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Methodological issues under the Convention

Annual report on the technical review of greenhouse gas inventories from

Parties included in Annex I to the Convention

**Annual report on the technical review of greenhouse gas
inventories from Parties included in Annex I to the
Convention**

Note by the secretariat

Summary

This report describes activities relating to greenhouse gas (GHG) inventory reviews conducted during the period November 2010 to October 2011 and to activities planned for 2012. It also provides information on the training activities under the Convention and under the Kyoto Protocol, the meeting of inventory lead reviewers, progress made in updating the roster of experts and progress made in the maintenance and development of the GHG information system, including CRF Reporter.

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I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by its decision 12/CP.9, requested the secretariat to prepare an annual report on inventory review activities, including any recommendations resulting from meetings of lead reviewers (LRs) participating in the technical review of greenhouse gas (GHG) inventories of Parties included in Annex I to the Convention (Annex I Parties), for consideration by the Subsidiary Body for Scientific and Technological Advice (SBSTA). The COP also requested the secretariat to include in this report information on its inventory review training programme, in particular on examination procedures and on the selection of trainees and instructors.

2. In addition, the SBSTA, at its twenty-fourth session, requested the secretariat to continue to prepare annual reports on inventory review activities, pursuant to decision 12/CP.9, for consideration by the SBSTA, and to include in these reports information on progress made in updating the roster of experts.¹

B. Scope of the note

3. This report provides information on activities relating to GHG inventory reviews conducted from November 2010 to October 2011 and on planned activities for 2012. It also provides information on the meeting of inventory LRs, progress made in updating the roster of experts, training activities under the Convention and under the Kyoto Protocol, and progress made in the development and maintenance of the GHG information system.

4. This report focuses on the elements of the review process that are specific to the Convention and should be read in conjunction with the “Annual report on the technical review of greenhouse gas inventories and other information reported by Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol under Article 7, paragraph 1, of the Kyoto Protocol”² prepared by the secretariat in accordance with decision 22/CMP.1. The review under the Kyoto Protocol encompasses the review of GHG inventories under the Convention in accordance with the “Guidelines for review under Article 8 of the Kyoto Protocol” (hereinafter referred to as the Article 8 review guidelines), therefore the lessons learned and problems encountered in the review process in 2010 under the Convention have many common elements with the reviews under the Kyoto Protocol.

C. Possible action by the Subsidiary Body for Scientific and Technological Advice

5. The SBSTA will be invited to take note of the information contained in this report.

II. Review activities

6. The “Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention” (hereinafter referred to as the UNFCCC review guidelines) adopted in 1999 (decision 6/CP.5) and revised in 2002 (decision 19/CP.8) help to ensure that the COP is provided with objective, consistent, transparent, thorough and

¹ FCCC/SBSTA/2006/5, paragraph 95.

² FCCC/SBSTA/2011/INF.16.

comprehensive information and technical assessments of GHG inventories from Annex I Parties, that these inventories are consistent with the agreed reporting guidelines and that the quality of these inventories improves over time. In addition, the review guidelines help to ensure that the COP is provided with a technical assessment of the implementation of the commitments of Annex I Parties under Article 4, paragraph 1(a), and Article 12, paragraph 1(a), of the Convention.

7. Following completion of the trial period established in decision 6/CP.5, a technical annual review of the individual national GHG inventory of each Annex I Party has been mandatory since 2003, in accordance with decision 19/CP.8.

8. The GHG inventory review activities – along with some activities for the training of review experts and the organization of LRs' meetings that until 2009 were funded through voluntary contributions to supplementary funds – are funded from the UNFCCC secretariat core budget. Some other related activities, such as refresher seminars for experienced reviewers, inclusion of new experts as trainees in the review teams, strengthening of the capacity of the secretariat to support review and training activities, and the development of the GHG information system, continue to be funded through voluntary contributions to supplementary funds.

A. Individual inventory reviews

9. In 2010, 10 in-country reviews and eight centralized reviews covering 42 Parties were conducted. Reports of these reviews were published between November 2010 and October 2011. Of the 10 in-country review reports, one was completed³ seven weeks before the date established in the inventory review guidelines for publication and one four weeks before this date. One report was completed on time and one was completed two weeks after the due date for publication. Two reports were completed between six and eight weeks after the due date for publication and four were completed between 11 and 14 weeks after the due date for publication. Of the 10 in-country review reports, five were published over one year after the submission due date.

10. Of the 32 centralized review reports, one was completed eight weeks before the date established in the inventory review guidelines for publication, one five weeks before this date and one four weeks before this date. One report was completed on time and one report was completed within two weeks after the due date established in the inventory review guidelines for publication. Eleven reports were completed between four and eight weeks after the due date for publication and six reports were completed between 10 and 11 weeks after this date. Four reports were completed between 14 and 17 weeks after the due date for publication and two reports were completed between 19 and 20 weeks after this date. Three reports were completed between 27 and 30 weeks after the due date for publication and one after 38 weeks after this date. Of these 32 centralized review reports, 14 were published over one year after the submission due date.

11. The delay in the publication of the reports was mainly because experts participating in these reviews had, owing to other commitments and work obligations, difficulties in finalizing the review reports within the established deadlines. In addition, experts faced difficulties in meeting these deadlines because of the complexity of the review process under the Kyoto Protocol, such as the need for the first time in 2010 to review the information on activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol and in some cases to apply procedures for adjustments, which increased substantially the work of the experts and contributed to delays. Also, experts faced difficulties in meeting the

³ The review report was published 15 weeks before the date established in the inventory review guidelines and its corrigendum seven weeks before this date.

established deadlines owing to the need for continuous interaction with the Parties and, in some cases, because some Parties provided their comments late, used successive iterations for providing comments or requested additional time to provide comments.

