

Appendix 3: Revised Terms of Reference of the EFDB Editorial Board

IPCC Emission Factor Database The Editorial Board

Note:

These terms of reference are to be classified as “supporting material” prepared for consideration by the Intergovernmental Panel on Climate Change. This supporting material has not been subject to formal IPCC review and approval process. It has been approved by the IPCC Task Force Bureau on National Greenhouse Gas Inventories at its 11th session in Geneva, Switzerland, on 19 September 2003.

The TFB, at its 11th session, decided that the responsibility of the EFDB Editorial Board should be to “evaluate” whether proposed new emission factors or other parameters are acceptable or not according to the criteria set out in these terms of reference. The TFB decided to avoid using the term "assess" because it might be misleadingly associated with the IPCC Assessment Reports that are produced through a series of official review processes involving governments and many experts. Pursuant to this decision, the responsibility or exercise of the EFDB Editorial Board should be described as “evaluate” or “evaluation” rather than “assess” or “assessment” in any relevant documents, including these terms of reference and the EFDB User Manual.

Boundary conditions

The database on GHG emission factors (EFDB) is developed under the work plan endorsed by the Task Force Bureau of the IPCC National Greenhouse Gas Inventories Programme (TFB). The final responsibility of the system is with the IPCC. The Management Plan for the maintenance of the EFDB is meant to fully recognise this responsibility, through defining a pragmatic and cost-effective management structure to ensure the following:

- a. A sustained availability of the information in EFDB through
 - i. The Internet;
 - ii. Distribution of the information contained in EFDB on CD-ROMs for users with limited Internet access.
- b. A sustained inflow of new emission factors and other parameters that supports estimation of emissions of greenhouse gases, primarily at a national level.
- c. Appropriate presentation, publication and dissemination of information on the EFDB and its contents¹.

The goal of the EFDB is to grow towards a recognised library, where users can find emission factors and other parameters with background documentation that can be used for estimating greenhouse gas emissions in national submissions of inventories to the UNFCCC². The EFDB will complement the information on emission factors and other parameters given in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and the IPCC report on *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*. The choice of emission factor or other parameters should be guided by the principles and approaches in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and the IPCC report on *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*. The responsibility of using the information in the EFDB appropriately will always remain with the national expert using it.

The EFDB shall be open to any relevant proposal on emission factors or other related parameters. Acceptance of such proposals will be subject to evaluation by the EFDB Editorial Board using the criteria given in paragraphs 2-7 on pages 4-5 of this document.

Management plan - Role of the EFDB Steering Group

Figure 1 presents an overview of the proposed management structure for the EFDB.

The Technical Support Unit (TSU) will be responsible for the technical maintenance (system management) of the EFDB.

The EFDB Steering Group members present at the 1st Editorial Board meeting recognised that modification/improvement of the EFDB will be required, and therefore recommended that the Steering Group established by the TFB at its 6th session³ should continue to be responsible for the

