

# HANDBOOK FOR REVIEW OF NATIONAL GHG INVENTORIES

## CHAPTER II: CROSS-CUTTING REVIEW ISSUES

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## INTRODUCTION

1. This chapter provides guidance for the review of general and cross cutting inventory issues: e.g. choice of tier, documentation of national methods, emission factors and activity data, and the cross cutting chapters key category analysis, uncertainty, QA/QC and institutional arrangements. This section also provides guidance on the appropriate use of tools and information provided by the secretariat to facilitate the review. The guidance contained in this general section apply for all source and sink categories.
2. A draft version of the review report will be sent to Parties for comments, in accordance with the provisions of the review guidelines. The comments from the Parties, if any, will be sent to the Lead Reviewers before finalization of the report before it is published on the UNFCCC web site.
3. All substantive comments received should be considered by the Lead Reviewers and by the appropriate sectoral expert(s). The expert review team should provide a brief written response to the Party on how it has considered/addressed comments, and indicate where and how the review report was revised. This response should also provide clear explanations for cases where the review report has not been modified in response to a Party's comment.
4. In cases where Parties have acknowledged, in multiple cases, the problems identified by the review teams and indicated their intentions to make future improvements, the expert review team could give recognition of this fact in the review report.
5. The team should ensure that any revisions to the review report are provided to the Party for its consideration and comment prior to the report's finalization.

**Table II-1: Choice of Tier**

Source Category	All	
Definition	The Tier indicates the complexity as well as (in most cases) the accuracy of the method applied to estimate the emissions from a particular source and/or emissions/ removals from a particular land use category.	
Potential Key Issues:	That a Party is using a lower tier than recommended by IPCC good practice guidance.	
General References	UNFCCC reporting guidelines paragraphs 10 – 12 (FCCC/SBSTA/2004/8) IPCC good practice guidance chapter 7.	
Detailed Review Element	Question	Elaboration/clarification
Choice of Tier	Check if the appropriate choice of tier has been used for each of the reported emission estimates.	The IPCC guidelines often include several alternative methods or Tiers for each source. In general, a higher Tier will yield a more accurate estimate of the emissions from a source, and is therefore to be preferred. In some cases the use of a higher Tier will not yield a significant increase in accuracy, and the use of a lower Tier may be the best option for some sources. The appropriate choice of Tier for the particular source in question will depend upon the overall national resources and availability of data (see decision tree 7.4 in the IPCC good practice guidance and decision trees Figures 3.1.1 and 3.1.2 in GPG LULUCF), and on the decision tree specific to the source category. Use the determination of key categories submitted by the Party.
	Are all categories in a source/sink category key?	If a source or sink category contains several sub-categories, there are usually one or two sub-categories that are most important. These sub-categories should be estimated using a more rigorous methodology. For other sub-categories, more flexibility in the choice of method may be appropriate. (For example, in the case of enteric fermentation, cattle is a much more important source than poultry in most countries.) See IPCC good practice guidance chapter 7.2, page 5.
	If a recommended method for a key category has not been used, consider:	Figure 7.4 provides for consideration of whether “data can be collected without significantly jeopardising the resources for other key categories.”
	- How difficult is the collection of data?	Information with respect to resources needed to collect data is given in the “Choice of Method” section in the

Source Category	All
	<p data-bbox="895 226 1222 259">IPCC good practice guidance.</p> <p data-bbox="895 286 1278 353">This is required in paragraph 41 of the reporting guidelines.</p> <p data-bbox="895 412 1305 568">The objective is to reduce uncertainty of the overall inventory estimate, and the priority of the resources for different source categories should reflect this.</p> <p data-bbox="469 600 823 667">If a country-specific method has been used, consider:</p> <p data-bbox="469 694 823 761">- Is the use of a country-specific method justified?</p> <p data-bbox="895 694 1305 913">Available data should support the use of the method. Sectoral chapters provide guidance on whether country-specific emission factors are justified, e.g., the availability of QA/QC procedures, peer-reviewed studies, etc.</p> <p data-bbox="469 945 823 1012">- Is the method considered more accurate for the country?</p> <p data-bbox="895 945 1305 1034">The country's assessment of the uncertainty for the estimate should be considered.</p> <p data-bbox="469 1066 839 1155">- Is the method, including activity data and emission factors, used consistently?</p> <p data-bbox="895 1066 1305 1348">To the greatest extent possible, the method should be applied consistently across time, sub-categories and geographic areas. Where a country has used a combination of methods, the approach should reflect underlying differences in data availability at the national level.</p> <p data-bbox="469 1379 762 1413">If expert judgment is used:</p> <p data-bbox="469 1440 863 1507">- Does an expert judgment protocol exist?</p> <p data-bbox="895 1379 1305 1507">A guide to conduct and record expert judgment is provided in the IPCC good practice guidance, chapter 6.2.5.</p>
Documentation	<p data-bbox="469 1503 868 1659">Check if appropriate documentation is included as part of the NIR if the Tier is a country-specific method, or if the emission factors are country-specific.</p> <p data-bbox="895 1503 1305 1998">The highest Tier is generally a national method, and Parties are encouraged to use this provided that they yield a more accurate result and are properly documented. The preferred documentation is in peer-reviewed articles, but this will rarely be the case. Institute reports may be used to document the national methods and emission factors. (A reference to a report in the national language should not be considered sufficiently transparent.) The IPCC good practice guidance provides information on documentation and archiving of information.</p>