12. In 2011 the secretariat received 43 annual submissions⁴ from Annex I Parties (see the table). In accordance with decision 19/CP.8, the inventory review process is conducted in three stages: initial check; synthesis and assessment (parts I and II); and individual review. The initial check stage provides an immediate quality assurance (QA) aimed at verifying the completeness of the inventory submission and the correctness of its format. Status reports for all 43 submissions were prepared and published on the UNFCCC website⁵ by June 2011. Part I of the synthesis and assessment report compiles and compares basic inventory information, such as emission trends, activity data and implied emission factors, across Parties and over time. Part I of the synthesis and assessment report was published on the UNFCCC website on 27 June 2011⁶ and its corrigendum on 4 July 2011.⁷ Part II provides a preliminary assessment of the inventory of individual Parties and identifies any potential inventory problems, which are then assessed during the individual review stage. Part II of the synthesis and assessment report is not published.

13. After each stage of the review process, the Party under review has an opportunity to comment on the different draft reports (status report, synthesis and assessment parts I and II, and individual review report); the timelines for providing comments are established in the review guidelines contained in the annex to decision 19/CP.8. However, Parties do not always respond to the invitation to provide comments, or provide their comments late, or in successive iterations, which has an impact on the quality and timeliness of the review process, the deadlines for the stages in the review process and the publication of the final reports.

14. In accordance with decision 19/CP.8, the secretariat coordinates the review of national GHG inventories of Annex I Parties. During the individual review, an international team of experts, nominated by Parties, conducts a technical review of each inventory. As of October 2011, individual inventory reviews had been conducted for all 43 Annex I Parties, as follows:

(a) In-country reviews were conducted between 22 August and 22 October 2011 for the Czech Republic, Iceland, Lithuania, Luxembourg, the Netherlands, Romania, Slovakia, Spain and Ukraine. The reports of these reviews are expected to be finalized and published between December 2011 and March 2012;

(b) Centralized reviews were organized between 29 August 2011 and 24 September 2011 in Bonn, Germany, for Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Denmark, Estonia, the European Union, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Latvia, Liechtenstein, Malta, Monaco, New Zealand, Norway, Poland, Portugal, the Russian Federation, Slovenia, Sweden, Switzerland, Turkey, the United Kingdom of Great Britain and Northern Ireland and the

⁴ On 17 September 2009, Kazakhstan became a Party included in Annex I to the Convention for the purposes of the Protocol, while remaining a Party not included in Annex I to the Convention for the purposes of the Convention. Since Kazakhstan does not have a quantified emission limitation or reduction commitment inscribed in Annex B to the Kyoto Protocol its 2011 annual submission is being treated as a submission under the Convention. On 26 October 2010, Malta became a Party included in Annex I to the Convention for the purposes of the Convention, in accordance with decision 3/CP.15.

⁵ <http://unfccc.int/national_reports/annex_i_ghg_inventories/inventory_review_reports/items/6049.php>.

⁶ <<http://unfccc.int/resource/webdocs/sai/2011.pdf>>.

⁷ <<http://unfccc.int/resource/webdocs/sai/2011c01.pdf>>.

United States of America. The reports of these reviews are expected to be finalized and published between January and March 2012.

Submission of annual information required under the Kyoto Protocol, review dates and status of review reports

<i>Annex I Party</i>	<i>NIR and CRF submission dates</i>	<i>Language of NIR</i>	<i>Report symbol</i>	<i>Review dates</i>	<i>Status of review report</i>
Australia	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/AUS	29 Aug. to 3 Sep. 2011	In preparation
Austria	NIR – 14 Apr. 2011 CRF – 14 Apr. 2011	English	FCCC/ASR/2011/AUT	29 Aug. to 3 Sep. 2011	In preparation
Belarus ^a	NIR – 17 May 2011 CRF – 15 Apr. 2011	Russian	FCCC/ASR/2011/BLR	5–10 Sep. 2011	In preparation
Belgium	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/BEL	19–24 Sep. 2011	In preparation
Bulgaria	NIR – 15 Apr. 2011 CRF – 14 Apr. 2011	English	FCCC/ASR/2011/BGR	29 Aug. to 3 Sep. 2011	In preparation
Canada	NIR – 16 May 2011 CRF – 16 May 2011	English	FCCC/ASR/2011/CAN	29 Aug. to 3 Sep. 2011	In preparation
Croatia	NIR – 15 Apr. 2011 CRF – 14 Apr. 2011	English	FCCC/ASR/2011/HRV	12–17 Sep. 2011	In preparation
Czech Republic	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/CZE	29 Aug. to 3 Sep. 2011	In preparation
Denmark	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/DNK	12–17 Sep. 2011	In preparation
Estonia	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/EST	29 Aug. to 3 Sep. 2011	In preparation
European Union	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/EU	12–17 Sep. 2011	In preparation
Finland	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/FIN	29 Aug. to 3 Sep. 2011	In preparation
France	NIR – 11 Apr. 2011 CRF – 11 Apr. 2011	French	FCCC/ASR/2011/FRA	5–10 Sep. 2011	In preparation
Germany	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/DEU	19–24 Sep. 2011	In preparation
Greece	NIR – 15 Apr. 2011 CRF – 19 Apr. 2011	English	FCCC/ASR/2011/GRC	29 Aug. to 3 Sep. 2011	In preparation
Hungary	NIR – 24 May 2011 CRF – 21 May 2011	English	FCCC/ASR/2011/HUN	12–17 Sep. 2011	In preparation
Iceland	NIR – 13 May 2011 CRF – 16 Apr. 2011	English	FCCC/ASR/2011/ISL	22–27 Aug 2011	In preparation
Ireland	NIR – 15 Apr. 2011 CRF – 13 Apr. 2011	English	FCCC/ASR/2011/IRL	5–10 Sep. 2011	In preparation

