.73						
Net carbon stock change in soils: mineral soils	0.73		0.89					0.82	0.73	0.73					
Net carbon stock change in soils: organic soils	0.73		0.89					0.82	0.73	0.73					
D.1.2 Flooded land remaining flooded land <sup>c</sup>															
D.2. Land converted to wetlands															
carbon stock change in living biomass	0.73							0.94	0.73						
carbon stock change in dead organic matter	0.73							0.94	0.73						
carbon stock change in litter	0.73							0.94	0.73						
Net carbon stock change in soils: mineral soils	0.73							0.94	0.73						
Net carbon stock change in soils: organic soils	0.73							0.94	0.73						
D.2.1 Lands converted to peat extraction															
carbon stock change in living biomass	0.73							0.82	0.73						
carbon stock change in dead organic matter	0.73							0.82	0.73						
carbon stock change in litter	0.73							0.82	0.73						
Net carbon stock change in soils: mineral soils	0.73		0.89					0.82	0.73	0.73					
Net carbon stock change in soils: organic soils	0.73		0.89					0.82	0.73	0.73					
D.2.2 Land converted to flooded land															
carbon stock change in living biomass	0.82							0.89	0.82						
carbon stock change in dead organic matter	NA							0.89							
carbon stock change in litter	NA							0.89							
Net carbon stock change in soils: mineral soils	NA							0.89							
Net carbon stock change in soils: organic soils	NA							0.89							
E.1. Settlements remaining settlements															
carbon stock change in living biomass <sup>d</sup>	0.89							0.89	0.82						
carbon stock change in dead organic matter	0.73							0.98	0.73						
carbon stock change in litter	0.73							0.98	0.73						
Net carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.82							0.98	0.82						
E.2. Land converted to settlements															
carbon stock change in living biomass <sup>e</sup>	0.89							0.89	0.82						
carbon stock change in dead organic matter	0.73							0.98	0.73						
carbon stock change in litter	0.73							0.98	0.73						
Net carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.82							0.94	0.82						
F.1. Other land remaining other land <sup>c</sup>															
F.2. Land converted to other land															
carbon stock change in living biomass	0.89							0.89	0.82						
carbon stock change in dead organic matter	0.73							0.94	0.73						
carbon stock change in litter	0.73							0.94	0.73						
Net carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net carbon stock change in soils: organic soils <sup>b</sup>	0.82							0.94	0.82						
Cross-cutting categories															
Direct N <sub>2</sub> O emissions from N inputs to managed soils			0.73					0.94		0.73					
Emissions and removals from drainage and rewetting and other management of organic and mineral soils															
Drained organic soils <sup>c</sup>	0.73	0.73	0.73					0.94	0.73	0.73	0.73				
Rewetted organic soils	0.73	0.73	NA					0.94	0.73	0.73					
Direct N <sub>2</sub> O emissions from N mineralization/immobilization associated with loss/gain of soil organic matter			0.73					0.94			0.73				
Indirect N <sub>2</sub> O emissions from managed soils			0.73					0.94			0.73				
Biomass burning	0.82	0.82	0.82					0.89	0.73	0.73	0.73				
Harvested wood products	0.89							0.89	0.82						

Note: Entries are marked 'NA' because Parties are either not required to report this category in the greenhouse gas inventories or are not required to include it in their national totals.

Abbreviations: NA = Not applicable.

<sup>a</sup> Net emissions include net decreases in carbon stocks in individual carbon pools.

<sup>b</sup> In accordance with the Intergovernmental Panel on Climate Change (IPCC) 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (chapter 2), the uncertainty for drained organic soils is 20%, and conservativeness factors are 0.94. The uncertainty for CO<sub>2</sub> emissions is higher than 150% for drained and rewetted inland organic soils (conservativeness factors of 0.73) as presented in this table under 'emissions and removals from drainage and rewetting'.

<sup>c</sup> No methodologies are available in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (hereinafter the 2006 IPCC Guidelines).

<sup>d</sup> In accordance with the 2006 IPCC Guidelines, the activity data for this subcategory (living biomass) is not land area but crown area or number of trees depending on the methodology.