Source Category	All	
QA/QC	Check if results of QA/QC procedures have been recorded and are available.	Both general and source specific QA/QC procedures are elaborated in the IPCC good practice guidance.  For source categories where higher tiers are used, recommended source-specific QA/QC procedures are provided in the source specific good practice guidance.

**Table II-2: Key Category Analysis**

Source Category	All	
Definition	Key category analysis is a comparison of all source and sink categories to determine the key categories.	
Potential Key Issues:	Aggregation level in the analysis. Inclusion of LULUCF categories. If Tier 2 key category analysis is used the estimate of uncertainty may be a potential issue.	
General References	IPCC good practice guidance chapter 7. IPCC good practice guidance for land use, land-use change and forestry chapter 5.	
Detailed Review Element	Question	Elaboration/clarification
Key Category Analysis	<p>Compare the results of the key category analysis by the Party with the one generated by the Secretariat. Check to see whether the Party has included LULUCF categories in its analyses.</p> <p>Check if the aggregation of sources is at an appropriate level of detail.</p>	<p>The team's generalist should primarily be responsible for evaluating the Party's key category assessment and comparing it to that of the secretariat. If the Party has not reported a key category analysis, the ERT should use the secretariat's analysis to focus and prioritize the review in accordance with the good practice guidance. The results of the review should be presented in the report according to the secretariat's key category assessment.</p> <p>If the Party has reported a key category analysis and the results of this analysis differ substantively from those of the secretariat, the ERT should explore the reason for this difference, as requested by the UNFCCC review guidelines, and explain the reason in the review report. In many cases this is due to the fact that the Party has used a different level of aggregation from that used by the secretariat in conducting the assessment. In cases where the Party has conducted a tier 2 assessment, this fact alone may explain the difference.</p> <p>A Tier 2 key category analysis will generally generate less key categories than a Tier 1 key category analysis. The Tier 1 key category analysis is normally done on a set of source categories rather than each individual source. If common assumptions or the same emission factors are used, the sources may be</p>

	<p>Check estimates of uncertainty if Tier 2 key category analysis is used.</p> <p>Check that the qualitative criteria have been applied.</p>	<p>combined into a source category. Each greenhouse gas should be considered separately unless there is specific reason not to. See IPCC good practice guidance chapter 7, page 5-6 and IPCC good practice guidance for land use, land-use change and forestry chapter 5, pages 33-36.</p> <p>When Tier 2 key category analysis is used, the estimated uncertainties will influence the results of the analysis. See IPCC good practice guidance chapter 7, page 11-12 and IPCC good practice guidance for land use, land-use change and forestry chapter 5, pages 36-37.</p> <p>A few qualitative criteria have been developed to complement the numerical analysis. See IPCC good practice guidance chapter 7, page 13 and IPCC good practice guidance for land use, land-use change and forestry chapter 5, page 38.</p>
Documentation	<p>Check if the chosen aggregation is documented and explained.</p> <p>Choose the appropriate key category assessment to focus the review and organize the report.</p>	<p>Parties shall report using Table 7.A1 – 7.A3 of the IPCC good practice guidance, see chapter 7 page 15. See also table 5.4.1 in chapter 5, page 31 of IPCC good practice guidance for land use, land-use change and forestry.</p> <p>If the ERT determines that the Party's key category assessment was conducted correctly, then the results of that assessment should be the basis for focusing and conducting the review. However, the organization of the report should be at the level of disaggregation in the secretariat's analysis, as reflected in the review report template. At the same time, the specific key categories reported by the Party should be given proper consideration in the report and reconciled with those identified by the secretariat.</p> <p>In cases where the ERT (on the basis of documentation and any additional explanations provided by the Party) does not consider the Party's key category analysis to have been conducted correctly, then the secretariat's should be used as the basis for review.</p>