<i>Annex I Party</i>	<i>NIR and CRF submission dates</i>	<i>Language of NIR</i>	<i>Report symbol</i>	<i>Review dates</i>	<i>Status of review report</i>
Italy	NIR – 15 Apr. 2011 CRF – 14 Apr. 2011	English	FCCC/ASR/2011/ITA	12–17 Sep. 2011	In preparation
Japan	NIR – 26 Apr. 2011 CRF – 26 Apr. 2011	English	FCCC/ASR/2011/JPN	12–17 Sep. 2011	In preparation
Kazakhstan ^b	NIR – 30 May 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/KAZ	5–10 Sep. 2011	In preparation
Latvia	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/LVA	12–17 Sep. 2011	In preparation
Liechtenstein	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/LIE	5–10 Sep. 2011	In preparation
Lithuania	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/LTU	26 Sep. to 1 Oct. 2011	In preparation
Luxembourg	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/LUX	19–24 Sep. 2011	In preparation
Malta	NIR – 14 Apr. 2011 CRF – 13 Apr. 2011	English	FCCC/ASR/2011/MLT	29 Aug. to 3 Sep. 2011	In preparation
Monaco	NIR – 18 Mar. 2011 CRF – 9 Mar. 2011	French	FCCC/ASR/2011/MCO	5–10 Sep. 2011	In preparation
Netherlands	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/NLD	26 Sep. to 1 Oct. 2011	In preparation
New Zealand	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/NZL	29 Aug. to 3 Sep. 2011	In preparation
Norway	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/NOR	12–17 Sep. 2011	In preparation
Poland	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/POL	12–17 Sep. 2011	In preparation
Portugal	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/PRT	5–10 Sep. 2011	In preparation
Romania	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/ROU	26 Sep. to 1 Oct. 2011	In preparation
Russian Federation	NIR – 23 Apr. 2011 CRF – 14 Apr. 2011	Russian	FCCC/ASR/2011/RUS	5–10 Sep. 2011	In preparation
Slovakia	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/SVK	22–27 Aug. 2011	In preparation
Slovenia	NIR – 18 Apr. 2011 CRF – 18 Apr. 2011	English	FCCC/ASR/2011/SVN	29 Aug. to 3 Sep. 2011	In preparation
Spain	NIR – 14 Apr. 2011 CRF – 14 Apr. 2011	Spanish and English	FCCC/ASR/2011/ESP	17–22 Oct. 2011	In preparation
Sweden	NIR – 31 Mar. 2011 CRF – 31 Apr. 2011	English	FCCC/ASR/2011/SWE	5–10 Sep. 2011	In preparation

<i>Annex I Party</i>	<i>NIR and CRF submission dates</i>	<i>Language of NIR</i>	<i>Report symbol</i>	<i>Review dates</i>	<i>Status of review report</i>
Switzerland	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/CHE	19–24 Sep. 2011	In preparation
Turkey ^c	NIR – 13 Apr. 2011 CRF – 13 Apr. 2011	English	FCCC/ASR/2011/TUR	19–24 Sep. 2011	In preparation
Ukraine	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	Russian	FCCC/ASR/2011/UKR	10–15 Oct. 2011	In preparation
United Kingdom of Great Britain and Northern Ireland	NIR – 15 Apr. 2011 CRF – 15 Apr. 2011	English	FCCC/ASR/2011/GBR	19–24 Sep. 2011	In preparation
United States of America	NIR – 13 Apr. 2011 CRF – 13 Apr. 2011	English	FCCC/ASR/2011/USA	5–10 Sep. 2011	In preparation

Abbreviations: CRF = common reporting format, NIR = national inventory report.

^a Belarus indicated that its 2011 annual submission is made under the Convention only.

^b Kazakhstan is a Party included in Annex I for the purposes of the Kyoto Protocol. Since Kazakhstan does not have a quantified emission limitation or reduction commitment inscribed in Annex B to the Kyoto Protocol, its 2011 annual submission is being treated as a submission under the Convention.

^c Turkey indicated that the 2011 annual submission is made under both the Convention and the Kyoto Protocol.

15. It is too early to draw any conclusions on the timeliness of the reviews conducted in 2011, as the review reports are in preparation and because, with a very few exceptions, the inventory submissions have to be reviewed following the requirements established under the Article 8 review guidelines, since, for Annex I Parties that are also Parties to the Kyoto Protocol, 2011 is the second year for the mandatory annual submission under the Kyoto Protocol.

16. Following established practice, for 2012 the secretariat is planning to review eight inventory submissions through in-country reviews, while the others will be reviewed through eight centralized reviews. Reviews of all Parties are planned for the end of August and during September 2012.

B. Other inventory review procedures

17. In accordance with decision 12/CP.9, the secretariat developed and put in place procedures to implement the code of practice for the treatment of confidential information during the inventory review. These procedures cover submission, processing and handling by the secretariat of any information designated as confidential by an Annex I Party and the granting of access to such information by experts.

18. During in-country reviews, Parties often provide the review teams with access to confidential information. This is possible as the reviews are conducted in the countries and thus the Parties' own procedures on how to share confidential information with the review teams can be followed. During the 2011 reviews, four Parties under centralized reviews submitted to the secretariat information designated as confidential. There has been a tendency by some Parties to increase the number of categories considered as confidential without a clear explanation for this approach, often referring to national laws and regulations on confidentiality of the information. The absence of the submission of

information that clarifies emission estimates for these categories reduces the transparency of the inventories and makes the review of this information during centralized reviews very difficult.

19. Decision 12/CP.9 further requires that all members of expert review teams (ERTs) sign an agreement for expert review services, which specifies the responsibilities, expected time commitment and appropriate conduct for ERT members, in particular with respect to the protection of confidential inventory information. All experts participating in the inventory reviews from 2004 onwards have signed this agreement, and this practice will be continued in the future.

