



**UNITED
NATIONS**



**Framework Convention
on Climate Change**

Distr.
GENERAL

FCCC/SBSTA/2006/INF.6
23 October 2006

ENGLISH ONLY

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

Twenty-fifth session

Nairobi, 6–14 November 2006

Item 7 (b) of the provisional agenda

Methodological issues under the Convention

Issues relating to greenhouse gas inventories

**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 document describes activities of the secretariat relating to greenhouse gas inventory reviews during the period August 2005 to September 2006 and activities planned for the remainder of 2006 and early 2007. It provides information on the Parties subject to review, the training and participation of experts in the review process, the meeting of inventory lead reviewers and the progress in updating the roster of experts.

CONTENTS

	<i>Paragraphs</i>	<i>Page</i>
I. INTRODUCTION.....	1–5	3
A. Mandate.....	1–2	3
B. Scope of the note.....	3	3
C. Possible action by the Subsidiary Body for Scientific and Technological Advice	4–5	3
II. REVIEW ACTIVITIES	6–30	3
A. Individual inventory reviews.....	8–12	4
B. Expert review teams.....	13–18	4
C. Other inventory review procedures.....	19–20	6
D. Meeting of inventory lead reviewers	21–30	6
III. INVENTORY REVIEW TRAINING.....	31–38	7
IV. PROVISION OF GREENHOUSE GAS INVENTORY INFORMATION FOR THE CONFERENCE OF THE PARTIES	39–42	8
V. ROSTER OF EXPERTS	43–46	9

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 recommendation resulting from meetings of lead reviewers 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 selection of trainees and instructors.
2. In addition, the SBSTA, at its twenty-fourth session, requested the secretariat to include in the report information on progress in updating the roster of experts.

B. Scope of the note

3. This document provides information on the activities of the secretariat relating to GHG inventory reviews undertaken during the period August 2005 to October 2006 and planned for the remainder of 2006 and early 2007. It covers the work by the secretariat to improve the effectiveness, efficiency and consistency of the review process, in accordance with the review guidelines, and thus to help ensure the reliability of information on GHG emissions and trends provided to the COP and its subsidiary bodies.

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

4. The SBSTA may wish to consider the information in this document and, if necessary, provide recommendations to the COP and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP).
5. The SBSTA may wish to consider the review activities during 2007 when three reviews of inventory related information will take place. This includes the 2006 annual GHG inventory review in conjunction with the review of the initial report under the Kyoto Protocol, in accordance with decisions 7/CP.11 and 26/CMP.1, and the 2007 annual GHG inventory review. In addition, the reviews of the fourth national communications of Annex I Parties are ongoing. Having several reviews running in parallel is a burden for the Parties, experts and the secretariat. For this reason the SBSTA may wish to consider extending the flexibility that was provided to the secretariat for the 2006 annual GHG inventory reviews and the review of the initial report (decisions 7/CP.11 and 26/CMP.1) to encompass the reviews of the 2007 annual GHG inventory.

II. Review activities

6. The technical review of national GHG inventories from Annex I Parties started in 2000, in accordance with decision 6/CP.5. Following completion of the trial period set up in that decision, annual reviews of the individual inventory of each Annex I Party became mandatory in 2003. UNFCCC review guidelines¹ adopted in 1999 (decision 6/CP.5) and revised in 2002 (decision 19/CP.8) help to ensure that reviews are conducted consistently in a technically sound manner.
7. In addition to the GHG inventory review activities funded from the core Convention budget, others are supported by voluntary contributions to supplementary funds. In particular, the secretariat

¹ Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention (FCCC/CP/2002/8 and FCCC/CP/1999/7).

recognizes the generous contributions and/or in-kind support of Australia, Japan, the Netherlands and Switzerland, which have supported the activities discussed here, mainly those relating to the development of the GHG information system, the training of review experts and the organization of lead reviewers' meetings.

