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## METHODOLOGICAL ISSUES

## GUIDELINES ON REPORTING AND REVIEW OF GREENHOUSE GAS INVENTORIES FROM PARTIES INCLUDED IN ANNEX I TO THE CONVENTION (IMPLEMENTING DECISIONS 3/CP.5 AND 6/CP.5)

# Report on experience with the technical review process (implementation of decision 6/CP.5)

# Note by the secretariat

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I.

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# I. INTRODUCTION

### A. Mandate

1. By its decision 6/CP.5, the Conference of the Parties (COP) adopted guidelines for the technical review of greenhouse gas (GHG) inventories<sup>1</sup> from Parties included in Annex I to the Convention (hereinafter referred to as "the review guidelines") for a trial period covering inventory submissions due in 2000 and 2001 (FCCC/CP/1999/7).

2. The COP requested the secretariat:

(a) To conduct initial checks of the GHG inventories from Parties included in Annex I to the Convention (Annex I Parties);

(b) To conduct an annual synthesis and assessment of the GHG inventories from Annex I Parties;

(c) To undertake individual reviews of GHG inventories for a limited number of Annex I Parties using three approaches (desk reviews, centralized reviews and in-country reviews);

(d) To produce a report on the technical reviews, assessing, *inter alia*, the advantages and disadvantages of the different approaches for the individual reviews, including human and financial resource requirements.

3. The COP decided to initiate the individual review of inventories for all Annex I Parties in 2003. For this purpose, it requested an evaluation of experience gained during the trial period, on the basis of the secretariat's report, with a view to adopting revised guidelines for the technical review of inventories at its eighth session.

4. At its fifteenth session, the Subsidiary Body for Scientific and Technological Advice (SBSTA) welcomed the organization by the secretariat of an expert meeting, which was held from 4 to 6 December 2001 in Bonn, on methodological and operational issues relating to, *inter alia*, the use of the review guidelines. In addition, the SBSTA requested the secretariat to prepare a report on the expert meeting for consideration at its sixteenth session.

## B. Scope of the note

5. This note was prepared in response to the mandate included in paragraph 2 (d) above and provides information on experiences with the technical review process of GHG inventories. It supplements the interim report on this matter prepared for the fifteenth session of the subsidiary bodies (FCCC/SBI/2001/12), which should be read in conjunction with this note.

6. In preparing this note, the secretariat took into account relevant conclusions of the expert meeting (FCCC/SBSTA/2002/2) mentioned in paragraph 4 above. The meeting was attended by 60 experts who had participated as review experts in the activities organized during the trial period, while many of these experts had also been involved in the preparation of their countries' national inventories. Based on their experiences and the experiences of Parties and of the secretariat in the use of the review

<sup>&</sup>lt;sup>1</sup> By its decision 3/CP.5, the COP adopted the UNFCCC reporting guidelines on annual inventories for the preparation of national communications by Parties included in Annex I to the Convention (hereinafter referred to as "the reporting guidelines"), which include the common reporting format and the national inventory report. The COP decided that Annex I Parties should use these guidelines for reporting inventories due by 15 April each year, beginning in 2000 (see FCCC/CP/1999/7).

guidelines during the trial period, the participants at the expert meeting provided an assessment of the implementation of decision 6/CP.5 on the technical review process of GHG inventories from Annex I Parties. The key elements of this assessment are included in this note. A proposal for draft revised review guidelines for the technical review process is included in document FCCC/SBSTA/2002/2/Add.1.

## C. Possible action by the SBSTA

7. The SBSTA may wish to take note of the information contained in the note when it considers revisions of the review guidelines as mandated by decision 6/CP.5. The SBSTA may wish to forward to the Subsidiary Body for Implementation (SBI) a draft decision on the revision of the review guidelines for its consideration with a view to recommending a decision on this matter by the COP at its eighth session. The subsidiary bodies may wish to provide additional guidance to the secretariat on the technical review of GHG inventories from Annex I Parties.

# II. TECHNICAL REVIEW OF GREENHOUSE GAS INVENTORIES

## A. Background

8. The purposes of the technical review of Annex I Parties' GHG inventories are, *inter alia*, to ensure that the COP has adequate information on GHG inventories and GHG emission trends, and to assist Annex I Parties in improving the quality of their GHG inventories.