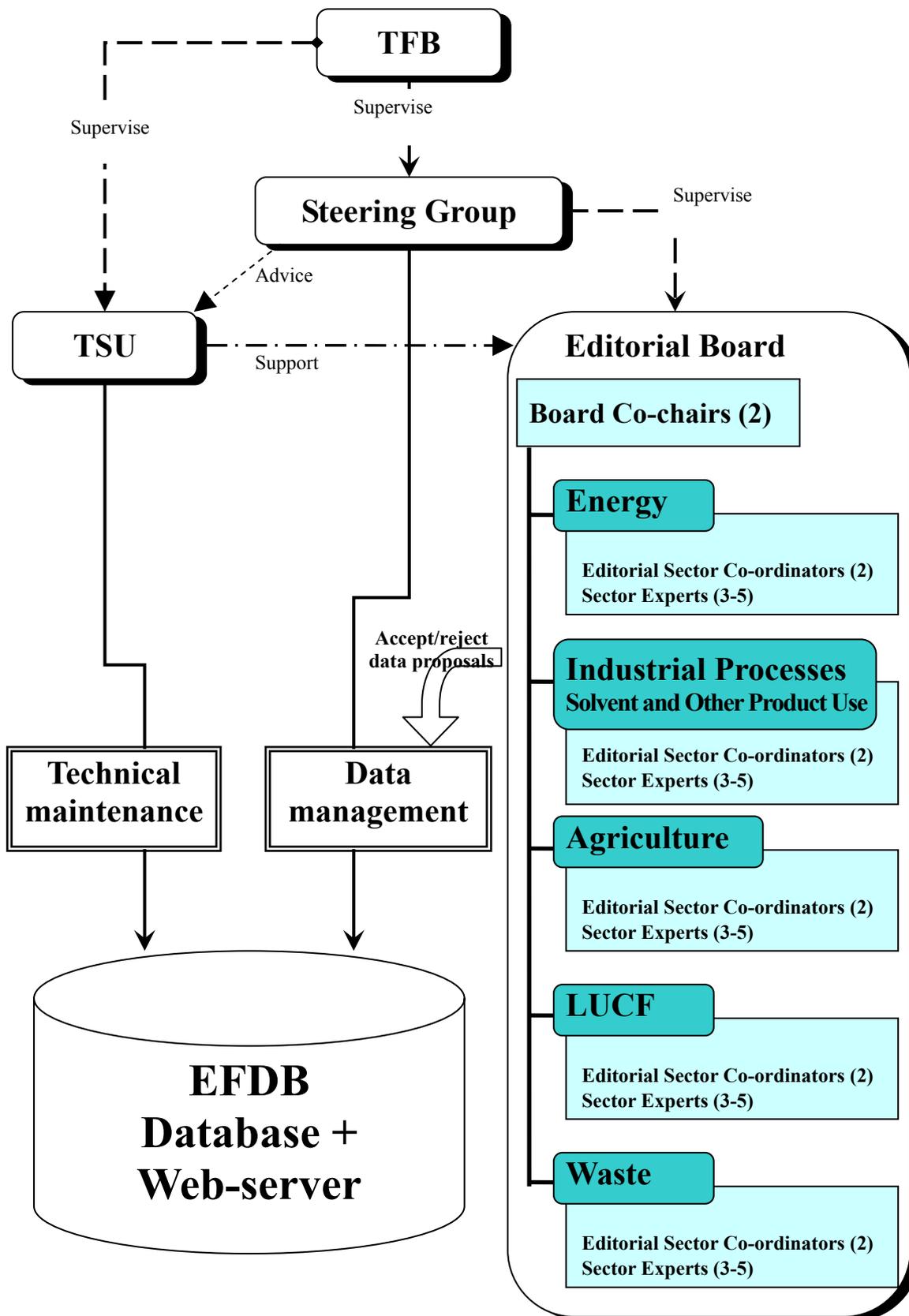
¹ The working language of the EFDB is English. However, the TFB will consider translation of the web application and database content in other official UN languages when the required funding is ensured.

² The EFDB covers 6 direct GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆) and 4 precursors (NMVOCs, CO, NO_x, SO₂).

³ The EFDB Steering Group is composed of 9 members: Tinus Pulles (Project Co-Chair from the Netherlands), Katarina Mareckova (Project Co-Chair from Slovakia), Thelma Krug (TFB Co-Chair), Taka Hiraishi (TFB Co-Chair), Joe Mangino (US), Branca Americano (Brazil), Riitta Pipatti (TSU), Kiyoto Tanabe (TSU) and a representative from the UNFCCC secretariat.

management of EFDB during the first two years of its use and population. The Steering Group will carry out its work through e-mails and meetings on the margins of the Editorial Board meetings.