III. Meeting of inventory lead reviewers

20. The UNFCCC review guidelines require that ERTs be led by two experts with substantial inventory review experience, who are nominated as LRs for an individual review process. For each ERT, one LR should be from a Party not included in Annex I to the Convention (non-Annex I Party) and the other from an Annex I Party. LRs have a special role in guiding the review teams to ensure the consistency, quality and objectivity of the reviews. Recognizing this role, the COP, by its decision 12/CP.9, requested the secretariat to organize meetings of LRs to promote a common approach by ERTs to methodological and procedural issues encountered in the inventory reviews, and to make recommendations to the secretariat on ways to further improve the effectiveness and efficiency of the review process.

21. LRs have a critical role in the review process, in which they ensure the consistency, quality and objectivity of the reviews in accordance with the requirements of the UNFCCC review guidelines. The annual meetings of the LRs helped in fulfilling this role. The most recent, 8th, meeting of inventory LRs took place in Bonn on 21 and 22 March 2011. Sixty-one experts, 29 from non-Annex I Parties and 32 from Annex I Parties, were invited to the meeting, which was attended by only 37 experts, 12 from non-Annex I Parties and 25 from Annex I Parties. In addition, a member of the enforcement branch of the Compliance Committee attended the meeting as an observer.

22. In addition, the secretariat organized a one-day refresher seminar for experienced experts on 23 March 2011, after the 8th meeting of LRs, on the review of complex models and higher-tier methods. Thirty-seven experts for all Intergovernmental Panel on Climate Change (IPCC) inventory sectors, 19 from non-Annex I Parties and 18 from Annex I Parties, were invited to the refresher seminar, which was attended by 23 experts, 11 from non-Annex I Parties and 12 from Annex I Parties, in addition to the LRs who attended the 8th meeting of LRs.

23. The 8th meeting addressed both procedural and technical issues relating to the annual review of GHG inventories of Annex I Parties and similar reviews under the Kyoto Protocol. The issues addressed by the LRs related to reviews under the Convention are presented below.

A. Procedural issues, including actions by the secretariat

1. Review process in 2010, including consistency issues

24. The LRs expressed their appreciation to all the experts who participated in the review process of the 2010 annual submissions, in particular the experts who accepted late invitations to attend a review following last minute cancellations by other experts, the experts who participated in more than one review and the experts who had to take on

additional responsibilities during the reviews owing to unforeseen circumstances. The LRs also expressed their appreciation to the secretariat for coordinating and supporting the review process in an effective and efficient way.

25. The LRs acknowledged that, in general, ERTs consistently applied the UNFCCC review guidelines during the 2010 annual reviews, as well as the relevant procedures. The LRs also acknowledged that the secretariat, in response to a request made by the SBSTA at its thirtieth session,⁸ continued to perform QA of the review activities in the 2010 annual review cycle. This further enhanced the consistency of the reviews. The LRs noted that the SBSTA, at its twenty-ninth session, requested the secretariat to include the consideration of the consistency of the reviews as a permanent agenda item for the meetings of LRs.⁹

26. The LRs acknowledged the importance of ensuring consistency at each stage of the annual technical review process. They noted that this consistency has improved in recent years, on the basis of experience gained over 10 years of reviews and the work done by LRs, ERTs and the secretariat.

2. Improving the efficiency of reviews

27. The LRs noted that there is a need to continue to improve the efficiency of the review process. The starting point for improving the efficiency is to conduct better planning of, and preparation for, the reviews and to improve the introductory presentation to ERTs. The presentation should include more information on what the expectations are during the review week, what the outcome of the review week is and how to use the different review tools. The LRs requested the secretariat to include in this presentation specific guidance for ERTs on using the words “recommend” and “encourage” when advising a Party on how to resolve an identified problem. The presentation should be provided to all ERTs, both for in-country and centralized reviews. The LRs noted the importance of enhanced communication during centralized reviews and that questions to the Party are sent in advance of the review in order to facilitate the work during the review. The LRs also noted that special attention should be paid, by review experts and LRs, to following up on recommendations made in previous review reports and recalculations. The LRs requested the secretariat to provide a data file of recalculations, such as the submission comparison tool, to ERTs in advance of the reviews.

3. Training and experts’ participation in reviews

28. The LRs welcomed the information on ongoing and planned training activities in 2011, including the organization of annual and regional training seminars, the development of a new training course for the review of higher-tier methods and complex models, and the organization of a refresher seminar for experienced reviewers. They noted that the refresher seminar in 2011 will focus on the review of higher-tier methods and complex models and will be held back to back with the 8th meeting of inventory LRs, with the participation of LRs and experienced reviewers of all sectors. The LRs recommended that the secretariat continue organizing regional and refresher seminars, subject to the availability of resources, and encouraged Parties to provide such resources.

29. Given the increasing complexity of the annual review process, the LRs reiterated that there is a need for enhanced and smooth integration of the new reviewers into the work of the ERTs. The LRs requested the secretariat to continue to take into account the need for smooth integration of the new reviewers into the work of the ERTs when planning the composition of ERTs, and agreed that LRs would take this into account when allocating and supporting tasks within the team, in particular by guiding new experts in the

⁸ FCCC/SBSTA/2009/3, paragraph 73(b).

⁹ FCCC/SBSTA/2008/13, paragraph 64.

preparation for the centralized reviews, encouraging mentoring by more experienced reviewers and involving new experts in certain review activities during and after the week of the centralized review. To support this effort, the LRs requested the secretariat to provide information on which experts are participating in the review process for the first time.