<sup>e</sup> Information on CO<sub>2</sub> is also included here, although emissions/removals may be reported in the land use remaining in the same category and land converted to a new land use category.

Table 4

Conservativeness factors for net removals 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, of the Kyoto Protocol<sup>a</sup>

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
4. Land use, land-use change and forestry															
A.1. Forest land remaining forest land															
Carbon stock change in living biomass	1.12							1.02	1.12						
Carbon stock change in dead wood	1.37							1.02	1.37						
Carbon stock change in litter	1.21							1.02	1.21						
Net carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.37							1.06	1.37						
A.2. Land converted to forest land															
Carbon stock change in living biomass	1.12							1.06	1.12						
Carbon stock change in dead wood	1.37							1.06	1.37						
Carbon stock change in litter	1.21							1.06	1.21						
Net carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net carbon stock change in soils: organic soils	1.37							1.06	1.37						
B.1. Cropland land remaining cropland															
Carbon stock change in living biomass	1.21							1.02	1.21						
Carbon stock change in dead organic matter	1.37							1.02	1.37						
Carbon stock change in litter	1.21							1.02	1.21						
Net carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.21							1.06	1.21						
B.2. Land converted to crop land															
Carbon stock change in living biomass	1.21							1.06	1.21						
Carbon stock change in dead organic matter	1.37							1.06	1.37						
Carbon stock change in litter	1.21							1.06	1.21						
Net carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.21							1.06	1.21						
C.1. Grassland remaining grassland															
Carbon stock change in living biomass															
(Root-to-shoot ratio)	1.37							1.02	1.37						
(All other parameters)	1.21							1.02	1.21						
Carbon stock change in dead organic matter	1.37							1.02	1.37						
Carbon stock change in litter	1.21							1.02	1.21						
Net carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.21							1.06	1.21						
C.2. Land converted to grassland															
Carbon stock change in living biomass															
(Root-to-shoot ratio)	1.37							1.06	1.37						
(All other parameters)	1.21							1.06	1.21						
Carbon stock change in dead organic matter	1.37							1.06	1.37						
Carbon stock change in litter	1.21							1.06	1.21						
Net carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.21							1.06	1.21						

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
D.1. Wetlands remaining wetlands															
D.1.1 Peat extraction remaining peat extraction															
Carbon stock change (carbon stock change) in dead organic matter	1.37							1.21	1.37						
carbon stock change in litter	1.37							1.21	1.37						
Net carbon stock change in soils: mineral soils	1.37		1.12					1.21	1.37		1.37				
Net carbon stock change in soils: organic soils	1.37		1.12					1.21	1.37		1.37				
D.1.2 Flooded land remaining flooded land <sup>c</sup>															
D.2. Land converted to wetlands															
carbon stock change in living biomass	1.37							1.06	1.37						
carbon stock change in dead organic matter	1.37							1.06	1.37						
carbon stock change in litter	1.37							1.06	1.37						
Net carbon stock change in soils: mineral soils	1.37							1.06	1.37						
Net carbon stock change in soils: organic soils	1.37							1.06	1.37						
D.2.1 Lands converted to peat extraction															
carbon stock change in living biomass	1.37							1.21	1.37						
carbon stock change in dead organic matter	1.37							1.21	1.37						
carbon stock change in litter	1.37							1.21	1.37						
Net carbon stock change in soils: mineral soils	1.37		1.12					1.21	1.37		1.37				
Net carbon stock change in soils: organic soils	1.37		1.12					1.21	1.37		1.37				
D.2.2 Land converted to flooded land															
carbon stock change in living biomass	1.21							1.12	1.21						
carbon stock change in dead organic matter	NA							1.12							
carbon stock change in litter	NA							1.12							
Net carbon stock change in soils: mineral soils	NA							1.12							
Net carbon stock change in soils: organic soils	NA							1.12							
E.1. Settlements remaining settlements															
carbon stock change in living biomass <sup>d</sup>	1.12							1.12	1.21						
carbon stock change in dead organic matter	1.37							1.02	1.37						
carbon stock change in litter	1.37							1.02	1.37						
Net carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.21							1.02	1.21						
E.2. Land converted to settlements															
carbon stock change in living biomass <sup>1</sup>	1.12							1.12	1.21						
carbon stock change in dead organic matter	1.37							1.02	1.37						
carbon stock change in litter	1.37							1.02	1.37						
Net carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.21							1.06	1.21						
F.1. Other land remaining other land <sup>c</sup>															
F.2. Land converted to other land															
carbon stock change in living biomass	1.12							1.12	1.21						
carbon stock change in dead organic matter	1.37							1.06	1.37						
carbon stock change in litter	1.37							1.06	1.37						
Net carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net carbon stock change in soils: organic soils <sup>b</sup>	1.21							1.06	1.21						
Cross-cutting categories															
Direct N <sub>2</sub> O emissions from N inputs to managed soils			1.37					1.06			1.37				
Emissions and removals from drainage and rewetting and other management of organic and mineral soils															
Drained organic soils <sup>a</sup>	1.37	1.37	1.37					1.06	1.37	1.37	1.37				
Rewetted organic soils	1.37	1.37	NA					1.06	1.37	1.37					
Direct N <sub>2</sub> O emissions from N mineralization/immobilization associated with loss/gain of soil organic matter			1.37					1.06			1.37				
Indirect N <sub>2</sub> O emissions from managed soils			1.37					1.06			1.37				
Biomass burning	1.21	1.21	1.21					1.12	1.37	1.37	1.37				
Harvested wood products	1.12							1.12	1.21						