Figure 1. Management structure for the EFDB



Terms of Reference of the Editorial Board

Objectives

1. The objective of the EFDB Editorial Board is to ensure all emission factors and other parameters contained in the emission factors database (EFDB) under the IPCC National Greenhouse Gas Inventories Programme (IPCC-NGGIP) fulfil the criteria described below and endorsed by the Task Force Bureau (TFB) of the IPCC-NGGIP. Another objective is to advise the TSU on effective strategies to populate the database and to promote the usage of the collected information on emission factors or other parameters.

Criteria

2. The EFDB should assist countries in producing inventories that are neither over- nor underestimates so far as can be judged and in which uncertainties are reduced as far as practicable. To achieve this, a proposed emission factor or other parameter should

- ✓ be in line with the fundamental principles and approaches of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and the IPCC report on *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*;
- ✓ be accompanied by documentation describing the conditions of its derivation and information regarding the level of uncertainty, preferably quantified but at a minimum some qualitative indicators, to be attached to it;
- ✓ be unbiased and as accurate as possible;
- ✓ contribute to the EFDB by adding a value for a source not already covered or by providing a different value or an identical but independent value for an existing emission factor or parameter type. The technical information in the “properties fields” should provide the information needed to differentiate between the alternative values for emission factors or parameters for a particular source.

To meet these standards, the proposed emission factor or other parameter should be robust, applicable and documented. Each of these is briefly discussed below.

Is the emission factor or other parameter robust?

3. A robust emission factor or other parameter is one that, within the accepted uncertainty, is unlikely to change if there was repetition of the original measurement programme or modelling activity. Specific issues concerning robustness are:

- Are the measurement techniques including raw data validated and/or verified?
- Are the modelling techniques including supporting data validated and/or verified?
- Is the conversion (if any) from model assumptions or measurement conditions to annual or other forms of emission factors or other parameters sufficiently explained and justified?
- Is an uncertainty assessment on the emission factor or other parameter presented?

Is the emission factor or other parameter applicable?

4. An applicable emission factor or other parameter is one that matches either a specific IPCC Source/Sink Category or subcategory, or another well defined source category that can be used in a national inventory compilation. An emission factor is applicable if the source and its mix of technology, operating and environmental conditions and abatement and control technologies under which the emission factor was measured or modelled are clear and allow the user to see how it can be applied.

Is the emission factor or other parameter documented?

5. For emission factors or other parameters to be transparent, access information to the original technical reference must be provided to evaluate the robustness and applicability as described above. This can preferably be done by providing sufficient information through a scientific or technical publication in an internationally available journal or a report or book with an ISBN number. For those emission factors or other parameters where this is not available, the data provider can provide the information required to enable a judgement on its robustness and applicability as described above through technical documentation, or by sufficient information in the proposal document fields of the database to satisfy the acceptance requirements.
6. The information provided in the database should be detailed and comprehensive enough so that users may be able to evaluate the applicability to a national GHG inventory. Pivotal elements are an accurate source definition and proper information on the type and extent of validation and on known applications to date. These documentation requirements are even more important when the background document is not written in English.
7. The data provider should be encouraged to provide an electronic or hard-copy of the technical reference to the TSU at the time of data submission or alternatively, make available this information in a publicly accessible form such as widely available scientific journals or proceedings.

Membership

8. The Editorial Board will consist of the following members:
 - a. Two Board Co-chairs
 - b. Two experts as Editorial Sector Co-ordinators for each of the sectors:
 - i. Energy
 - ii. Industrial Processes, and Solvent and Other Product Use
 - iii. Agriculture
 - iv. Land-Use Change and Forestry
 - v. Waste
 - c. Three to five additional experts as Sector Experts for each of the sectors above.
 - d. A representative of the TSU to represent data and system management.
9. The members of the Editorial Board other than the representative of the TSU will be selected by the TFB from the experts officially nominated by governments/IPCC National Focal Points for this purpose. In this selection, geographical balance as well as balance of expertise should be ensured.
10. The selected experts will serve the Editorial Board for two years. There will be an option for another 2 years to ensure continuity of the work of the Editorial Board.
11. The TSU will maintain the actual membership list of the Editorial Board. The e-mail lists will be maintained on the EFDB server to facilitate communication among the Editorial Board members.
12. The Editorial Board members may consult other experts if the needed expertise is not covered by the Editorial Board members. The name and contact information for the expert consulted should be included in decision on the proposal. A list of consulted experts should be published in the EFDB to give full credit for their contribution.