9. In accordance with the review guidelines, the technical review of the GHG inventories from Annex I Parties comprises three complementary stages:

- (a) An initial check of annual inventories;
- (b) A synthesis and assessment of annual inventories; and
- (c) Individual reviews of greenhouse gas inventories.

10. Table 1 provides an overview of the GHG inventories from Annex I Parties submitted to the secretariat in 2000 and in 2001. The submissions in the common reporting format (CRF) were used as the basis for the three stages of the technical review. Submissions based on earlier reporting guidelines (such as decision 9/CP.2) were not considered at any stage of the review process during the trial period.

	2000	2001
Total submissions	32	32
Submissions using the CRF	24	30
Submissions accompanied by national inventory reports	8	15

Table 1. Greenhouse ga	s inventory submissions	s in the years 2000 and 2001
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11. In response to the request contained in decision 6/CP.5, the secretariat has conducted initial checks and a synthesis and assessment of all GHG inventories submitted in 2000 and 2001 by Annex I Parties using the CRF, and has coordinated individual reviews of the GHG inventories from 39 Annex I Parties through four desk reviews, two centralized reviews and eight in-country reviews.

# B. Initial checks of annual inventories

12. Detailed information relating to initial checks carried out on 2000 and 2001 inventory submissions, including approach used and timing considerations, is provided in the interim report prepared by the secretariat (FCCC/SBI/2001/12, paras. 10 to 16). All status reports were published on the UNFCCC web site (see <a href="http://www.unfccc.int/resource/ghg/statrep2000.html">http://www.unfccc.int/resource/ghg/statrep2000.html</a> and <a href="http://www.unfccc.int/resource/ghg/statrep2001.html">http://www.unfccc.int/resource/ghg/statrep2001.html</a>).

13. The participants at the expert meeting (FCCC/SBSTA/2002/2, para. 42) recommended that the approach for conducting this stage of the technical review process should not change. They proposed, however, that the time allowed for the publication of the status reports should increase from four to seven weeks, which includes three weeks for Parties to provide comments on the draft status reports.

# C. Synthesis and assessment of annual inventories

14. Detailed information relating to the synthesis and assessment carried out on inventory submissions of 2000, including approach used and timing considerations, is provided in the interim report prepared by the secretariat (FCCC/SBI/2001/12, paras. 17 to 35).

15. For the synthesis and assessment of the 2001 submissions, key sources were calculated using both level and trend assessment,<sup>2</sup> applying the tier 1 level assessment as described in chapter 7 of the Intergovernmental Panel on Climate Change (IPCC) *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (hereinafter referred to as the IPCC Good Practice Guidance). The list of key sources for the 2000 and 2001 GHG inventory submissions have been published on the UNFCCC web site (see <a href="http://www.unfccc.int/resource/ghg/s\_a2000.html">http://www.unfccc.int/resource/ghg/s\_a2000.html</a> and <a href="http://www.unfccc.int/resource/ghg/s\_a2000.html">http://www.unfccc.int/resource/ghg/s\_a2001.html</a>, respectively). Furthermore, the synthesis and assessment of the 2001 submissions incorporates tables for comparing inventory data from the land-use change and forestry (LUCF) sector across Annex I Parties which provided data using the CRF tables 5 A-D.

16. The synthesis and assessment report for inventory submissions of 2000 and 2001 submissions were published on the UNFCCC web site (see <u>http://www.unfccc.int/resource/ghg/sai2000.pdf</u> and <u>http://www.unfccc.int/resource/ghg/sai2001.pdf</u>).<sup>3</sup> The reports contain more than 200 pages, of which 50-60 pages are tables, while the remaining pages contain comments on individual national inventories.

17. Compiled inventory data on GHG emissions and trends, in both tabular and graphical format, were prepared by the secretariat and were published in FCCC/SBI/2000/11, Corr.1 and Corr.2 and FCCC/SBI/2000/INF.13 for the 2000 inventory submissions, and FCCC/SBI/2001/13<sup>4</sup> for the 2001 inventory submissions.<sup>5</sup> These documents contain information from all Annex I Parties using the latest available GHG inventory submissions, irrespective of the year when they were submitted and of the format used (CRF or IPCC standard reporting tables). They were prepared for consideration by the subsidiary bodies at their scheduled sessions during the second part of the years 2000 and 2001.

