Responses to questions received from interested parties under section 3.1.1 of the *"Invitation for Proposals for the IPCC 2006 GHG Inventory Software"*

1. What is the budget for this project?

Interested parties should submit their proposals for the resources required, taking into account the needs of the project and that funds from the IPCC are limited.

2. Is the call for tenders (dated April 13, 2007) valid? If so, what is the new project timeline?

April 13, 2007 is the date the invitation was issued. The deadline for submission of proposals is 22 May.

3. Is the document \"Invitation for Proposals for the IPCC 2006 GHG Inventory Software\" still valid?

Yes

4. Is the principle contact listed in the 2006 document (Mr Hiroyuki Ishitobi) still valid? If so, what is his e-mail address?

While Mr Hiroyuki Ishitobi will be the principal contact for IGES for contractual matters any communications on this invitation should be made to Dr Simon Eggleston at <2006software@iges.or.jp>

5. Is there a formal application procedure?

6. Is there any initial application required for companies going to submit the Proposal? Or it's enough if potential contractor would send Proposal to the address of Head, Technical Support Unit IPCC National Greenhouse Gas Inventories Programme C/o Institute for Global Environmental Strategies (see paragraph 3.1.2 of the Invitation for Proposals for the IPCC 2006 GHG Inventory Software and http://www.ipccnggip.iges.or.jp/public/2006gl/tender_software.htm)?

Details of the application procedure are given in sections 3.1.1 and 3.1.2 of "Invitation for Proposals for the IPCC 2006 GHG Inventory Software" and will comply with the requirements of IGES under Japanese law. There is no initial application required.

7. What supporting documentation do you require?

See section 3.1 of "Invitation for Proposals for the IPCC 2006 GHG Inventory Software"

8. Does the software updated by UNFCCC supersede the IPCC 1996 GHG software? Can we use UNFCCC software as the reference for our understanding and to respond this RFP?

The software updated by the UNFCCC Secretariat does supersede the IPCC 1996 GHG Software by including corrections and the Good Practice Guidance for Land Use, Land-Use Change and Forestry. While the software is useful as a reference, the Software to be developed should not be constrained by the approach and software platforms used.

9. Would the new software require have to support migration of data from the current software? If yes, you want to support IPCC 1996 or UNFCCC data or both?

No

10. Importing data from external sources (other systems) is not a requirement. Please confirm.

No – apart from the bulk import specified in section 2.1.8 of Invitation for Proposals for the IPCC 2006 GHG Inventory Software

11. Importing data from MS Excel is not required. Only export to MS Excel (in a pre-defined format) is required. For any import, files exported by the system in limited pre-defined formats (e.g. XML) will be provided. Please confirm.

See section 2.1.8 of Invitation for Proposals for the IPCC 2006 GHG Inventory Software – it is not necessary that data import from Excel is possible but as a minimum import from text files (comma separated variable in a format to be defined by the software developer).

12. 2006 IPCC guideline - "V2_x_An1_Worksheets.pdf" lists only 6 worksheets for energy input module but page 9 of RFP(table 3) refers 11 worksheets as calculation pages. Do we use the reporting table formats from the guideline document for the missing worksheets? Some of the missing worksheets in 2006 guidelines are 1A3, 1A4, 1A5, 1B3, 1C1,1C2, 1C3 etc

Section 2.6 and table 2.16 in volume 2 of the 2006 Guidelines discuss the worksheets. The first worksheet is repeated for multiple sectors as shown in table 2.16. (1A3, 1A4, 1A5), IB3 is an "other" category where no methods can be specified so a simple data entry form should be provided which includes entry for a description of the category. Emissions from 1C are based on measurements so a worksheet is not needed. Therefore a data entry sheet based on the reporting table "Table 1.4a Energy Background Table: 1C CO2 Transport, Injection and Storage" should be used (as stated in table 3 in Invitation for Proposals for the IPCC 2006 GHG Inventory Software).

