

IPCC EXPERT MEETING ON
Uncertainties and Cross Cutting Issues in Inventory Management

CULHAM, UNITED KINGDOM, 5-7 OCTOBER, 1999

OBJECTIVES

- To provide good practice guidance on:
 - 1.) Quantifying and reporting absolute and trend uncertainties in greenhouse gas inventories
 - 2.) Quality assessment, quality control and data archiving procedures.
 - 3.) Methodological choice and time series consistency.
 - 4.) Inventory checking and verification against independently compiled estimates, reference calculations, and atmospheric measurements.
- To develop a conceptual basis for uncertainty analysis of emission inventories.
- To promote common understanding by means of a glossary of terms

PARTICIPANTS: Inventory experts, scientists, representatives from government, international and non-governmental organisations.

LOCATION: Culham, United Kingdom

PRODUCTS: Input to the IPCC Report on *Good Practice in National Inventory Preparation Including Managing the Uncertainties*, which will be considered for acceptance by IPCC XVI.

ORGANISERS: IPCC Programme on National Greenhouse Gas Inventories, UK National Environmental Technology Center, and UK Department of the Environment, Transport, and the Regions

PRELIMINARY AGENDA

Tuesday, 5 October, 1999

8:30 - 9:00

Registration and coffee

9:00 – 9:10 UK

9:10 – 9:30

9:30 – 9:50 R. Acosta

9:50 – 10:00

Plenary Session

Welcome, introduction,

SBSTA request, outcome from Paris and sector workshops, final product, and contribution of this meeting.

Revision of UNFCCC Reporting Guidelines and work programme under Arts 5, 7 and 8 of the Kyoto Protocol

Discussion

		<i>Plenary Presentations by Authors: (major issues and challenges)</i>
10:00-10:20	Ian Galbally	Conceptual basis for uncertainty analysis
10:20 – 10:40	Simon Eggleston	Quantifying uncertainties in practice
10:40 – 10:50		<i>Questions to papers 1 and 2</i>
10:50 - 11:10		<i>Coffee break</i>
11:10 – 11:30	Joe Mangino	QA/QC of inventory systems
11:30 – 11:50	Kristin Rypdal	Methodological choice
11:50 - 12:00		<i>Questions to of papers 3 and 4</i>
12:00 - 12:20	Author	Checks and verification at national and at international level
12:20 – 12:30		<i>Discussion</i>
12:30 – 12:50	Milos Tichy	Glossary
12:50 - 13:00		<i>First plenary discussion of glossary.</i>
13:00 – 14:00		<i>Lunch</i>
14:30 – 16:00		Break out Sessions
16:00 – 16:30		<i>Coffee Break</i>
16:30 – 18:00		Break out Sessions
<u>Wednesday, 6 October</u>		
8:30 - 9:00		Meeting of Break-out Group Chairs - Assessment of progress
		<i>Plenary Session</i>
9:00 - 9:30		<i>Glossary presentation/discussion</i>
9:30 – 10:45		Break out sessions
10:45 – 11:00		<i>Coffee Break</i>
11:00 – 13:00		Break out sessions
13:00 – 14:00		<i>Lunch</i>
14:00 – 16:00		Break out sessions
16:00 – 16:30		<i>Coffee Break</i>
16:30 – 18:00		Break out sessions

Thursday, 7 October

8:30 - 9:00	Meeting of Break-out Group Chairs - Assessment of progress
9:00 – 10:45	Break out sessions
10:45 – 11:00	<i>Coffee Break</i>
11:00 – 13:00	Break out sessions
13:00 14:00	<i>Lunch</i>
14:00 – 16:00	Break out sessions
16:00 - 16:45	<i>Plenary Session</i> Breakout Group and Glossary Summaries: presented by Chairs
16:50- 17:45	General Discussion
Chair	Conclusion of the meeting

Friday, 8 October

9:00 – 11:00 Organisers' post meeting

Rooms will be available if there are break out groups who need time to finalize their report contributions. Coffee/tea will also be available.

AGENDA FOR BREAK-OUT GROUP

Break-out group chair: The chair should present a summary of the background paper (*10-20 minutes*), lead the discussions, report to the plenary, and complete the guidance “Good practice in Inventory preparation” after the meeting.

By the end of the meeting, the breakout groups must provide first drafts on good practice guidelines for their subject. These will be further revised in co-operation with the chairs according to the agreed time schedule.

Background papers: The background papers will serve as the basis for substantive discussion on good practice guidance. The breakout groups will use the afternoon of day 1 to discuss general issues and establish ownership of the background papers. The Glossary will be completed before the meeting and presented for agreement in plenary.

Presentation of national approaches: Depending on the subject and time allotted, this will consist of 1-3 presentations. The meeting and break-out group chairs should try to identify candidates 2 weeks before the meeting. Each presentation should summarize a national approach to a subject, and identify main issues and problem areas. (*5-10 minutes each*)

Break out groups:

1. Conceptual basis for uncertainty analysis: This group will clarify which statistical concepts can be applied to inventories. This included evaluation of: scaling up emission factor and activity data; representative sampling; handling missing data; combining uncertainties which may be large compared to the mean; and/or not normally distributed; uncertainties which are related in time or across sectors; splicing together of different methodologies whilst maintaining consistency; and the use of uncertainties for prioritising research efforts.

2. Quantifying uncertainties in practice: This group will formulate a proposal for a tiered approach to estimate uncertainties drawing on output from sectoral meetings and results from national studies. It will also try to establish rules for making use of expert judgement and for the harmonisation of expert judgement from sector meetings as well as rules for the combination of uncertainties. It will also complete uncertainty advice where missing in addition to finding agreement on conventions (e.g., standardisation on 95% confidence intervals and standards for direct measurements). Finally, it will work on the assessment of uncertainties in trends and suggest a tabular format for reporting uncertainties.

- 3. QA/QC of inventory systems:** This group will formulate a proposal for QA/QC procedures to be included in good practice in inventory management, taking into account international standards and allowing for central archiving, decentralised archiving, and archiving for confidential review. The proposal should also reflect the requirements for auditing, the relationship to UN-FCCC reporting guidelines and review procedures, and the need for central co-ordination to ensure consistency on data inputs throughout inventory calculations
- 4. Methodological choice:** This group will formulate a proposal for the general rules, including the definition of major sources (for which detailed methods appropriate) and small sources (for which simpler methods may be used) taking account size and rate of change of emissions from source. It will also define when a change of methodology is appropriate – because better data became available or because mitigation technologies were introduced. It will also outline practical rules for splicing methodologies whilst maintaining time series consistency. Finally, it will consider the reporting of methodological choice including decision tree indexing and tabular format.
- 5. Checks and verification at national and at international level:** This group will make a proposal of the verification systems for GHG Inventories. It should discuss their relevance to inventory management of reference calculations, comparisons of emission factors, independently compiled estimates, and atmospheric measurements. It should also contain the reporting results of checks and verification
- Glossary:** There will not be a separate group for the glossary but input will be requested from the break out groups.