Responsibility

13. In order to achieve the objectives mentioned in paragraph 1 above, the EFDB Editorial Board should assume the responsibility to evaluate whether proposed new emission factors or other

parameters are acceptable or not according to the criteria in paragraphs 2 through 7. In principle, the EFDB Editorial Board will accept without further evaluation the data already published by the IPCC. The data presented in emission factor handbooks or international scientific emission databases may be also accepted without further evaluation on the condition that the Editorial Board collectively judges that those handbooks or databases are internationally recognised as authoritative information sources.

14. The Board Co-chairs will have overall responsibility for the evaluation of proposed new emission factors or other parameters for the EFDB. They will decide whenever the Editorial Sector Co-ordinators do not reach consensus or when the data provider refutes the decision.
15. The Editorial Sector Co-ordinators will
 - ✓ appoint a member of the sector group to prepare a draft decision to accept or reject the data proposal and post it for comments on the web site
 - ✓ merge the draft decision by the appointed expert with the comments by the other members of the sector group into the final decision to accept or reject the proposed emission factor or other parameter

Procedure for evaluation

16. The procedure for evaluation of proposed new emission factors or other parameters will be performed using both the functionality of the EFDB web site and e-mail.
17. This procedure for evaluation should follow the flow chart below, resulting in a decision on including the new information in the EFDB preferably within 8 weeks after commencement of the evaluation:

Task		W1	W2	W3	W4	W5	W6	W7	W8	
A data provider proposes new data. TSU carries out initial checks, and notifies Editorial Sector Co-ordinators and Sector Experts	★									
Editorial Sector Co-ordinators appoint an expert to lead the evaluation										
The appointed expert evaluate the proposed data, prepares a draft decision and posts it on the web site										
Editorial Sector Co-ordinators and Sector Experts comment on the draft decision. Editorial Sector Co-ordinators take a final decision ⁴										
Board Co-Chairs endorse the final decision made by the Editorial Sector Co-ordinators										↩
Publish the new information in the EFDB		Web publication 2-4 times a year								

- a. When a proposal on new data is submitted to the EFDB (by using Single Input menu for example), the TSU will perform an initial check:
 - i. Prompt the data provider to supply obligatory information if this is missing and point out that further consideration of the data is dependent on receiving the missing information.
 - ii. When all mandatory information is available, notify the Editorial Sector Co-ordinators and Sector Experts for the relevant sector of the new proposal by e-

⁴ If consensus cannot be reached, the Editorial Sector Co-ordinators will involve the Board Co-chairs.

mail⁵, and ask them to make a decision preferably within 8 weeks from the notification.

- iii. Notify the data provider who submitted the new data that the proposal has been sent to the EFDB Editorial Board for evaluation and that a decision is to be expected in about 8 weeks from the notification.
- b. The Editorial Sector Co-ordinators will appoint one of the members of the sector group to take the lead in the evaluation of the data proposal and inform the TSU on this choice. The TSU will provide the appointed expert with the e-mail address of the data provider. This will be carried out preferably within 1 week after the notification by the TSU.
- c. The appointed expert will prepare a draft decision to accept or reject the data proposal. The acceptance can be on the condition of specific revisions or additions. The appointed expert will keep the other Sector Experts, Editorial Sector Co-ordinators and the TSU informed.