30. The LRs noted the continued need for additional review experts for the review process, in particular from non-Annex I Parties, to be nominated to the UNFCCC roster of experts and to participate in the training courses. They also noted the need for the governments that nominate experts to the UNFCCC roster of experts and agree on their participation in reviews to ensure that these experts are fully available, in order to ensure the timely completion of the reviews, in accordance with relevant decisions under the Convention. This is particularly relevant to governments that nominated very few experts to the UNFCCC roster of experts. The LRs acknowledged the need for Parties to update the UNFCCC roster of experts on a regular basis and requested the secretariat to remind all Parties once a year to update it.

4. Reporting, data management and review tools

31. The LRs welcomed the work undertaken by the secretariat to further develop the review tools in order to meet the needs under the Convention. They noted that this work facilitates the annual review by the ERTs and the consistency of this review, and also noted that providing feedback on the review tools is crucial for the further development of the review tools in order to facilitate the review activities under the Convention.

32. The LRs also welcomed the work undertaken by the secretariat on the development of the virtual team room (VTR) to support the review activities and noted that the VTR should have a positive and decisive impact on the performance and traceability of the findings from the review process. The LRs encouraged the secretariat to organize a trial use of the VTR, with a minimum of components (review issues tracking system, communication management system and workflow management system), to be used as support for the review of the annual submissions of a sufficient number of Parties in the next review cycle (2011 annual submissions), and to use the outcome of and experience from the trial use of the VTR in implementing a full-scale VTR system to support the review of the annual submissions of all Parties in the 2012 annual review cycle. The LRs noted that funding for this project is not secured after June 2011 and emphasized the importance of Parties contributing financial resources to this work in a sustainable manner.

5. Development of CRF Reporter

33. The secretariat informed the LRs that the performance and further development of the current CRF Reporter software are becoming seriously constrained, and that there is a risk that it will be difficult to maintain the compatibility of the current architecture and software with the recent developments in hardware and operation systems. The LRs noted that, in accordance with the conclusions¹⁰ of the SBSTA at its thirty-second session on the work programme for the revision of the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories” and the use of the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, the secretariat has been requested,¹¹ subject to the availability of funding, to initiate the preparatory work on upgrading CRF Reporter, with a view to completing this work by October 2012, subject to a decision being taken on the revised common reporting format tables by the COP at its seventeenth session.

¹⁰ FCCC/SBSTA/2010/6, paragraphs 63–76.

¹¹ FCCC/SBSTA/2010/6, paragraph 74.

34. The LRs noted the information provided by the secretariat on the organizational work on, and technical options for, addressing the limitations of the current CRF Reporter and the possible approaches to developing the new CRF Reporter. The LRs also noted the difficulty of completing the work according to the planned schedule (by October 2012) and that this work is being performed on the basis of supplementary funding that is limited at present. They further noted the possible duplication of resources in upgrading the current CRF Reporter in parallel with the development of the new CRF Reporter. Considering that the new CRF Reporter will not be available before 2013, the LRs requested the secretariat to continue maintaining the current CRF Reporter so that it will maintain its functionality and performance at least until the 2014 annual submissions and their review. The LRs emphasized the importance of advancing the work on the current and new CRF Reporters in parallel and the need for Parties to contribute to this work with supplementary financial resources. The LRs encouraged the secretariat to explore, subject to the availability of resources, the possibility of establishing a group of technical experts or convening a workshop to provide advice on the approach to the development of CRF Reporter and the steps for its implementation.

6. Reviews in 2011

Annual review report template

35. The LRs requested the secretariat to update the annual review report (ARR) template on the basis of the experience gained and examples of best practice from previous reviews. The LRs noted that the changes to the ARR template will be minor. They requested the secretariat to develop possible checklists for issues to be addressed in the ARR.

36. The LRs noted that the inclusion of further guidance and proposed text in the ARR template is necessary in order to further improve consistency related to how the findings are presented in the review reports (e.g. with regard to the use of the terms “recommend” and “encourage”).

37. In particular, when considering problems related to transparency, if the ERT identifies that essential information is missing that prevents the ERT from assessing potential over- or underestimations, the ERT should use the term “recommend” when addressing transparency-related improvements. If the ERT identifies that, in this context, essential information was provided but a clearer presentation of this information could facilitate the work of future ERTs, the ERT should use the term “encourage”.

The Convention and its Kyoto Protocol

38. The LRs acknowledged the steps taken by the secretariat to assist the LRs in their role of ensuring that reviews are performed in accordance with the UNFCCC review guidelines and are performed consistently across Parties by each ERT. This includes the performance of QA of review activities by the secretariat, in accordance with the conclusions of the SBSTA at its thirtieth session. The LRs requested the secretariat to continue to perform QA of review activities during the 2011 annual review process, subject to the availability of resources.

39. The LRs noted that not all review experts come well prepared to the reviews. In order to improve the preparation of the ERTs for the review, the LRs agreed that they need to work with the ERTs, supported by the secretariat, so that questions identified during the preparation for a review are sent to the Party prior to the review week. The LRs also agreed that the focus of these questions should be to follow up on how the Party addressed recommendations included in the previous review report and any major recalculations.

Models, facility-level data and data from the European Union emissions trading scheme

40. The LRs reaffirmed that ERTs, when reviewing higher-tier/country-specific methods or models, need to follow the approach agreed at the 6th meeting of inventory LRs.¹² However, the LRs noted the difficulties faced by ERTs in reviewing models, especially during centralized reviews, and the need to facilitate this review, including through the use of materials based on the training course on the review of higher-tier methods which is under development.

41. The LRs noted that there is a need to ensure further consistency in the review of facility-level data, such as data from the European Union emissions trading scheme. The LRs requested the secretariat to compile and make available to ERTs additional information on the issues identified in review reports on reviewing facility-level data. The LRs noted that this information could be provided in the form of, for example, a checklist or factsheet.

B. Methodological, technical and other issues, including actions by lead reviewers and expert review teams

1. Overall approach to the 2011 annual reviews, consistency issues and annual review report template

42. During the meeting, the secretariat presented the overall approach to conducting the reviews of the 2011 annual inventory submissions under the Convention, with an emphasis on consistency issues.