Note: Entries are marked 'NA' because Parties are either not required to report this category in the greenhouse gas inventories or are not required to include it in their national totals.

Abbreviations: NA = Not applicable.

<sup>a</sup> Net removals include net decreases in carbon stocks in individual carbon pools.

<sup>b</sup> In accordance with the Intergovernmental Panel on Climate Change (IPCC) 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (chapter 2), the uncertainty for drained organic soils is 20%, and conservativeness factors are 1.06. The uncertainty for CO<sub>2</sub> emissions is higher than 150% for drained and rewetted inland organic soils (conservativeness factors of 1.37) as presented in this table under 'emissions and removals from drainage and rewetting'

<sup>c</sup> No methodologies are available in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (hereinafter the 2006 IPCC Guidelines).

<sup>d</sup> In accordance with the 2006 IPCC Guidelines, the activity data for this subcategory (living biomass) is not land area, but crown area or number of trees depending on the methodology.

<sup>e</sup> Information on CO<sub>2</sub> is also included here, although emissions/removals may be reported in the land use remaining in the same category and land converted to a new land use category.

Table 5

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

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
Afforestation and reforestation (total)															
Carbon stock change in above-ground biomass	0.89							0.94	0.89						
Carbon stock change in below-ground biomass	0.89							0.94	0.89						
Carbon stock change in litter	0.82							0.94	0.82						
Carbon stock change in dead wood	0.73							0.94	0.73						
Net carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net carbon stock change in soils: organic soils <sup>c</sup>	0.73							0.94	0.73						
Harvest wood products	0.89							0.82	0.73						
(Land subject to natural disturbances) <sup>d</sup>															
Carbon stock change in above-ground biomass	0.89							0.94	0.89						
Carbon stock change in below-ground biomass	0.89							0.94	0.89						
Carbon stock change in litter	0.82							0.94	0.82						
Carbon stock change in dead wood	0.73							0.94	0.73						
Net Carbon stock change in soils per area: mineral soils	0.82							0.94	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.73							0.94	0.73						
Harvest wood products	0.89							0.82	0.73						
Deforestation (total) <sup>e</sup>															
Carbon stock change in above-ground biomass <sup>f</sup>	0.73							0.94	0.73						
Carbon stock change in below-ground biomass	0.82							0.94	0.82						
Carbon stock change in litter	0.73							0.94	0.73						
Carbon stock change in dead wood	0.73							0.94	0.73						
Net Carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.82							0.94	0.82						
Harvest wood products	0.89							0.82	0.73						
Forest management (total) <sup>g</sup>															
Carbon stock change in above-ground biomass	0.89							0.98	0.89						
Carbon stock change in below-ground biomass	0.89							0.98	0.89						
Carbon stock change in litter	0.82							0.98	0.82						
Carbon stock change in dead wood	0.73							0.98	0.73						
Net Carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.73							0.94	0.73						
Harvest wood products	0.89							0.82	0.73						
(Newly established forest(CEF-ne)) <sup>h</sup>															
Carbon stock change in above-ground biomass	0.89							0.94	0.89						
Carbon stock change in below-ground biomass	0.89							0.94	0.89						
Carbon stock change in litter	0.82							0.94	0.82						
Carbon stock change in dead wood	0.73							0.94	0.73						
Net Carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.73							0.94	0.73						
Carbon stock at harvesting <sup>h</sup>															