13. The new system will be internationalized (language-enabled) to allow support for additional languages in future. i.e. User Interface can be created in UN languages, however, for data input/output -

a. Numerical data & other key character data (e.g. Notation Keys) will only be in standard format / English.

b. Textual data e.g. comments in Reference Information can be in UN languages. Please confirm.

- a) Yes the use of notation keys as specified in English is mandatory.
- b) Reference information and other textual data must be in any UN language. It would be preferable for the user also to be able to input in any language installed on their system.
- 14. We assume at least e-mail facility is available for the end users to exchange inventory data –please confirm

Yes

- 15. Where would the Data Management Core be located? Is this a. one per country (i.e. aggregated at country level) or b. one per region or
 - c. one globally

A – one per country

16. Does region level data collection also need to be supported? V1_2_Ch2_DataCollection.pdf, section 2.2.3 does specify some guidelines related to regional inventory data.

Regional (sub-national) data collection is not needed at Tier 1 (the methods the software should implement.)

17. Section 2.1.8 of the RFP - The data modules will then need to be brought together and reconciled with the central data management module. Any specific reconciliation procedure (replace, aggregate etc) to be used? or are these same as the QA/QC checks?

Clearly the individual sectors will need to be aggregated to provide the national inventory. If the reconciliation reveals duplicates for specific individual sectors then the software should prompt users for the appropriate action (reject all or accept one option).

18. Can multiple users enter same worksheet of an input module simultaneously?

19. We understand that when specifying reference sources, it is only free-form text (in the documentation box). There is no requirement for the users to be able to embed (as attachments) reference sources (documents, files etc) during the data input process. Please confirm.

Yes

20. Can Reporting Tables be produced from input modules directly? Or will these only be produced post data consolidation, QA/QC checks?

Not from input modules directly but only through data consolidation and QA/QC checks.

21. How many users will use the software? A split by users of Input Modules, Data Management Core (Analysis & Output functions) would be useful. Additionally, an indication of frequency of usage will also be helpful.

This depends on the country and its resources. In principle there can be a central body that would use the data management core and output functions. Input modules would be used by individual sector experts. However, where resources are limited these roles could be combined into one person. The aim will be to produce an inventory each year.

22. Who would be responsible for operational aspects (e.g. backups, archrivals') of the system (especially Data Management Core)?

This would be part of the role of the body with responsibility for compiling the overall inventory.

23. Any security requirements? We understand that Username will need to be captured. But are there any specific authentication & authorization requirements?

There are no specific requirements beyond recording the username and changes as noted in section 2.2.1. We do not anticipate that the system will store confidential data.

24. Section 2.2.1 of the RFP - The system should have a data version control. This will record the user name of who made changes to the database and the date of the change. Do you also need the system to track data changes (e.g. before and after image of data)? Do you need the ability to maintain multiple versions of datasets for each year?

No, multiple versions of the datasets are not required. Users will be instructed to export data as a archive for backup. Back-up and security should be part of the wider inventory process.

25. Training users/TSU members is out of Vendor's scope. If any assistance in training is required, it will be costed separately

Yes (note sections 2.1.6 and 2.2.7 for documentation required)

26. Archive requirements– How many years of data and inventories that the system is expected to maintain?

This is depends on the country: some inventories go back to 1970. Typically users would store inventories annually from 1990 to 2020. Each inventory consists of the latest year and all previous years. Thus several inventories would imply multiple copies of data for each year (e.g. an inventory system for 1993 could contain: 1990 Inventory – Data for 1990 1991 Inventory – Data for 1991 and revised 1990 1992 Inventory – Data for 1992 and revised 1990, 1991 1993 Inventory – Data for 1993 and revised 1990, 1991, 1992)

27. We assume testing machines will be provided by TSU - please confirm

We anticipate distributing copies of the software to testers in their own countries for use of their own machines – thus replicating actual intended use.