For the synthesis and assessment of the 2000 inventory submissions, only the level assessment was used.
 For technical reasons the synthesis and assessment report for the 2001 submission will be published after

FCCC/SBSTA/2002/5. It will be published before the sixteenth session of the SBSTA.

<sup>&</sup>lt;sup>4</sup> A corrigendum to document FCCC/SBI/2001/13 will be issued prior to the sixteenth session of the subsidiary bodies.

<sup>&</sup>lt;sup>5</sup> These documents are produced on an annual basis in response to the mandate by the COP included in decision 6/CP.3. In order to avoid duplication of data, these documents were used as a substitute for the addendum to the synthesis and assessment report, as originally indicated in the review guidelines (see FCCC/CP/1999/7, page 112, para. 17).

18. The participants at the expert meeting emphasized the importance of the synthesis and assessment for the whole review process, and agreed that the current practices should remain in place. They also made several recommendations for improving the effectiveness of this stage of the review process (FCCC/SBSTA/2002/2, paras. 43 to 47).

19. The advantage of this stage of the review is that it allows the systematic identification of problems in the GHG inventories prior to the individual reviews. During the trial period, the synthesis and assessment reports were used by the review experts to assess further the potential inconsistencies, gaps and mistakes identified in national GHG inventories. The assessment helps to identify many methodological issues affecting the reliability of the GHG estimates. The efficiency of this stage of the review process is affected when Parties fail to report information on some source categories or activities, or when they do not adhere to the requirements of the reporting guidelines.

# D. Individual review of greenhouse gas inventories

20. Detailed information relating to the third stage of the technical review process carried out on inventories submitted in 2000 is provided in the interim report prepared by the secretariat (FCCC/SBI/2001/12, paras. 17 to 35).

21. The participants at the expert meeting, based on their experience with the individual reviews, have made recommendations relating to, *inter alia*, the overall approach of the individual reviews, expert review team issues, timing key source determination, review of models, supporting software issues and revision of the review guidelines (FCCC/SBSTA/2002/2, paras. 48 to 61). These recommendations aim to enhance the efficiency of the technical review process.

22. The preliminary guidance used by review experts for carrying out the individual reviews (FCCC/SBI/2001/12, paras. 39 to 42) was updated taking into account comments and proposals from the experts who participated in the individual reviews of the inventories submitted in 2000. The updated guidance is published on the UNFCCC website (see <a href="http://unfccc.int/sessions/workshop/010412/index">http://unfccc.int/sessions/workshop/010412/index</a>).

23. During the individual reviews of the 2000 inventory submissions, it became evident that the lead reviewers<sup>6</sup> had a substantial workload, which included the review of a specific IPCC sector, an overall assessment of the complete inventory submission(s) and the coordination of the work of the team (FCCC/SBI/2001/12, paras. 37 and 38). In order to facilitate the work of the lead reviewers, the expert review teams that dealt with the 2001 inventory submissions included additional experts (one expert for each in-country visit and two experts for each desk and centralized review), who had broad knowledge of all areas of the inventory process ("generalists"). These experts assumed some of the tasks that were originally bestowed upon the lead reviewers (such as reviewing the national inventory report (NIR) to determine a general assessment of its conformity with the UNFCCC reporting guidelines, and drafting the overview section of the review report) and assisted, when necessary, other members of the team with the review of their assigned sector.

24. In accordance with the mandate by the COP, three approaches for the individual review were tested during the trial period: sending inventory information to experts (desk review), experts' meetings in a single location (centralized review) and in-country visits of experts. Tables 2a and 2b provide an overview of the individual review activities carried out during the year 2001<sup>7</sup> for the 2000 and 2001 GHG inventory submissions, respectively.

<sup>&</sup>lt;sup>6</sup> In document FCCC/SBI/2001/12, "lead reviewers" are referred to as "lead authors".