**Table II-3: Uncertainty Analysis**

<b>Source Category</b>	<b>All</b>	
Definition	Uncertainty analysis aims to provide a quantitative measure of the uncertainty of the national inventory caused by the emission factors, activity data and the methods used as well as the relative importance of these factors. See IPCC good practice guidance Annex 3, page 18.	
Potential Key Issues:	Expert judgment of the individual uncertainties.	
General References	IPCC good practice guidance chapter 6.	
<b>Detailed Review Element</b>	<b>Question</b>	<b>Elaboration/clarification</b>
Uncertainty Analysis	Check if the estimates of uncertainty in the source categories are reasonable.	Default values for uncertainty are available in the IPCC good practice guidance in the sector chapters as well as in the GPG LULUCF chapter 3. It may also be possible to compare with another Party where you expect comparable values.
	If other method than the one provided by IPCC good practice guidance is used to combine uncertainty, why is this?	This may affect the key category determination if Tier 2 key category analysis is used.
	Is it consistent between the quantitative and the qualitative uncertainty discussion?	Quantifying the uncertainty is often a very difficult task, but should still be consistent with a qualitative evaluation.
Documentation	Check if all expert judgments are documented and archived.	This is only possible during an in-country visit, as the documentation is to be archived. See IPCC good practice guidance chapter 6, page 10.

**Table II-4: QA/QC**

Source Category	All	
Definition	<p>QC is a system of routine technical activities to measure and control the quality of the inventory as it is being developed.</p> <p>QA activities include a planned system of review procedures conducted by personnel not directly involved in the inventory compilation/development process.</p> <p>For fuller definitions see Box 8.1 in the IPCC good practice guidance.</p>	
Potential Key Issues:	Awareness and appropriate implementation of the QA/QC plan at all levels in the inventory development.	
General References	IPCC good practice guidance chapter 8 and GPG LULUCF chapter 5.	
Detailed Review Element	Question	Elaboration/clarification
QA/QC	Is there a QA/QC plan included in the NIR and a description of the implemented QA/QC activities?	A set of simplified procedures for QA/QC is provided in IPCC good practice guidance Table 8.1, chapter 8 and in GPG LULUCF Table 5.5.1, chapter 5. The plan may also contain a schedule for when the different emission/removal estimates will be reviewed with regard to choice of Tier, emission factors and collection of new and better activity data. This will thus indicate when and where recalculations may be needed.
	Check if the individuals performing the emission calculations also implement QA.	QA should be an integrated part of the procedures for estimating emissions and removals, and all individuals involved should be familiar with the plan to assure its effectiveness.
	Compare emission estimate with those of previous years.	Emissions do not typically change significantly from one year to the next, but tend to display a trend over several years. A time series that is consistent (i.e. calculated using the same methodology) should most often be without large and sudden discontinuities in the annual numbers. See IPCC good practice guidance chapter 8.7.1.4. page 8.12 and section 5.6 of GPG LULUCF..
	Check if the QC procedures are implemented according to the plan.	In an in-country visit visual inspection of response to a hearing or other measures could be requested.
Documentation	Check what routines and findings are recorded for documentation of QA/QC.	See IPCC good practice guidance chapter 8.10.1 and in GPG LULUCF section 5.5.6.