Harvest wood products	0.89							0.82	0.73						
(Harvested and converted forest plantations (CEF-hc)) <sup>i</sup>															
Carbon stock change in above-ground biomass	0.73							0.94	0.73						
Carbon stock change in below-ground biomass	0.82							0.94	0.82						
Carbon stock change in litter	0.73							0.94	0.82						
Carbon stock change in dead wood	0.73							0.94	0.73						
Net Carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.82							0.94	0.82						
Harvest wood products	0.89							0.82	0.73						

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
Forest management (Land subject to natural disturbances) <sup>a1</sup>	0.73														
Carbon stock change in above-ground biomass	0.82							0.94	0.82						
Carbon stock change in below-ground biomass	0.73							0.94	0.73						
Carbon stock change in litter	0.73							0.94	0.73						
Carbon stock change in dead wood	0.82							0.94	0.82						
Net Carbon stock change in soils: mineral soils	0.82							0.94	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.89							0.94	0.82						
Harvest wood products	0.89							0.82	0.73						
Technical correction <sup>1</sup>															
Cropland management <sup>4</sup>															
Carbon stock change in above-ground biomass	0.82							0.98	0.82						
Carbon stock change in below-ground biomass	0.82							0.98	0.82						
Carbon stock change in litter	0.82							0.98	0.82						
Carbon stock change in dead wood	0.73							0.98	0.73						
Net Carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.82							0.94	0.82						
Grazingland management <sup>4</sup>															
Carbon stock change in above-ground biomass	0.82							0.98	0.82						
Carbon stock change in below-ground biomass	0.73							0.98	0.73						
Carbon stock change in litter	0.82							0.98	0.82						
Carbon stock change in dead wood	0.73							0.98	0.73						
Net Carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.82							0.94	0.82						
Revegetation <sup>4</sup>															
Carbon stock change in above-ground biomass	0.82							0.98	0.82						
Carbon stock change in below-ground biomass	0.73							0.98	0.73						
Carbon stock change in litter	0.73							0.98	0.73						
Carbon stock change in dead wood	0.73							0.98	0.73						
Net Carbon stock change in soils: mineral soils	0.82							0.98	0.82						
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.82							0.94	0.82						
Wetland drainage and rewetting <sup>4</sup>															
Carbon stock change in above-ground biomass	0.73							0.94	0.73						
Carbon stock change in below-ground biomass	0.73							0.94	0.73						
Carbon stock change in litter	0.73							0.94	0.73						
Carbon stock change in dead wood	0.73							0.94	0.73						
Net Carbon stock change in soils: mineral soils	0.73	0.73	0.73					0.94	0.73	0.73	0.73				
Net Carbon stock change in soils: organic soils <sup>c</sup>	0.73	0.73	NA					0.94	0.73	0.73					
Harvest wood products															
From afforestation/reforestation	0.89							0.82	0.73						
From deforestation	0.89							0.82	0.73						
From forest management	0.89							0.82	0.73						
Cross-cutting categories															
Direct and indirect N <sub>2</sub> O emissions from N fertilization			0.73					0.94		0.73					
CH <sub>4</sub> and N <sub>2</sub> O emissions from drained and rewetted organic soils <sup>1</sup>															
Drained organic soils <sup>1</sup>	0.73	0.73	0.73					0.94	0.73	0.73	0.73				
Rewetted organic soils <sup>1</sup>	0.73	0.73	NA					0.94	0.73	0.73					
N <sub>2</sub> O emissions from N mineralization/immobilization due to carbon loss/gain associated with land-use conversions and management change in mineral soils			0.73					0.94			0.73				
Greenhouse gas emissions from biomass burning (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O)	0.82	0.82	0.82					0.89	0.73	0.73	0.73				