 $<sup>^{7}</sup>$  The in-country review of the French 2001 inventory, which took place in January 2002, was the only activity not to have been conducted in 2001.

	Information su	bmitted	Inc	dividual review activity		
Party	CRF	NIR	Desk review	Centralized review	In-country review	
Australia	1990-1998	~		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	
Canada	1990 and 1998	~		<ul> <li>✓</li> </ul>		
Hungary	1998			<ul> <li>✓</li> </ul>		
Japan	1990-1998			<ul> <li>✓</li> </ul>		
Netherlands	1990-1998		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		
New Zealand	1990-1998	~	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	~	
United Kingdom of Great	1990-1998	~			~	
Britain and Northern Ireland						
United States of America	1990-1998	~	~		~	

# Table 2a. Individual reviews of selected greenhouse gas inventories submitted in 2000 by Annex I Parties

# Table 2b. Individual reviews of selected greenhouse gas inventories submitted in 2001 by Annex I Parties

	Information su	bmitted	Inc	Individual review activity		
Party	CRF	NIR	Desk	Centralized	In-country	
			review	review	review	
Austria	1990-1999	~		<ul> <li>✓</li> </ul>	~	
Belgium	1998 and 1999			~		
Bulgaria	1999	~	~			
Czech Republic	1999		~			
Denmark	1990-1999	~	<ul> <li>✓</li> </ul>			
Estonia	1999			<ul> <li>✓</li> </ul>		
European Community	1990-1999	~		<ul> <li>✓</li> </ul>		
Finland	1990-1999	~	~		~	
France	1990-1999	~	~		~	
Germany	1990-1999			<ul> <li>✓</li> </ul>		
Greece	1990-1999	~		<ul> <li>✓</li> </ul>		
Iceland	1999		~			
Ireland	1999		~			
Italy	1998 and 1999		<ul> <li>✓</li> </ul>			
Latvia	1999	~	~			
Luxembourg	1999		~			
Norway	1990 and 1999	~	~			
Portugal	1990-1999		~			
Slovakia	1999		~			
Spain	1990-1999	~		<ul> <li>✓</li> </ul>		
Sweden	1990-1999	~	~		~	
Switzerland	1999		~			

25. In-country reviews were conducted only for those Annex I Parties to have volunteered for such an individual review. For the desk and centralized reviews, inventories with different levels of completeness were selected (for instance, submissions with and without NIR, submissions with complete CRF time series and submissions with CRF for one or more years) to assess the impact of information gaps on the outcome of each approach. As shown in tables 2a and 2b, the GHG inventory submissions of

some Annex I Parties were reviewed using more than one of the three approaches. The purpose of this was to facilitate the identification of relative advantages and disadvantages of the different review approaches and to facilitate an assessment of the three approaches.

26. To the date of publication of this note, 13 individual review reports have been published on the UNFCCC website (<u>http://www.unfccc.int/resource/ghg/indrev2000.html</u> and <u>http://www.unfccc.int/resource/ghg/indrev2001.html</u>)</u>. Most of the remaining 26 review reports are expected to become available before the sixteenth session of the subsidiary bodies.

27. One of the main advantages of performing individual reviews is that they provide an opportunity to assess in depth the methodologies and related factors which influence the accuracy of the reported GHG estimates. While missing source categories can be identified systematically through the synthesis and assessment, an individual review allows the determination of whether emission estimates are complete, and also of the reasons for omitting any emissions from certain activities within an IPCC source category.

28. The existence of well-prepared NIRs is of paramount importance for individual reviews, which provide an opportunity for a full assessment of the transparency of the inventory and its supporting documentation (such as description of methods, derivation of emission factors, underlying assumptions). When NIRs are not provided, or the information contained in an NIR includes many gaps, the efficiency of the individual review activities is seriously affected, in particular for desk and centralized reviews.

# Views of experts and Parties relating to the individual reviews

29. Experts involved in desk, centralized and in-country reviews provided positive feedback about the usefulness of the technical review process. The experts agreed that one of the most important elements for the success of the technical review process is the involvement of competent review experts, either with extensive expertise of a particular IPCC sector or with a broad knowledge of all areas of the inventory process. In addition, they identified the advantages and disadvantages of the different review approaches. These are summarized in table 3.