28. What are the problems faced with current software on non-English version of Microsoft Windows? We assume that the problems that may occur are more to do with non-English version of MS Excel rather than the OS.

We have identified problems with non-English versions of Excel that are unable to run programs and macros written for the English version of Excel. We are unable to state that there are no operating system errors.

29. MS Excel spreadsheets is not the best solution for the new software but the database system should be used (as written in your specification chapter 1.4). However there exists a combined solution where the frame of the program and database operations will be programmed in the native language like C/C++ and some complicated tables like worksheets (with cell dependences and background calculations) will be implemented in the embedded Excel. Excel will be used as

pure user interface where in the same time all the data will be stored into the database. This solution can essentially spare the table's development time and improve flexibilities for future changes in the worksheets. This solution requires that MS Office Excel must be preinstalled on the target computer. Is this technology acceptable for you or not?

Any solution will be considered on its merits (including this one). Proposals should demonstrate that they are compatible with the requirements in the invitation to tender – inter alia: sections 2.1.4, 2.1.5 and 2.1.7. Proposals may assume users will have MS Office (Word and Excel) installed – though not the latest versions of Office or Windows.

30. The UNFCCC CRF Reporter is a software solving most of your requirements and functions. CRF Reporter does not implement Reporting according to 2006 IPCC Guidelines but the used user interface and technology could be an inspiration. Which features of the CRF Reporter technology and functions are those you don't like? Consequently which CRF Reporter limitation would you like to implement otherwise in the new IPCC2006 software?

The CRF reporter¹ is aimed at reporting while the software we want from this proposal is aimed at estimating emissions. In fact is more analogous to the UNFCCC inventory software² itself based on IPCC software for the 1996 Guidelines. One of the outputs form the software should be INTO the CRF reporter (sections 1.3 & 2.2.4.v). It is difficult to pick out individual features from the CRF reporter as it is the overall usability and functionality that matter. However the hierarchical tree structure for displaying the sectors does demonstrate to users the relationships between the individual sectors.

31. We have noticed the inconsistency between the Proposal delivery date - 22 May 2007 (see paragraph 3.1.2 of the Invitation for Proposals for the IPCC 2006 GHG Inventory Software) and Contract timeline accordingly to which the Contract sign date planned for April 2006 (see paragraph 3.3 Figure 6 of the Invitation for Proposals for the IPCC 2006 GHG Inventory Software). Could you please clarify this inconsistency as it's critical for project planning purposes to be presented in the Proposal?

The project will start as soon as contracts can be exchanged. Clearly this will be delayed from the original plan. The following milestones can be adjusted appropriately except the COP14/MOP4 meeting that is fixed. Subsequent milestones can also be adjusted, however we still intend to hold the review meeting in early 2008.

¹ <u>http://unfccc.int/national_reports/annex_i_ghg_inventories/reporting_requirements/items/3901.php</u>

² <u>http://unfccc.int/resource/cd_roms/na1/ghg_inventories/index.htm</u>

- 32. Could you please update us with appropriate links to web pages which were mentioned in paragraph 3.3 item 2 Start Phase 1b of the Invitation for Proposals for the IPCC 2006 GHG Inventory Software?
- 33. The Invitation for Proposals for the IPCC 2006 GHG Inventory Software has two 'Error! Reference source not found.' which prohibits the reader to locate the hyperlink or reference. One error is page 11 in section 2.1.2 Modular structure and the second on page 19 in the stage 2. Start Phase 1b.

These are both references to Figure 2.

34. Please confirm that 'at it premises' from page 18, 3.3 Timing item 1 Phase 1a :(Design) 'At the end of this stage the developer will present the design to the TSU at its premises' means at our offices in Ottawa, Canada or does this mean the TSU offices in Japan?

This means the TSU office in Hayama, Japan.

Simon Eggleston Head TSU, IPCC National Greenhouse Gas Inventory Programme IGES, Hayama, Japan