43. The LRs agreed that they need to continue to pay special attention to the consistency of the review process by, for example, informing ERTs of the conclusions and recommendations resulting from the meetings of inventory LRs and ensuring that the agreed approach to the 2011 annual review process is communicated to ERTs and adhered to thereafter. They also agreed that ERTs need to consider national circumstances in their endeavour to address consistency issues.

44. The LRs acknowledged their own role in ensuring that the reviews are consistent by following the UNFCCC review guidelines and the agreed review approach and ensuring the quality of a given review report by identifying gaps, internal inconsistencies, etc., when working on the draft review report and taking into account comments received from the secretariat after its QA of the review report.

45. The LRs also acknowledged the need for consistency in the review of land use, land-use change and forestry (LULUCF) under the Convention.

46. The LRs expressed concern that the review transcript on which the findings of a review are recorded, including in relation to problems that have been resolved, is not necessarily complete and that the secretariat does not always receive a complete or updated review transcript from the ERT after a review has been finalized. As in previous meetings, the LRs reiterated that the review transcript remains an important tool for the review process and should be used at all stages of an individual review, such as during the preparation for the review, throughout the review week and when reflecting on the final outcome of the review, and should include a clear indication of whether an issue included in the transcript has been resolved.

47. The LRs noted that the ARR template will continue to help to minimize the repetition of information and facilitate consistency across review reports and will improve the presentation of the key information resulting from the reviews.

¹² <http://unfccc.int/files/national_reports/annex_i_ghg_inventories/review_process/application/pdf/sixth_meeting_of_inventory_lead_reviewers.pdf>.

48. The LRs endorsed the overall approach to the annual reviews in 2011, including the discussed proposed changes to the ARR template.

2. Methodological issues

49. The LRs reaffirmed that ERTs, when reviewing higher-tier/country-specific methods or models, need to follow the approach agreed at the 6th meeting of inventory LRs.¹³

50. In specific cases, taking into account the Party's national circumstances, the LRs acknowledged that using a default method or data could be in line with the decision trees contained in the *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (hereinafter referred to as the IPCC good practice guidance).

51. The LRs recommended that ERTs ensure that the category-specific information provided in the ARR includes the applied method and an assessment of whether it is in line with the IPCC good practice guidance.

3. Previous recommendations

52. The LRs noted the need to enhance the way the ERTs track how Parties, in their annual submissions, address the recommendations included in previous ARRs. The LRs requested the secretariat to include in the review transcript the recommendations made in the previous year's ARR in order to help ERTs with this assessment. The LRs agreed that they need to ensure that ERTs continue to identify issues that remain unresolved and clearly identify them in the ARR. The LRs also agreed that high priority needs to be given to previous recommendations in the early stages of an individual review, particularly during the review experts' preparation for the review and in the first days of the review week.

53. The LRs noted that Parties are required to provide information on how they have addressed recommendations made in previous review reports and that several Parties provide a table with such information in their national inventory reports (NIRs). The LRs agreed that this could be considered good practice and, while not required by the UNFCCC reporting guidelines, Parties could be encouraged to include such a table in their NIRs. They also noted that Parties may not be in a position to fully implement the recommendations of the current ERT in time for the inventory submission of the subsequent year.

54. The full text of the conclusions of the 8th meeting of LRs is available on the UNFCCC website.¹⁴

IV. Roster of experts and availability of nominated experts

55. Currently, the roster of experts contains 770 GHG inventory experts, 355 from non-Annex I Parties and 415 from Annex I Parties. From September 2010 to September 2011, 111 new experts were nominated to the roster, 39 from non-Annex I Parties and 72 from Annex I Parties. Some Parties updated their part of the roster and deleted obsolete records.

56. A limited number of experts listed on the roster participate currently in the review process. In 2011, a total of 126 individuals from 54 different Parties served as inventory experts on review teams. Of these experts, 43 were from non-Annex I Parties, 17 were from Annex I Parties with economies in transition and 66 were from other Annex I Parties.

¹³ <http://unfccc.int/files/national_reports/annex_i_ghg_inventories/review_process/application/pdf/sixth_meeting_of_inventory_lead_reviewers.pdf>.

¹⁴ <http://unfccc.int/files/national_reports/annex_i_ghg_inventories/review_process/application/pdf/con_rec.8.pdf>.

Owing to the unavailability of experts to participate in a review, some experts had to participate in two reviews (seven experts from non-Annex I Parties and one from an Annex I Party). One of the reasons for the significant discrepancy between the number of nominated experts and the number participating in reviews is that only a few Parties regularly update the list of experts nominated by them to reflect, inter alia, the fact that many of the experts on the roster have moved on to other positions or have retired and are no longer available to participate in the review process. Another reason is that some experts nominated to the roster have not yet taken the mandatory training courses, or have not passed the relevant examinations. This means that the roster from which the secretariat could select eligible experts to participate in reviews currently contains 288 experts.

57. In 2011, the secretariat invited 224 experts in total to participate in reviews; of these, 62 experts declined participation, informing the secretariat about their unavailability owing to previous commitments, heavy workload, lack of financial resources or other reasons. In addition, 28 experts informed the secretariat about their availability on dates different than the scheduled review dates for which they were invited or their availability only on particular dates, making it necessary to change their participation to other reviews and to find experts on those reviews willing and available to make such changes. Overall, these issues affected negatively on, and increased the difficulty of, the planning of ERTs by the secretariat for 2011. This affected also the timeliness for the preparation of the reviews by experts. At the same time, these issues impacted seriously the completeness of ERTs and ensuring their proper geographical balance. For example, for one centralized review the secretariat invited 24 experts in total; of these, seven declined and seven informed the secretariat about their willingness to participate in reviews on different dates; finally, only 10 experts were available to participate in that review, instead of the normal 13 ERT members. Owing to the unavailability of experts to participate in the 2011 reviews, one centralized review was cancelled, increasing significantly the workload of experts participating in the other seven centralized reviews, of which only one had a complete ERT. Continued limited availability of experts could influence the quality and level of detail of the reviews, particularly for complex sectors. To improve this situation, the secretariat intends to start planning for the 2012 reviews earlier and to issue an earlier call for availability of experts. However, such measures can help only if experts are available and respond positively to invitations in time, and if Parties place more attention to this issue, possibly taking further actions such as ensuring that nominated experts are fully available for reviews and receive the necessary support from their governments.