A. Individual inventory reviews

8. In accordance with decision 19/CP.8, the secretariat coordinates the review of national GHG inventories of Annex I Parties. In 2005, the secretariat organized a review for each country that provided a complete inventory submission (i.e. containing the common reporting format and a national inventory report) within six weeks of the submission due date. The secretariat was also able to organize reviews for a few countries that submitted inventories late.

9. The inventory review process is conducted in three stages: initial check, synthesis and assessment, and individual review. The initial check stage provides an immediate quality assurance check to verify that the inventory submission is complete and in the correct format. Part I of the synthesis and assessment compiles and compares basic inventory information, such as emission trends, activity data and implied emission factors, across Parties and over time; part II provides a preliminary assessment of the inventory of individual Parties, and identifies any potential inventory problems, which are then explored during the individual review stage.

10. During the individual review an international team of experts, nominated by Parties, conducts a technical review of each inventory. In 2005, individual inventory reviews were conducted for 37 Annex I Parties, as follows:

- **In-country reviews:** Australia, Belarus, Estonia, European Community, Italy, Lithuania, Monaco, Poland and Ukraine;
- **Centralized reviews:** Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Japan, Latvia, Netherlands, New Zealand, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America.

11. The national inventories of Liechtenstein and Luxembourg were not reviewed in 2005 because these Parties did not submit a national inventory report; they submitted only the common reporting format. The Russian Federation and Turkey did not submit an annual inventory in 2005.

12. Of the nine in-country review reports, seven were completed on time, or within one week of the due dates established in the inventory review guidelines. Two reports were delayed by two to three months. Of the 28 centralized review reports, twenty-six were completed on time, or within one week of the due dates established in the inventory review guidelines. Two reports were delayed by less than two months. The delay in the publication of the reports was due to the discussions between the expert review team and the Party under review about the review findings and how to reflect the Party's comments in the final report.

B. Expert review teams

13. During individual inventory reviews, international teams of inventory experts examine the data, methodologies and procedures used in preparing the national inventory. The secretariat selects experts for these teams from nominations by Parties to the roster of experts. Invitations to participate in the review are copied to the national focal point.

14. In general, each team comprises a generalist who covers cross-cutting inventory issues and one or two experts for each inventory sector – energy, industrial processes, agriculture, waste, and land use, land-use change and forestry (LULUCF). However, for reviews of smaller Parties, experts may be requested to cover two sectors.

15. In selecting members of expert review teams, the secretariat seeks to ensure an overall balance in the number of experts from Annex I Parties and Parties not included in Annex I to the Convention (non-Annex I Parties) participating in the reviews, and a geographical balance among experts within these two groups. In 2005, a total of 112 individuals from 58 different Parties served as inventory experts on review teams. Of these experts, 14 were from Annex I Parties with economies in transition, 52 were from other Annex I Parties, and 46 were from non-Annex I Parties. (Two experts from non-Annex I Parties participated in two reviews each.) In addition, one expert from an international organization, the International Energy Agency, participated. In accordance with United Nations rules, the secretariat provided funding for travel costs and subsistence allowances for experts from non-Annex I Parties and some Parties with economies in transition. Table 1 provides a breakdown of expert participation by nominating Party in 2005.

16. From 2000, when the individual reviews were first conducted under the trial period, to 2005, 195 individual experts from 82 different Parties (37 Annex I Parties and 45 non-Annex I Parties) have participated in GHG review activities. After the 2006 review cycle, the numbers are expected to increase to more than 210 experts from 88 different Parties (37 Annex I Parties and 51 non-Annex I Parties).

17. In 2005 the secretariat invited 22 new experts, who had not previously participated in inventory reviews and who had undergone a training course and examination, to participate as members of expert review teams. In 2006 and 2007 the secretariat will again seek the participation of experts from Parties which have not previously participated in the review process, in order to further increase the number and the geographical representation of non-Annex I experts in the inventory reviews (see section III below on inventory review training).