**Table II-5: Time-series consistency and Recalculations**

Source Category	All	
Definition	An inventory is consistent if the same methodologies are used for the base year and all subsequent years, and if consistent data sets are used to estimate emissions or removals from sinks. It is especially important to check for consistency when emissions/removals are recalculated. Recalculation is a re-estimation of the emissions or removals for all years in the time series to reflect a change in method, activity data or emission factors.	
Potential Key Issues:	Inconsistency in the time series.	
General References	IPCC good practice guidance chapter 7 and GPG LULUCF section 5.6, chapter 5.	
Detailed Review Element	Question	Elaboration/clarification
Time-series	Has the same method been applied to all years in the time-series?	Using the same method is preferable to assure a consistent time series. This may not, however, always be possible and some techniques for splicing of time series are provided in the IPCC good practice guidance, see chapter 7.3.1.2.2 page 7.18 and section 5.6.2 in the GPG LULUCF, specifically Table 5.6.1, p 5.57.
	Is the dataset prepared on a calendar-year basis and consistent across time?	<p>In general, inventories should be prepared using calendar year data. However, because activity data used in the preparation of national GHG inventories are often collected for purposes other than the GHG inventory, it may not be feasible for a Party to change its national data collection practices to a calendar year data.</p> <p>Use of non-calendar year data for inventory reporting under the UNFCCC is consistent with the IPCC good practice guidance in cases where collection of data on a non-calendar year basis conforms with the normal statistical practices of the Party concerned and the use of such non-calendar year data results in a more accurate estimate, provided that other principles of the IPCC good practice guidance (e.g., transparency, time-series consistency, use of correct/appropriate methodologies etc.) are correctly applied.</p> <p>In addition, the LRs agreed that, while the use of mixed calendar year and non-calendar year data in the preparation of a GHG inventory is not ideal, it may be unavoidable for some Parties. The use of mixed data may also be consistent with the IPCC good</p>

		practice guidance, provided that they are used consistently and presented transparently in the GHG inventory.
Recalculation	How does the recalculation affect the emission, uncertainty and relevant implied emission factor?	Recalculations should increase accuracy of the estimate and may increase or decrease the emission from the source or removals from a sink. The effect on the reduction commitment in absolute terms may differ as this is given by a percent change from base year to target year.
	Is there a plan for review of sources/sinks that may lead to recalculation?	Reviewing a source/sink and collecting new activity data will often lead to more accurate estimates and affect the several years in the emission time series. It may also lead to the use of a higher tier.
	Are there sources that from a view of expected data availability should have been recalculated?	Parties should evaluate the need for recalculation consistent with the plans for improvement of the inventory.
Documentation	Check if the recalculations are documented according to the UNFCCC guidelines for reporting.	All recalculations should be reported, see also IPCC good practice guidance chapter 7.3.3, page 20 and also GPG LULUCF, Section 5.6.5.

**Table II-6: Institutional Arrangements**

Source Category	All	
Definition	The assignment and division of responsibilities for the data collection, estimation of emissions and compilation of the national inventory.	
Potential Key Issues:	Processes for review and approval of the inventory document	
General References		
Detailed Review Element	Question	Elaboration/clarification
Institutional Arrangements	Check if there is one entity that has main responsibility for the inventory preparation.	It is easier to avoid double counting and other inconsistencies between different sectors when one entity has an overall responsibility.
	Check if the experts estimating the emissions/removals and those compiling the inventory have a common understanding of the limitations in the data.	Good communication between the different experts performing the calculations and those collecting the data is important to assure the accuracy of the emission/removal estimates. This may be part of the quality assurance routines, and it is the responsibility of the lead inventory agency to assure common understanding and implementation of the routines.
Documentation	Has the Party documented the institutional arrangements used to produce the inventory?	Each Party's national system must ensure that inventory processes are in compliance with COP decisions.

**Table II-7: Use of International Data sets**

Source Category	All	
Definition	<p>The secretariat currently collect data from several specific international data sources to facilitate consideration of national inventory submissions. The data are primarily used in the production of tables for Part I of the Synthesis and Assessment Report, specifically data from:</p> <ul style="list-style-type: none"> <li>– International Energy Agency</li> <li>– United Nations Statistics Division</li> <li>– Food and Agriculture Organization of the United Nations</li> <li>– World Bank</li> </ul> <p>Experts may also consider other data sources during the review process.</p>	
Potential Key Issues:	How should reviewers consider data from other sources, which data sources can be considered?	
General References	Conclusions of second meeting of Inventory Lead Reviewers	
Detailed Review Element	Question	Elaboration/clarification
International Data Sets	What other data sources can be considered during a review?	In comparing the Party's reported data to those from other sources, the ERT should consider the reliability of the other data source. The following questions may help in these considerations: Is the organization providing the data a recognized international organization? Are the data regularly updated, maintained and disseminated? Are the data used by the organization generated by the countries themselves?
	Is there a discrepancy between the Party's reported data and that from another source?	Data from other international data sources (whether provided by the secretariat or obtained by the reviewer directly) should be considered as a tool to be used in assessing inventories but the discovery of discrepancies should not in itself be seen as indicating an inventory problem. Discrepancies between a Party's reported activity data (AD) and data from other organizations (international or otherwise) may or may not be indicative of an underlying problem.
	Can the discrepancy be adequately explained?	<p>If a discrepancy between a Party's reported AD and data from another source is identified, the ERT should consult with the Party to determine whether it can be explained. The ERT should also consider whether the Party's data and data collection procedures are reliable and transparent.</p> <p>If the ERT considers the Party's AD to be reliable and transparent, then</p>