The appointed expert may contact the data provider by e-mail in order to ask for more information on the proposed data. The appointed expert may also contact the data provider to recommend specific revisions/additions to be made. If the data provider agrees to the recommendation, the original proposal should be revised by the data provider himself/herself⁶. All these correspondences should be copied to the TSU. The appointed expert will post the draft decision with rationale on the Editorial Board webpage. This will be carried out preferably within 4 weeks after the appointment of the expert in charge.

- d. Subsequently, the Editorial Sector Co-ordinators responsible for the sector shall comment on the draft decision. Other Sector Experts may post their comments on the website. The final decision will in principle be based on consensus. If there is no consensus, the Editorial Sector Co-ordinators will decide in consultation with the Board Co-Chairs⁷. This decision will be forwarded to the data provider by the TSU. This will be carried out preferably within 2 weeks after the appointed expert posts the draft decision on the Editorial Board webpage.
- e. In the case that the data provider refutes the decision, the TSU will forward it by e-mail to the Board Co-Chairs, Editorial Sector Co-ordinators and Sector Experts for the sector for their further consideration⁸. Again, the final decision will in principle be based on consensus. If there is no consensus, the Editorial Sector Co-ordinators will decide in consultation with the Board Co-Chairs. This decision will be forwarded to the data provider by the TSU.
- f. Preferably, one week later the Board Co-chairs will endorse the final decision made by the Editorial Sector Co-ordinators for the sector. If the decision is positive the Editorial Sector Co-ordinators will request the TSU to make the new data available to all on the EFDB web site.
- g. The TSU will send a message by e-mail to the data provider, indicating the decision of the Editorial Board.

⁵ The TSU should make this notification in such a manner that reduces unnecessary e-mails and maximises efficiency of the work of the Editorial Board.

⁶ Neither the Editorial Board nor the TSU should change the substantive information contained in the original proposal without the consent of the data provider.

⁷ The Editorial Sector Co-ordinators will contact the data provider if it is deemed necessary. In this case some delay will probably be unavoidable. The Editorial Sector Coordinator should inform it to the TSU.

⁸ In this case some delay will probably be unavoidable.

- h. The TSU will upload the new and accepted information onto the web site and will place a notification on the changes on the home page of the web site two to four times a year.
 - i. The TSU will also publish this new information by CD-ROMs annually or semi-annually.
18. A periodic process for uploading data on the EFDB will be established in future. However, due to the need to populate the EFDB effectively, a continuous process will be temporarily followed during the initial data submission period. The switch from a continuous to a periodic process will be proposed by the Editorial Board and the TSU and determined by the TFB. The process switch may also depend on quantity of submitted data.

Annual meeting

19. To ensure consistency of the decision criteria over time and between Editorial Sector Coordinators and Sector Experts, an annual meeting of the Editorial Board will be organised in the second quarter of each year⁹.
20. All members of the Editorial Board and the Steering Group, a representative from the UNFCCC secretariat, and a limited number of experts nominated by governments will participate in this meeting. Governments are encouraged to nominate their national inventory experts to represent the primary users of EFDB¹⁰.
21. The agenda of the meeting will contain, amongst others, the following elements:
- a. An overview of the achievements of the past year;
 - b. An overview of the usage through analysis of website statistics and data requests on the EFDB web site;
 - c. A presentation of the work plan by the EFDB Steering Group;.
 - d. An overview of the type of data providers (national inventory compilers, scientific community, relevant business firms, etc);
 - e. Identification of weak points in the database and proposals for improvement of emission factors and other parameters in specific sectors, sub-sectors and source categories;
 - f. Other issues relating to EFDB functionality, procedures and process for evaluation of proposed new data, data collection, data dissemination, administrative issues, etc.

⁹ Exceptionally, the first meeting of the EFDB Editorial Board was held on 28-30 January 2003.

¹⁰ Exceptionally, national inventory experts to represent the primary users were not invited to the first meeting of the EFDB Editorial Board, since it was premature to seek feedback from users.