Table 1. Inventory review experts in 2005 by nominating Party

Annex I Parties		Annex I Parties with economies in transition	Non-Annex I Parties	
Australia ^a	Netherlands ^a	Bulgaria ^a	Algeria	Morocco
Austria	New Zealand ^a	Croatia	Argentina ^a	Nigeria
Belgium	Norway ^a	Czech Republic	Benin	Paraguay
Canada ^a	Portugal	Hungary	Brazil ^a	Peru ^a
Denmark	Spain ^a	Lithuania ^a	Chile ^a	Philippines ^a
European Community	Sweden	Romania ^a	China ^a	Republic of Korea
Finland ^a	Switzerland	Russian Federation ^a	Cuba	Republic of Moldova
Germany ^a	United Kingdom ^a	Slovakia	Egypt	South Africa
Greece ^a	United States ^a	Slovenia	Ghana	Sudan
Iceland		Ukraine	India ^a	Thailand
Ireland ^a			Indonesia	Togo
Italy ^a			Kazakhstan	Uruguay ^a
Japan ^a			Mongolia ^a	Zambia

^a Parties from which two or more experts were used in 2005.

18. Even if the number of expert reviewers is growing, more reviewers are needed for the review process of the national inventories of all Annex I Parties. Availability of experts with sufficient time, free of other commitments, to devote to the review process, especially from non-Annex I Parties, continues to be the main challenge for the review process. In this sense, the role of the Parties is essential to ensure that experts are made available for the review process and provided with sufficient resources to support their participation in the review process.

C. Other inventory review procedures

19. In accordance with decision 12/CP.9, the secretariat developed 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 by expert reviewers to this information. All procedures are in place; however, the secretariat has not yet received any confidential inventory information from a Party.

20. Decision 12/CP.9 further requires that all members of expert review teams must sign an agreement for expert review services, which specifies the responsibilities, expected time commitment, and appropriate conduct for expert review team members, in particular with respect to the protection of confidential inventory information. All of the experts participating in the inventory reviews from 2004 onwards have signed this agreement. The secretariat will also require all new experts participating in future reviews to sign this agreement.

D. Meeting of inventory lead reviewers

21. Under the UNFCCC review guidelines, expert teams are to be lead by two experts with substantial inventory review experience. For each team, one lead reviewer is to be from a non-Annex I Party and the other from an Annex I Party. These lead reviewers have a special role in guiding the review teams to ensure the quality, consistency and objectivity of the reviews. Recognizing the special role of lead reviewers, the COP requested the secretariat to organize meetings of lead reviewers to promote a common approach by expert review teams 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 inventory reviews.

22. The fourth meeting of inventory lead reviewers was held in Bonn, Germany, from 4 to 6 October 2006. Originally 64 experts, split evenly between Annex I and non-Annex I Parties, were invited to the meeting. In addition, due to some early indications of unavailability of experts the secretariat invited three additional experts from non-Annex I Parties. The meeting was attended by 54 experts, 26 from Annex I Parties and 28 from non-Annex I Parties. In addition, a representative of the Intergovernmental Panel on Climate Change national greenhouse gas inventories programme attended the meeting as an observer.

23. The meeting addressed both procedural and technical issues relating to the annual review of greenhouse gas inventories of Annex I Parties under the Convention and to the initial reviews under the Kyoto Protocol.

24. The SBSTA, at its twenty-fourth session, requested the lead reviewers to include in the discussion in their next meeting the following issues: the experience gained and lessons learned regarding confidentiality of information, conflicts among team members, consistency of reviews and how recommendations formulated by expert review teams contribute to improving reporting by Parties.

25. These issues were discussed during the meeting. The secretariat informed the lead reviewers that there is no experience gained as regards confidentiality of information as no Party has yet reported

confidential information. As regards conflicts among team members, the lead reviewers did not raise examples of any such conflicts. Consistency of reviews was discussed in depth: this resulted in further guidance to the review teams as regards methodological issues.