		<p>the discrepancy should not be considered a problem and therefore should not be reflected in the review report.</p> <p>If major discrepancies are found between the Party's reported data and those provided by another recognized data source used in the Synthesis and Assessment (S&amp;A) report (e.g., IEA or the Food and Agriculture Organization of the United Nations (FAO)), and they cannot be adequately explained by the Party, the ERT may, as appropriate, encourage the Party to explore the reason for these discrepancies.</p>
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**Table II-8: Country- Specific Methods and/or Sources**

Source Category	All	
Definition	<p>In accordance with the IPCC Guidelines, Annex I Parties may use national methodologies which they consider better able to reflect their national situation, provided that these methodologies are compatible with the IPCC Guidelines and IPCC good practice guidance and are well-documented and scientifically based.</p> <p>In the case where CS methods and data are used, the ERT should consider the documentation available and assess whether the method is applied and documented according to the principles of GPG, and appropriate in light of the Party's national circumstances.</p> <p>In the case that a Party uses default method or data, the ERT should consider the Party's rationale and whether the use of such defaults is justified for the category, in light of the Party's national circumstances.</p> <p>In addition, some Parties report country-specific sources, for which there is no IPCC methodology.</p>	
Potential Key Issues:	How should country-specific sources and methods be assessed	
General References	Conclusions of 2 <sup>nd</sup> and 4 <sup>th</sup> meeting of Inventory Lead Reviewers	
Detailed Review Element	Question	Elaboration/clarification
Methodology	Has the Party applied general good practice principles in estimating emissions from the source/sink?	<p>Because good practice (and the reporting guidelines) encourage completeness of reporting, a Party should not be criticized for including such a country-specific source/sink in its inventory.</p> <p>In considering a reported country-specific source/sink where there is no agreed IPCC methodology, the ERT should always consider cross-cutting good practice principles (i.e., transparency, completeness, consistency). The ERT should also consider whether the source has been reported consistently over time. Previous reporting of the source by</p>

	Has the secretariat identified similar examples from other Parties?	<p>the Party should be considered here.</p> <p>In addition, the ERT should assess whether the methods used for a country-specific source/sink are well documented and scientifically based, and reflect this, as appropriate, in the review report.</p> <p>In addition, ERTs may consider similar or related sources and methodologies reported by other Parties as a basis for comparison.</p> <p>ERTs should bear in mind that for each inventory sector CRF contains a category 'Other', in line with the IPCC Guidelines, which has been provided to allow Parties to report sources/sinks that do not fall into clear IPCC source categories, according to the Party's national circumstances.</p>
Completeness	Has the review team identified a non-reported country-specific source for which there is no IPCC methodology?	<p>The UNFCCC reporting guidelines encourage Parties to estimate all existing (anthropogenic) source and sink categories, including sources/sinks for which there are no agreed IPCC methodologies. However, it may be inappropriate to expect a particular Party to provide an estimate of a country-specific source/sink when estimating such a source/sink would divert resources from key categories, unless that source/sink is likely to be significant. The ERT should therefore consider the likely significance of an unreported country-specific source, as well as the overall key categories of the Party, in evaluating whether to encourage the Party to investigate the significance of the source.</p>