58. The secretariat continues to make an online form available on the UNFCCC website¹⁵ to facilitate the nomination of experts to the roster and the updating of the list of nominees by a Party. At the same time, the secretariat continues to process nominations of experts to the roster received via e-mail and fax to further facilitate nominations by Parties. The secretariat also periodically invites Parties to update the roster and to nominate new experts and has improved the accessibility and user-friendliness of the web pages of the roster and the training programmes on the UNFCCC website.¹⁶ During 2010 and 2011, this important task was performed twice a year.

V. Training of experts

59. The training activities are of crucial importance for ensuring the required quality and consistency of the review process. This is particularly true for experts from non-Annex I

¹⁵ <http://unfccc.int/files/parties_and_observers/roster_of_experts/application/msword/roster_nomination_2006new.doc>.

¹⁶ <http://unfccc.int/national_reports/annex_i_ghg_inventories/inventory_review_training/items/2763.php>.

Parties, as they usually do not work on inventories on a daily basis. In addition, they are not involved in activities for which Annex I Parties report supplementary information under Article 7, paragraph 1, of the Kyoto Protocol, related to emissions and removals from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, information on accounting of Kyoto Protocol units, changes to the national systems and the national registries, and information on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol, which are subject to annual reviews. Experts participating in the training activities and the reviews would be able to use the experience gained to improve the quality of their own national inventories.

60. The secretariat continues to strongly encourage all experts on the UNFCCC roster of experts nominated for inventory review activities to take the relevant Convention and Kyoto Protocol training courses and examinations, because only experts that pass these examinations are able to participate in the reviews under the Convention and its Kyoto Protocol. The secretariat also periodically invites Parties to nominate new experts for the training programmes and provides relevant information and updates on the organization of the training courses on the UNFCCC website and through other electronic means, such as the secretariat's newsletter.

A. Training programme for greenhouse gas inventory review experts for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention

61. The basic training course developed in 2003 in accordance with decision 12/CP.9 and completed in 2005 with the LULUCF sector course became outdated, owing to developments in the GHG inventories and experience gained in the review process. Following the request by the SBSTA at its twenty-seventh session,¹⁷ the secretariat updated the training programme, taking into account, for example, the *Good Practice Guidance for Land Use, Land-Use Change and Forestry*, and updated the contents, self-tests and final examinations for the online courses for all sectors. The updated training courses were offered online for the first time in 2009.

62. By its decision 10/CP.15, the COP requested the secretariat to develop and implement the updated training programme for GHG inventory review experts for the technical review of GHG inventories from Annex I Parties, including the examination of experts, and to give priority to organizing an annual seminar for the basic course. It also encouraged Annex I Parties that are in a position to do so to provide financial support for enhancing the training programme. In accordance with this decision, the training programme developed on the basis of previous courses has been formally offered since 2010 and consist of the updated basic course, covering the general and cross-cutting issues and all IPCC inventory sectors, the course on improving communication and facilitating consensus in ERTs, the course on review of complex models and higher-tier methods (to be implemented in the second half of 2011) and an annual refresher seminar for experienced GHG inventory review experts, subject to the availability of resources, which was offered in 2010 and 2011.

63. The secretariat held two rounds of instructed online courses in 2011, owing to major contributions to supplementary funding by Australia, Belgium, the European Union, Finland, Japan, New Zealand, Romania, Slovakia, Spain, Sweden, Switzerland and the United Kingdom of Great Britain and Northern Ireland. The first course took place between 28 February and 18 April 2011 and the second course between 5 September and 23 October 2011. Both rounds of instructed courses were offered online, with two instructors available

¹⁷ FCCC/SBSTA/2007/16, paragraph 63.

to provide guidance and to respond to questions from the trainees, and ended with a three-day training seminar held in Bonn (19–21 April 2011) and Qawra, Malta (24–26 October 2011). The instructors were highly experienced and capable sectoral experts and LRs. For the first course, the secretariat invited one instructor from a non-Annex I Party and one from an Annex I Party and for the second course the secretariat invited two instructors from non-Annex I Parties.

64. During the training seminars the trainees participated in a simulation of a centralized review and on the last day took their corresponding examinations. In 2011, a total of 200 invitations were sent to Parties to nominate experts for the two instructed courses. Twenty-seven experts participated in the first instructed online course; of these, 22 experts participated in the final training seminar and 18 experts passed the examinations. In the second course, 32 experts participated during the online instructed period and, of these, 26 participated in the final training seminar and took the examinations. The results of the examinations are not yet available. During the second instructed course, which focused on the training of experts from African countries, a large number of experts from the host country, Malta, participated. This will help to strengthen the review process and will help all these countries to enhance their capabilities for preparing GHG inventories.

65. In addition to the instructed courses, the secretariat makes the inventory training courses available for inventory experts throughout the year and provides access for new trainees upon request by a Party. In 2011, 12 experts completed the non-instructed online courses and made relevant arrangements to take the examinations under the supervision of the secretariat, without incurring additional costs to the secretariat.