26. During the meeting the secretariat presented the approach and timeline for conducting the initial report reviews in accordance with decisions 26/CMP.1 and 7/CP.11. Lead reviewers endorsed these and also agreed that the scope of the review presented by the secretariat, including national inventories, assigned amount, commitment period reserve, national registries and national systems, and the division of responsibility of review team members, are appropriate.

27. Lead reviewers expressed concern about the potential financial and human resources constraints for conducting simultaneous review processes for the initial reviews, in conjunction with the 2006 annual review, and the 2007 annual reviews. Lead reviewers emphasized the need for Parties to give consideration to ways in which the 2007 annual reviews can be conducted, for example by allowing the secretariat additional flexibility in conducting the 2007 annual reviews with respect to timing and scope.

28. Lead reviewers recommended that the secretariat and lead reviewers encourage all experts to familiarize themselves with the text of decision 20/CMP.1 (Good practice guidance and adjustments under Article 5, paragraph 2, of the Kyoto Protocol), as well as with the technical guidance on methodologies for adjustments.

29. Lead reviewers welcomed the secretariat's implementation of the training programme for review under the Convention and the Kyoto Protocol, and endorsed the secretariat's plans to continue to offer the courses online, and through seminars when resources allow. Lead reviewers also requested the secretariat to update the training programmes for reviews under the Convention and the Kyoto Protocol to reflect recent experiences.

30. The full text of the conclusions of the lead reviewers' meeting is available on the UNFCCC website.²

III. Inventory review training

31. Decision 12/CP.9 called for the secretariat to establish a training programme under the Convention, comprising both technical and skill-building courses, for new members of expert review teams. As of 2004 only experts who have passed the examination for the training programme can participate in an inventory review. Development of the basic course, covering the general and cross-cutting issues and all inventory sectors except LULUCF, was completed in 2004. The LULUCF sector course was completed in 2005.

32. The basic course was offered for the third time in 2006, and the final seminar was held in Bonn, Germany, from 10 to 12 July 2006. The secretariat extended 104 invitations to national focal points for inventory experts. Of the 29 experts who took the course and seminar, 21 passed the examination in 2006 and will be invited to participate in an inventory review, provided they pass the examination on the courses for reviews under the Kyoto Protocol.

33. In addition to the official course, the secretariat makes the inventory training courses available for inventory experts year-round and provides access for new trainees upon the request of a Party. Eleven experts completed the online courses without instructor and made relevant arrangements to take the examinations under the supervision of the secretariat. Two took the examinations in Bonn while nine experts from Austria took the examination in Vienna, Austria. The Government of Austria covered all secretariat expenses for the examination in Vienna.

² <http://unfccc.int/national_reports/annex_i_ghg_inventories/review_process/items/2762.php>.

34. In inviting new experts for the training course, the secretariat continues to give priority to experts from non-Annex I Parties and, in particular, has sought experts from countries that have not previously been involved in the review process. As a result, experts from Albania, Bahamas, Bhutan, Costa Rica, Georgia and Malawi are expected to participate in an inventory review in 2006 or early 2007. This is in addition to experts from Denmark, Egypt, Iceland and South Africa who joined review teams for the first time in 2005.

35. Since 2004, a separate course, Improving communication and building consensus in expert review teams, which covers cross-cultural communication and conflict avoidance, is also available online for all inventory review experts. This course provides tools to improve the work of expert review teams and facilitate teamwork.

36. No separate training course has been developed on procedures for protection of confidential information. Instead the secretariat will directly instruct expert review teams on these procedures.