30. In addition, the experts indicated that the following are important to a successful review:

(a) A cooperative, helpful and positive approach on the part of review teams and national experts;

(b) Strong commitment by all to implement the process as planned;

(c) Availability of documentation (NIR and CRF) and supporting material (status reports, synthesis and assessment report) well in advance of the review activity;

- (d) Good communication within the review team;
- (e) Good guidance by lead reviewers, good planning and preparation;

(f) Availability of supporting documentation at location of review (applicable to in-country reviews and centralized reviews);

(g) Good working facilities for experts (to be provided by Parties for in-country reviews, and the secretariat for centralized reviews);

(h) Increased time allocation for the members of the review teams, who need to allow for time after visits for considering host country comments, and particularly for the lead reviewers who, in addition, should integrate the comments of the other members of the team into the review report;

(i) Sufficient time, whilst performing in country or centralized reviews, to prepare draft review reports.

Desk reviews	Centralized reviews	In-country reviews				
Advantages						
<ul> <li>Opportunity to study the NIR and CRF without the time constraint of in-country visits or centralized reviews</li> <li>No travel and per diem costs</li> </ul>	<ul> <li>Quick and easy exchange of views/information between the members of the review team and between the review team and the secretariat</li> <li>Dedicated period of time for reviews</li> <li>Capacity-building opportunity for experts with limited experience of the technical review process</li> </ul>	<ul> <li>Active interaction with national experts and opportunity to clarify issues immediately</li> <li>Availability of additional information (not included in NIR) assists in dealing better with national circumstances</li> <li>Confidence building among countries</li> </ul>				
Disadvantages						
<ul> <li>Limited interaction with national experts from the countries under review</li> <li>Tendency to focus on differences from IPCC defaults</li> <li>Non-availability of additional information not incorporated in the NIR</li> <li>Delays due to higher priority of office work</li> <li>Limited communication between members of the review team</li> <li>More difficulty in producing review reports which are comparable in style</li> </ul>	<ul> <li>Limited interaction with national experts from the countries under review</li> <li>Tendency to focus on differences from IPCC defaults</li> <li>Non-availability of additional information not incorporated in the NIR</li> </ul>	<ul> <li>More resource intensive</li> <li>More difficult to organize due to non-availability of experts</li> <li>Need for additional resources within the country under review</li> </ul>				

31. The secretariat reached similar conclusions on the advantages and disadvantages of the different individual review approaches as those described above.

32. In order to improve the efficiency of future review activities, the Parties, the lead reviewers and the secretariat will need to take into consideration the above-mentioned issues, and to identify any possible obstacles to implementing any of the requirements noted by the experts and ways of overcoming such obstacles.

33. The national inventory authorities of those Parties whose inventories were reviewed during the trial period have also reported generally positive experiences with the individual reviews. In particular, they noted that the expert review teams identified improvements needed in order to prepare more reliable emission estimates, especially for certain key sources (such as the use of higher tier methodologies, the need to assess and revise some emission factors, the need for internal peer review and QA/QC procedures

and the need to archive in a more organized way the data used for preparing the inventories). Such recommendations and findings have helped prioritizing the work on GHG inventories.

34. Some national experts (particularly from non-Annex I Parties,<sup>8</sup> but also from some Annex I Parties) were not familiar with the UNFCCC reporting guidelines (CRF and NIR). This affected the work of the expert review teams during the trial period. From the experience gained so far, it appears that there is a need to train many experts prior to their participation in review activities.<sup>9</sup> This need will become more obvious in the future, since the COP has decided that from 2003 all GHG inventories from Annex I Parties will be reviewed on an annual basis. The implementation of this decision means that potentially more than 100 national experts could be involved every year in the review activities.

### <u>Timing</u>

35. In order to fulfil the mandate of the COP (decision 6/CP.5) relating to the annual review of all GHG inventory submissions from Annex I Parties, starting in 2003, the participants at the expert meeting agreed that the secretariat should organize eight in-country reviews per year (that is, all GHG inventories of Annex I Parties should be subject to an in-country review once every five years). It was also suggested that the annual inventory submissions of the remaining 32 Annex I Parties should be reviewed through desk and centralized reviews. The secretariat should organize equal numbers of desk and centralized reviews, to the extent possible. During a centralized review, up to six GHG inventories should be reviewed.