Note: Entries are marked 'NA' because Parties are either not required to report this category in the greenhouse gas inventories or are not required to include it in their national totals.

Abbreviations: NA = Not applicable.

<sup>a</sup> Net emissions and removals include net increases and net decreases in carbon stocks in individual carbon pools (in a year during the commitment period and in the base year, respectively).

<sup>b</sup> For the base year, conservativeness factors given in this table apply to cropland management, grazing land management, wetland drainage and rewetting and revegetation under Article 3, paragraph 4, of the Kyoto Protocol.

<sup>c</sup> In accordance with the Intergovernmental Panel on Climate Change (IPCC) 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (chapter 2), the uncertainty for drained organic soils is 20%, and conservativeness factors are 0.94/1.06. The uncertainty for CO<sub>2</sub> emissions is higher than 150% for drained and rewetted inland organic soils (conservativeness factors of 0.73/1.37) as presented in this table under 'emissions and removals from drainage and rewetting'

<sup>d</sup> In cases where adjustments are calculated for other variables related to this category in common reporting format (CRF) table 4(KP-IA).1.1, the conservativeness factor for the specific pool should be applied. This applies, in particular, to the areas subject to natural disturbances in the year that it was first reported: background levels, margins,



the emissions in the inventory that can be excluded and subsequent removals in the inventory year. For salvage logging, the conservativeness factors for harvest wood products should apply.

<sup>e</sup> In cases where adjustments are calculated for other variables related to this category in CRF table 4(KP-I)A.2, the conservativeness factor for the specific pool should be applied. This applies, in particular, to the areas subject to natural disturbances in the year that it was first reported: background levels, margins, the emissions in the inventory that can be excluded, and subsequent removals in inventory year. For salvage logging, the conservativeness factors for harvest wood products should apply.

<sup>f</sup> The same conservativeness factors apply for deforested land previously reported under afforestation/reforestation and forest management and subject to natural disturbances.

<sup>g</sup> In cases where adjustments are calculated for other variables related to this category in CRF tables 4(KP-I)B.1, 4(KP-I)B.1.1 and 4(KP-I)B.1.2, the conservativeness factor for the specific pool should be applied.

<sup>h</sup> For all these cases, assume the uncertainties for the specific pool that are being adjusted.

<sup>i</sup> The conservativeness factors for deforestation were assumed for this activity.

<sup>j</sup> In cases where adjustments are calculated for the technical correction, the conservativeness factor for the specific pool should be applied.

<sup>k</sup> The uncertainty for activity data for the base year is 50%, and the conservativeness factors are 0.89/1.12.

<sup>l</sup> Information on CO<sub>2</sub> is also included here, although emissions/removals may be reported in the land use remaining in the same category and land converted to a new land-use category.

Table 6  
**Conservativeness factors for adjustments to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol: Conservativeness factors for removals<sup>a</sup> in a year during the commitment period/emissions<sup>a</sup> in the base year<sup>b</sup>**