**Table II-9: Implied Emission Factors and the results of the outlier detection tool**

Source Category	All	
Definition	<p>The secretariat provides information on implied emission factors (IEFs) in the synthesis and assessment reports. IEFs are top-down ratios calculated from a Party's emission estimate and aggregate activity data. IEFs are intended as a tool to assist in comparing a Party's estimate with those of other Parties and/or the IPCC default emission factors. IEFs do not necessarily correspond to the actual emission factors used by the Party in producing the emission estimate, and in many cases they are aggregated values.</p> <p>The outlier detection tool is a software which performs statistical analyses of inventory data (i. e. time-series data, or across Party) to enable comparison of implied emission factors and other information. The secretariat identifies unusual results (e.g. unusually large or small values) in Part II of the synthesis and assessment, and provides this information to the ERT and Party concerned. These results are intended to be used by ERTs to identify areas for further consideration.</p>	
Potential Key Issues:	Unusual IEFs, or other outlier results, are not in and of themselves indicative of an inventory problem. These tools should not be used as substitutes for expert judgement and consideration of the underlying facts and circumstances relating to the source.	
General References	Refer to the appropriate chapter for the sector	
Detailed Review Element	Question	Elaboration/clarification
Emission Factors and the results of the outlier detection tool	Is the Party's IEF significantly different from those of other Parties?	Unusual values in IEFs or other outlier results do not necessarily indicate an underlying inventory problem, but may indicate an area for further consideration by the ERT.
	Are the actual emission factor and methodology used by the Party appropriate?	In cases when an unusual value is identified, the ERT should consider the actual underlying value (i.e., the emission factor and/or other parameters) and methodology, and evaluate whether the value(s) and methodology are appropriate for the Party concerned (and comparable to the IPCC default value, if appropriate). In doing so, the ERT should consider the particular characteristics of the source/sink for that Party and any relevant findings of previous reviews. It is not appropriate to base a judgement on a departure from the IPCC good practice guidance solely on the basis of an unusual IEF or other statistical outlier.
	Has consideration of the underlying value and methodology adequately explained the unusual IEF?	The reviewers' conclusions, as reflected in the review report, should be based on an assessment of the actual values and approaches used in the preparation of the inventory (i.e., the emission factors and other

		<p>relevant parameters) – not the IEFs. However, it is appropriate to consider the IEFs as part of this assessment, as described above.</p> <p>In cases where the reviewer cannot adequately assess the actual value(s) or methodology used by the Party because of lack of documentation or transparency, the reviewer should explain this fact in the review report.</p>
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**Table II-10: GHG inventory compiled from different national inventories**

Source Category	All	
Definition	The IPCC Guidelines and the IPCC Good Practice Guidance (GPG) recommends the use of well-documented national methods, country specific emission factors and national activity data to prepare greenhouse gas (GHG) inventories, particularly for higher-tier methodologies. This constitutes one of the main principles of good practice guidance. Therefore, if an inventory is compiled from several national inventories that were prepared with country-specific data and methods, in accordance with national circumstances and GPG, the compiled inventory should be more accurate than if it were prepared using default methods, parameters and aggregated data sets.	
Potential Key Issues:	How should methods be assessed	
General References	Conclusions of 3 <sup>rd</sup> meeting of Inventory Lead Reviewers	
Detailed Review Element	Question	Elaboration/clarification
Methodology	Has the Party applied general good practice principles in estimating emissions from the source/sink?	When considering a GHG inventory that is compiled from different national inventories, the ERT should consider the information provided by the Party on the methods used in the national inventories to assess whether they conform with GPG. In this regard, the ERT should consider the categories that are key at the level of the compiled inventory, and the contribution of individual national inventories to the total emissions in these key categories. Where estimates of individual national inventories represent a high proportion of emissions in a key category (e.g., the relative contribution of the estimates of these inventories ranked by level account for 60% – 75% of emissions in the category), the ERT should assess whether these estimates were prepared using an appropriate (e.g. higher-tier) method. In some cases, when the ERTs considers that additional information is needed, this may require the consideration of the individual national inventories and/or the previous review reports of those inventories.

Documentation	Is sufficient documentation provided?	ERTs should continue to request the provision of transparent and appropriate information in the NIR to facilitate assessment of appropriate methodologies, as described above, and to minimize the need to consider individual national inventories or review reports in future reviews of an inventory compiled from national inventories. The ERTs should also consider, when needed, information on the main problems identified in national inventories, and efforts being undertaken to address these problems.
Completeness	Is the inventory complete? If data gaps have been identified, how are these addressed?	The IPCC good practice guidance provides guidance on ways to address data gaps in an inventory, such as the use of proxy data and statistical procedures to interpolate or extrapolate existing data. In cases where a gap-filling procedure has been applied to generate missing inventory data, the ERT should assess the justification for applying the procedure and whether the specific method used for a source is applied consistent with GPG.