36. It was also recommended that the individual reviews should start in September of each year, that each in-country review should be completed within 14 weeks, and that each desk or centralized review should be completed within 20 weeks (FCCC/SBSTA/2002/2, para. 53).

## E. Participation of national experts in all review activities

37. The process of selection of reviewers and lead reviewers who participated in review activities during the trial period is described in detail in the interim report (FCCC/SBI/2000/12, paras. 36 to 38 and 49 to 53).

38. For all review activities relating to GHG inventory submissions of the years 2000 and 2001, 126<sup>10</sup> national experts were involved, including three experts who assisted the secretariat in the development of a preliminary guidance for experts participating in the individual reviews. The distribution of the experts by review activity and by Annex II Parties, Annex I Parties undergoing the process of transition to a market economy (EIT), non-Annex I Parties and experts from international organizations is provided in table 4.

<sup>&</sup>lt;sup>8</sup> Inventory experts from non-Annex I Parties do not use the CRF and the NIR to report their national GHG estimates, which is a requirement for Annex I Parties only.

<sup>&</sup>lt;sup>9</sup> Possible procedures for the training of experts have not been addressed in this note, because this matter will be taken up in a document to be prepared by the secretariat for the seventeenth session of the SBSTA (see decision 23/CP.7), in which the overall experience of the trial period will be taken into account.

<sup>&</sup>lt;sup>10</sup> This total reflects the number of participations of national experts in the review teams, and includes experts who participated in more than one review activity.

Activity	Annex II Parties	EIT	non-Annex I Parties	International organizations
Synthesis and assessment	6	2	5	2
Desk reviews	19	5	18	-
Centralized reviews	7	4	9	-
In-country reviews	20	6	19	1
Total number of experts	52	17	51	3

# Table 4. Distribution of national experts who participated in the technical review of<br/>greenhouse gas inventories submitted in 2000 and 2001

### Difficulties in selecting experts

39. During the trial period, the secretariat faced difficulties in finding national experts using the UNFCCC roster of experts and in selecting national experts who were willing to participate in some review activities.

40. Although the information held on the roster of experts can be confirmed or updated either through submissions from national focal points to the secretariat or directly through on-line access, many Parties have not provided any updated information for almost two years. With regard to the participation of experts, a number of those contacted by the secretariat during the trial period declined the invitation to participate as they considered it to be an additional burden to their existing workload.

## Financial resources

41. In accordance with its current practice, the secretariat funded national experts<sup>11</sup> from non-Annex I Parties and EITs covering daily subsidence allowances (DSA) and travel expenses. All other national experts were funded by their governments or organizations.

42. The total amount provided by the secretariat for the above activities was approximately US\$ 145,000,<sup>12</sup> which covered the review of 39<sup>13</sup> GHG inventories (eight inventories were reviewed in-country, 13 inventories were reviewed in two centralized reviews and 18 inventories were reviewed in four desk reviews). Based on this combination of different approaches, the average expenditure per inventory reviewed was approximately US\$ 3,700, while the average expenditure per funded review expert was approximately US\$ 3,200. It is anticipated that for the technical review process which will start in 2003, a total of approximately US\$ 210,000 annually will be needed (assuming one synthesis and assessment, eight in-country reviews, three desk reviews and three centralized reviews annually).

43. During the trial period, the experts participating in the centralized reviews were required to review, on average, six GHG inventories compared to one inventory per in-country review. Taking this

<sup>&</sup>lt;sup>11</sup> The funded national experts were those who participated in the synthesis and assessment of the 2000 and 2001 inventory submissions (Bonn, Germany), in the two centralized reviews (Bonn, Germany) and in the eight in-country reviews (Australia, Austria, Finland, France, New Zealand, Sweden, the United Kingdom of Great Britain and Northern Ireland and the United States of America).

<sup>&</sup>lt;sup>12</sup> This total does not include costs incurred by the secretariat.