37. Additional information on the inventory review training activities can be found on the UNFCCC website.³

38. Decision 24/CMP.1 also requested the secretariat to develop training courses on national systems for estimation of GHG emissions of Annex I Parties, on adjustments under Article 5, paragraph 2, of the Kyoto Protocol, and on modalities for accounting for assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol. The secretariat offered all three courses online in three rounds in 2006: the first two for experienced reviewers and the third for new reviewers who had passed the basic course in July 2006. Information on this training programme is included in document FCCC/SBSTA/2006/INF.7.

IV. Provision of greenhouse gas inventory information for the Conference of the Parties

39. The foundation for the UNFCCC inventory review process is the GHG information system (GHGIS), which comprises a database and related software tools developed by the secretariat to import, quality control, process, store, analyse and facilitate the review and the publication of GHG inventory information provided by Parties. The GHGIS is vital to producing authoritative GHG information for the COP and ensuring that the large number of annual inventories can be processed in a cost-effective, timely and rigorous manner. The development, maintenance and upgrade of the GHGIS continues to be resource intensive (human and financial). The main source of funding is the core Convention budget, but the generous contributions of Parties to the Trust Fund for Supplementary Activities have been crucial for much of this work.

40. The major task relating to the GHGIS in 2004–2006 has been the development of the CRF Reporter software. The secretariat initiated the development of this software, as requested by decision 18/CP.8, in the second half of 2003, when supplementary funds became available.

41. Following extensive testing and feedback from Parties, the software has been further improved and a second version, which also covers the LULUCF sector, was made available in August 2005 for use by Annex I Parties in preparing inventory submissions due in 2006. To facilitate the use of CRF Reporter by all Annex I Parties in 2006, the secretariat and several Annex I Parties organized hands-on training workshops in September and October 2005, as well as a technical workshop to explore areas for further improvement of CRF Reporter. Twenty-eight Parties submitted their 2006 national inventory using the CRF Reporter software.

³ <http://unfccc.int/national_reports/annex_i_ghg_inventories/inventory_review_training/items/2763.php>.

42. The use of CRF Reporter is aimed at eliminating the inconsistencies, redundancies and difficulties in reporting and processing the inventory information that are inherent in the reporting software based on a spreadsheet application. Ensuring the reliability of inventory data to be used in the inventory review process under the Convention and under Article 8 of the Kyoto Protocol is a high priority. Use by all Annex I Parties of CRF Reporter for 2006 and future inventory submissions will facilitate the handling of data by the secretariat and greatly enhance the reliability of GHG information. The COP, by its decision 7/CP.11, decided that Annex I Parties should use CRF Reporter for the submission of their annual greenhouse gas inventories due from April 2006 to assist the secretariat in organizing reviews in an efficient and timely manner.

V. Roster of experts

43. For the annual review process of the GHG inventories of Annex I Parties, approximately 125 review experts are needed. To be able to participate in the annual GHG inventory review process the expert must be nominated to the UNFCCC roster of experts as a GHG inventory expert. There are now 430 GHG inventory experts nominated to the roster of experts, 261 from Annex I Parties and 169 from non-Annex I Parties. From August 2005 to September 2006, 105 new experts have been nominated to the roster, 71 from Annex I Parties and 34 from non-Annex I Parties.

44. Not all of these experts are participating in the review process. There are several reasons for this. As the roster of experts has not been updated regularly some of the experts on the roster have moved on to other positions and are no longer available as experts for the roster. Another reason is that some experts have been nominated to the roster but have not yet passed the mandatory training.

45. However, more new reviewers are needed for the review process of the annual GHG inventories of all Annex I Parties. Parties are encouraged to continuously update the roster of experts by nominating new experts where necessary and to remove experts who are no longer available as experts. Parties should also ensure that experts are made available for the review process and provided with sufficient resources to support the review process.

46. To make the nomination of an expert to the roster of experts easier for Parties an online nomination form is provided. Parties are encouraged to use this form when nominating new experts and updating the existing experts on the roster of experts. The secretariat has updated the web page on the roster of experts to make it more user-friendly.