66. In 2011, the secretariat organized a one-day refresher seminar in conjunction with the 8th meeting of LRs on the review of complex models and higher-tier methods, in which 23 experienced review experts participated in addition to 37 LRs (see para. 22 above). The main objective of this seminar was to address the difficulties occurring during the reviews in relation to the use of complex models and higher tiers and to provide initial additional guidance for ERTs on specific preparation for reviews and aspects to be considered during the review. The seminar also aimed to facilitate discussion among review experts on these issues and to provide feedback to the secretariat on enhancement of the contents of the training course on the review of complex models and higher-tier methods to be implemented in the second half of 2011.

B. Training programme for members of expert review teams participating in annual reviews under Article 8 of the Kyoto Protocol

67. Decision 24/CMP.1 requested the secretariat, subject to the availability of resources, to develop and implement the training programme for members of ERTs participating in the initial reviews under Article 8 of the Kyoto Protocol, including testing of experts and a final seminar for the course on the application of adjustments. The courses covered important aspects for the review of the initial reports, such as national systems, the application of adjustments and modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol. These courses have been offered to experts online since 2006. The majority of experienced experts at that time completed the training courses and passed the mandatory examination online in 2006, having the support of an instructor for the course of adjustments.

68. At its twenty-seventh session, the SBI requested the secretariat¹⁸ to develop two new training courses under the Kyoto Protocol, covering activities under Article 3, paragraphs 3

¹⁸ FCCC/SBI/2007/34, paragraph 100.

and 4, and the modalities for accounting of assigned amounts, in particular in relation to the national registry, including the standard electronic format. The secretariat developed these training courses during 2009 and between July and August of the same year offered them online for experienced and new experts. Fifty-six experts enrolled for these courses and 51 passed one or more examinations in August 2009.

69. By its decision 8/CMP.5, the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol requested the secretariat to develop and implement the updated training programme for members of ERTs participating in annual reviews under Article 8 of the Kyoto Protocol, including the examination of experts. It also encouraged Annex I Parties that are also Parties to the Kyoto Protocol that are in a position to do so to provide financial support for enhancing the training programme. The training programme is intended to train members of ERTs for the review of information submitted under Article 7 of the Kyoto Protocol. All training courses are offered online and the examinations are offered online three to four times a year. All courses are available, without an instructor, to trainees throughout the year.

70. This training programme was developed on the basis of the existing courses; some are mandatory for all reviewers, while some are mandatory for LRs and some other experts qualified for the review of particular aspects of the information submitted under Article 7 of the Kyoto Protocol. The training programme consists of the course on national systems, the course on the application of adjustments, the course on modalities for accounting of assigned amounts under Article 7, paragraph 4, the course on review of national registries and information on assigned amounts and the course on review of activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.

71. In 2010, 194 experts participated in the online training courses and 144 experts passed one or more examinations. In 2011, 68 experts participated in the online training courses and 65 experts passed one or more examinations. In 2010 and 2011, two highly experienced experts and LRs from non-Annex I Parties were invited, one each year, to be the instructor for the course on the application of adjustments.

VI. Greenhouse gas information system

72. The year 2011 marked the second year of mandatory reporting by Annex I Parties for the first commitment period of the Kyoto Protocol. These Parties continued to successfully make use of the CRF Reporter software for preparing and submitting their GHG inventories, including the tables for reporting activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol. No major issues were identified in the reporting and submission process. However, the number of records per submission by Party is constantly increasing because of the high volume of information reported for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol and because of the increase in the time series of years covered by the GHG inventory. To that end, the secretariat continued to monitor and adjust its internal systems in order to accommodate the increased data volume.

73. In 2011, Annex I Parties made 72 submissions of their GHG emission inventories using the common reporting format via the UNFCCC submission portal. These include both original submissions and resubmissions in the lead-up to, during and as a result of the annual review process. All these submissions have been imported into the GHG information system that is maintained by the secretariat and each of them has been assessed for completeness and internal consistency.

74. The secretariat continued to ensure that the data provided through the GHG data interface are regularly updated in order to make the latest GHG inventory data available for inventory review teams and external users, including for the negotiations during the

sessions of the subsidiary bodies to the Convention. To that end, the secretariat supported three planned releases of GHG inventory data through the GHG data interface. In the release of these data in July 2011 the secretariat included for the first time the user-defined indicators and for the release planned for November 2011 the secretariat plans to make available further sets of data reported by Parties, including data from the Compilation and Accounting Database (CAD) and data reported under Article 3, paragraphs 3 and 4. The complex nature of the CAD, and the vast amounts of holding information that it stores, made the preparation of this release a complex task. With the inclusion of these further sets of data in the GHG data interface the secretariat has implemented all the mandates for this interface.

75. In addition, the secretariat continued the support and improvement of the CAD. The CAD continues to perform its important tasks as record keeper of the information reported by Annex I Parties on GHG emissions and assigned amounts and the results from the review process and of decisions by the Compliance Committee and as the conduit of the information and processes into the international transaction log. In addition to the continued support for the CAD, the secretariat initiated the preparations to ensure functioning of the CAD during the additional period for the fulfilment of commitments, known as the 'true-up period', in order to be able to successfully record the reported and reviewed GHG emissions and assigned amount data for the entire first commitment period of the Kyoto Protocol.

76. Finally, the secretariat is working towards a planned release of the CRF Reporter software with minor changes in December 2011. This will not adversely affect the timely preparation by Parties of GHG inventories and their submission in 2012. The secretariat continued to support the expert review process by maintaining and generating reports and tools that underpin the process. Some additional tools were created, such as the Recalculation Data Analysis Tool and the Submission Comparison Tool. The secretariat continues to maintain and support the other parts of the GHG information system, such as the GHG data warehouse and business intelligence components, in order to ensure quality and to address some issues identified by Parties and review experts during the reporting and review process in 2011.