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
Afforestation and reforestation (total)															
Carbon stock change in above-ground biomass	1.12							1.06	1.12						
Carbon stock change in below-ground biomass	1.12							1.06	1.12						
Carbon stock change in litter	1.21							1.06	1.21						
Carbon stock change in dead wood	1.37							1.06	1.37						
Net carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net carbon stock change in soils: organic soils <sup>c</sup>	1.37							1.06	1.37						
Harvest wood products	1.12							1.21	1.37						
(Land subject to natural disturbances) <sup>d</sup>															
Carbon stock change in above-ground biomass	1.12							1.06	1.12						
Carbon stock change in below-ground biomass	1.12							1.06	1.12						
Carbon stock change in litter	1.21							1.06	1.21						
Carbon stock change in dead wood	1.37							1.06	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.37							1.06	1.37						
Harvest wood products	1.12							1.21	1.37						
Deforestation (total) <sup>e</sup>															
Carbon stock change in above-ground biomass <sup>f</sup>	1.37							1.06	1.37						
Carbon stock change in below-ground biomass	1.21							1.06	1.21						
Carbon stock change in litter	1.37							1.06	1.37						
Carbon stock change in dead wood	1.37							1.06	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.21							1.06	1.21						
Harvest wood products	1.12							1.21	1.37						
Forest management (total) <sup>g</sup>															
Carbon stock change in above-ground biomass	1.12							1.02	1.12						
Carbon stock change in below-ground biomass	1.12							1.02	1.12						
Carbon stock change in litter	1.21							1.02	1.21						
Carbon stock change in dead wood	1.37							1.02	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.37							1.06	1.37						
Harvest wood products	1.12							1.21	1.37						
(Newly established forest(CEF-ne)) <sup>h</sup>															
Carbon stock change in above-ground biomass	1.12							1.06	1.12						
Carbon stock change in below-ground biomass	1.12							1.06	1.12						
Carbon stock change in litter	1.21							1.06	1.21						
Carbon stock change in dead wood	1.37							1.06	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.37							1.06	1.37						
Carbon stock at harvesting <sup>h</sup>															
Harvest wood products	1.12							1.21	1.37						
(Harvested and converted forest plantations (CEF-hc)) <sup>i</sup>															
Carbon stock change in above-ground biomass	1.37							1.06	1.37						
Carbon stock change in below-ground biomass	1.21							1.06	1.21						
Carbon stock change in litter	1.37							1.06	1.21						
Carbon stock change in dead wood	1.37							1.06	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.21							1.06	1.21						
Harvest wood products	1.12							1.21	1.37						

	Emission factors							Activity data	Emission estimates						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
Forest management (Land subject to natural disturbances) <sup>a</sup>	1.37														
Carbon stock change in above-ground biomass	1.21							1.06	1.21						
Carbon stock change in below-ground biomass	1.37							1.06	1.37						
Carbon stock change in litter	1.37							1.06	1.37						
Carbon stock change in dead wood	1.21							1.06	1.21						
Net Carbon stock change in soils: mineral soils	1.21							1.06	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.12							1.06	1.21						
Harvest wood products	1.12							1.21	1.37						
Technical correction <sup>f</sup>															
Cropland management <sup>d</sup>															
Carbon stock change in above-ground biomass	1.21							1.02	1.21						
Carbon stock change in below-ground biomass	1.21							1.02	1.21						
Carbon stock change in litter	1.21							1.02	1.21						
Carbon stock change in dead wood	1.37							1.02	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.21							1.06	1.21						
Grazing land management <sup>d</sup>															
Carbon stock change in above-ground biomass	1.21							1.02	1.21						
Carbon stock change in below-ground biomass	1.37							1.02	1.37						
Carbon stock change in litter	1.21							1.02	1.21						
Carbon stock change in dead wood	1.37							1.02	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.21							1.06	1.21						
Revegetation <sup>d</sup>															
Carbon stock change in above-ground biomass	1.21							1.02	1.21						
Carbon stock change in below-ground biomass	1.37							1.02	1.37						
Carbon stock change in litter	1.37							1.02	1.37						
Carbon stock change in dead wood	1.37							1.02	1.37						
Net Carbon stock change in soils: mineral soils	1.21							1.02	1.21						
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.21							1.06	1.21						
Wetland drainage and rewetting <sup>d</sup>															
Carbon stock change in above-ground biomass	1.37							1.06	1.37						
Carbon stock change in below-ground biomass	1.37							1.06	1.37						
Carbon stock change in litter	1.37							1.06	1.37						
Carbon stock change in dead wood	1.37							1.06	1.37						
Net Carbon stock change in soils: mineral soils	1.37	1.37	1.37					1.06	1.37	1.37	1.37				
Net Carbon stock change in soils: organic soils <sup>c</sup>	1.37	1.37	NA					1.06	1.37	1.37					
Harvest wood products															
From afforestation/reforestation	1.12							1.21	1.37						
From deforestation	1.12							1.21	1.37						
From forest management	1.12							1.21	1.37						
Cross-cutting categories															
Direct and indirect N <sub>2</sub> O emissions from N fertilization				1.37				1.06			1.37				
CH <sub>4</sub> and N <sub>2</sub> O emissions from drained and rewetted organic soils <sup>1</sup>															
Drained organic soils <sup>1</sup>	1.37	1.37	1.37					1.06	1.37	1.37	1.37				
Rewetted organic soils <sup>1</sup>	1.37	1.37	NA					1.06	1.37	1.37					
N <sub>2</sub> O emissions from N mineralization/immobilization due to carbon loss/gain associated with land-use conversions and management change in mineral soils								1.06			1.37				
Greenhouse gas emissions from biomass burning (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O)	1.21	1.21	1.21					1.12	1.37	1.37	1.37				