<sup>&</sup>lt;sup>13</sup> This total includes national inventories that were reviewed using more than one of the three approaches (see tables 2a and 2b).

into account, the average expenditure per expert per GHG inventory reviewed for the centralized review is approximately US\$ 530 compared to approximately US\$ 3,200 for an in-country review.

44. The desk reviews did not have any funding requirements from the secretariat for travel and DSA, since the national experts worked in their own countries. For centralized and in-country reviews, the DSA is paid to compensate travel expenses only, as described in paragraph 41 above, but no support is provided to compensate reviewers for the work time (neither personal nor during normal working hours) that they dedicated to the review activities either at home or in a different country or for communication costs (e-mail, facsimile, telephone). Any financial burden resulting from their participation in the review activities<sup>14</sup> was borne either by the experts themselves or by their employers, and not by the secretariat. It is difficult to make an assessment of this financial burden due to differences in the salary scales of experts from different countries and with different work experience. This issue was also raised in the interim report of the secretariat (FCCC/SBI/2001/12, paras. 55 and 56).

### F. Secretariat support

45. Information on the resources provided by the secretariat for assisting in the implementation of decisions 6/CP.5 and 3/CP.5 for the first half of the year 2001 was incorporated in the interim report prepared by the secretariat (FCCC/SBI/2001/12, paras. 58 to 61). Updated information for the whole of the year 2001 is provided in table 5.

46. The work of the secretariat involved the organization of the review activities, carrying out the initial checks and synthesis and assessment, coordination of the expert review teams, technical and methodological advice, and the development of technical software to support the review process. Eighteen staff members participated to different extents (full and part-time) in the work. Ten of these were from the Professional category, including managers from each of the two programmes who worked together to coordinate the team, and eight from the General Service category, including database specialists.

Category	Full time staff	Part-time staff	Total staff resources
Professional	7	6	10
of which Software support	3	-	3
General Service	3	2	4
of which Software support	2	-	2
Total	10	8	14

#### Table 5. Staff resources during 2001

47. At its seventh session, the COP approved the budget of the secretariat for the biennium 2002-2003 (decision 38/CP.7), which includes a proposal for a new programme structure for the secretariat. To support the technical review process for all Annex I Parties, which the COP decided to initiate in 2003, a new subprogramme (Inventories subprogramme of the Methods, Inventories and Science programme) is operational as of 1 January 2002 and it has the following responsibilities:

(a) Compiling, processing and storing GHG inventory data from all Parties;

<sup>&</sup>lt;sup>14</sup> Except travel and DSA for experts from non-Annex I Parties and Annex I Parties with economies in transition.

- (b) Organizing technical reviews of GHG data submitted by Annex I Parties;
- (c) Assessing and synthesizing GHG inventory data submitted by Parties;
- (d) Publishing the results of the technical review;

(e) Providing information on the quality of GHG inventories, and on trends in GHG emissions and removals, in a consistent and transparent manner to the subsidiary bodies and the COP, as well as on the UNFCCC web site.

## G. Further work

48. At its seventh session, the COP requested the secretariat to continue to organize technical reviews of GHG inventories submitted by Annex I Parties in 2002 (decision 34/CP.7). In response to this request, the secretariat is planning to perform initial checks and a synthesis and assessment of all 2002 GHG inventories submitted using the CRF, and to organize one desk review, one centralized review and three in-country reviews. The purpose of these review activities, during this last phase of the trial period, is to implement any new provisions which may be included in the revised review guidelines to be considered by the SBSTA, at its sixteenth session, and also any recommendations of the participants in the expert meeting, in order to gain additional experience prior to the start of the technical review process for all Annex I Parties in 2003.

49. To support the review process, the secretariat will continue its efforts:

(a) To improve information provided to individual reviewers for each IPCC sector and for cross-cutting issues of the inventories. This includes the elaboration of a review handbook prepared on the basis of the updated preliminary guidance mentioned in paragraph 22 above, and including specific provisions for each IPCC sector;

(b) To improve coordination with Parties and experts in order to ensure the completeness of all expert review teams required for conducting technical reviews of GHG inventories in the year 2003 and beyond;

(c) To improve and further develop the GHG database and the existing software tools by, for example, incorporating graphical capabilities and additional search and reporting capabilities.

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