Note: Entries are marked 'NA' because Parties are either not required to report this category in the greenhouse gas inventories or are not required to include it in their national totals.

Abbreviations: NA = Not applicable.

<sup>a</sup> Net missions and removals include net increases and net decreases in carbon stocks in individual carbon pools (in a year during the commitment period and in the base year, respectively).

<sup>b</sup> For the base year, conservativeness factors given in this table apply to cropland management, grazing land management, wetland drainage and rewetting, and revegetation under Article 3, paragraph 4, of the Kyoto Protocol.

<sup>c</sup> In cases where adjustments are calculated for other variables related to this category in common reporting format (CRF) table 4(KP-I)A.1.1, the conservativeness factor for the specific pool should be applied. This applies, in particular, to the areas subject to natural disturbances in the year that it was first reported: background levels, margins, the emissions in the inventory that can be excluded and subsequent removals in the inventory year. For salvage logging the conservativeness factors for harvest wood products should apply.

<sup>d</sup> The same conservativeness factors apply for deforested land previously reported under afforestation/reforestation and forest management and subject to natural disturbances.

<sup>e</sup> In case where adjustments are calculated for other variables related to this category in CRF table 4(KP-I)A.2, the conservativeness factor for the specific pool should be applied. This applies, in particular, to the areas subject to natural disturbances in the year that it was first reported: background levels, margins, the emissions in the inventory that can be excluded, and subsequent removals in the inventory year. For salvage logging the conservativeness factors for harvest wood products should apply.

<sup>f</sup> In accordance with the Intergovernmental Panel on Climate Change (IPCC) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (chapter 2)*, the uncertainty for drained organic soils is 20%, and conservativeness factors are 0.94/1.06. The uncertainty for CO<sub>2</sub> emissions is higher than 150% for drained and rewetted inland organic soils (conservativeness factors of 0.73/1.37) as presented in this table under ‘emissions and removals from drainage and rewetting’

<sup>g</sup> In cases where adjustments are calculated for other variables related to this category in CRF table 4(KP-I)B.1, the conservativeness factor for the specific pool should be applied.

<sup>h</sup> For all these cases, assume the uncertainties for the specific pool that are being adjusted.

<sup>i</sup> The conservativeness factors for deforestation were assumed for this activity. In cases where adjustments are calculated for other variables related to this category in CRF table 4(KP-I)B.1, the conservativeness factor for the specific pool should be applied.

<sup>j</sup> In case that adjustments are calculated for the technical correction, the conservativeness factor for the specific pool should be applied.

<sup>k</sup> The uncertainty for activity data for the base year is 50%, and the conservativeness factors are 0.89/1.12.

<sup>l</sup> Information on CO<sub>2</sub> is also included here, although emissions/removals may be reported in the land use remaining in the same category and land converted to a new land-use category.]

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