

INTRODUCTION OF DOCUMENT FOR THE WORKSHOP (NOTE BY SECRETARIAT)

**Third Workshop on the Revision of the UNFCCC Annex I Reporting Guidelines for
Reporting of Inventories under the Convention**

Bonn, Germany, 24-25 March 2011



Astrid Olsson, Programme Officer and Sevdalina Todorova, Consultant
UNFCCC secretariat, RDA

OUTLINE OF PRESENTATION

- SBSTA 32 and 33
- Introduction of document
 - a) General
 - b) Guidelines text
 - c) CRF tables



SBSTA 32 (JUNE 2010) (I)

- Agreed on the process and timeline of the work programme ✓
- Requested the secretariat to organise the second WS under the work programme ✓
- On IPCC matters
 - a) Noted the IPCC work on tier 3 methods and complex approaches ✓
 - b) Invited the IPCC to present at the WS 2 the report on the workshop on managed land and the meeting on tier 3 methods and complex approaches ✓
 - c) Invited the IPCC to organise a meeting on HWP, wetlands and N₂O emissions from soils ✓
- Invited Parties to submit further views on the revision of the UNFCCC GL (FCCC/SBSTA/2010/MISC.7, Add.1 and 2) ✓



SBSTA 32 (JUNE 2010) (II)

- Requested the secretariat to
 - a) Prepare an annotated draft of the revised UNFCCC GL for initial discussion by the WS 3 and then for consideration by SBSTA34
 - b) Organise the WS 3
 - c) Commence, in 2010, a preparatory technical assessment of the upgrade of the CRF software
- Invited Annex I Parties to support the work programme activities
- Acknowledged the need for capacity building



SBSTA 33 (DECEMBER 2010) (I)

- Requested the secretariat to
 - a) Organize, subject to the availability of resources, a third workshop under the work programme, to be held in early 2011. It agreed that the workshop should address the annotated draft of the revised UNFCCC Annex I reporting guidelines. It further agreed that the report on the workshop shall be considered by the SBSTA at its thirty-fourth session
 - b) Organize, subject to the availability of resources, a fourth workshop under the work programme, to be held in the second half of 2011
 - c) Initiate, subject to the availability of resources, the preparatory work on upgrading the common reporting format (CRF) software (i.e. CRF Reporter) with a view to completing this work by October 2012, subject to a decision being taken on the CRF tables by the Conference of the Parties at its seventeenth session



SBSTA 33 (DECEMBER 2010) (II)

- Agreed that
 - a) In the revised UNFCCC Annex I reporting guidelines, the agriculture sector and the LULUCF sector should continue to be separate as in the current UNFCCC Annex I reporting guidelines. The SBSTA further agreed that separate reporting of agriculture and LULUCF requires an allocation of the AFOLU categories in the 2006 IPCC Guidelines to the agriculture and LULUCF sectors with a view to ensuring completeness and avoiding duplication of reporting of individual categories and/or sub-categories. The SBSTA also agreed that this may include revisiting the allocation of categories in the current UNFCCC Annex I reporting guidelines.
 - b) Parties included in Annex I to the Convention should continue reporting precursor gases.



INTRODUCTION OF DOCUMENT (I)

- Prepared on basis of
 - a) Current "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories"
 - b) Reporting and review experience
 - c) Parties' submissions (SBSTA 30–SBSTA 33)
 - Document contains 4 parts (1 note, 3 annexes)
 - a) Note – Introduction of suggested changes and rationale for them
 - Views by Parties
 - Background information
 - Proposed modifications
 - Issues for further discussion during the workshop
 - b) Annex I – Revised text of UNFCCC Annex I reporting guidelines
 - c) Annex II – Parts of submission of Australia on how to map AFOLU categories to agriculture and LULUCF
 - d) Annex III – CRF tables
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INTRODUCTION OF DOCUMENT (II)

- Current reporting guidelines cover
 - a) Objectives
 - b) Principles and definitions
 - c) Context
 - d) Base year
 - e) Methods
 - Methodology
 - Key category determination
 - Uncertainties
 - Recalculations
 - Quality assurance/quality control (QA/QC)



INTRODUCTION OF DOCUMENT (III)

- Current reporting guidelines cover
 - f) Reporting
 - General guidance
 - Estimates of emissions removals
 - Completeness
 - Key categories
 - Verification
 - Uncertainties
 - Recalculations
 - Quality assurance/quality control (QA/QC)
 - “Adjustments”
 - National inventory report
 - Common reporting format tables
 - g) Record keeping
 - h) Systematic updating of the guidelines
 - i) Language



INTRODUCTION OF DOCUMENT (IV)

- Annotated draft of the revised UNFCCC Annex I reporting guidelines
 - a) Coverage same as current reporting guidelines
 - b) Included in Annex I of document
 - c) Includes suggested modifications
 - Sometimes with different options
 - Option 1: Original text
 - Option 2: Party submission
 - Option 3: Secretariat [+ Party change]
 - Clearly indicates
 - Inclusion of new text (underline)
 - Suggested deletion of text (strike through)
 - Different options in text (in [])



OUTCOME OF WORKSHOP

- Expected outcome
 - a) Going through suggested modifications for text and CRF tables
 - b) Go through discussion points raised in document
 - c) Agree on necessary changes
 - d) Provide further suggestions for modification of text and CRF tables
- Secretariat will after workshop prepare
 - a) Workshop report
 - b) A document for SBSTA 34 containing annotated draft of the revised UNFCCC Annex I reporting guidelines
- These will be further discussed at SBSTA 34



Revision of the CRF tables (I)

Framework

- The current CRF template is to be used as the basis for developing new CRF tables and the revision to the CRF tables should be limited to changes of coverage of sectors, categories and gases introduced by the 2006 IPCC Guidelines. New categories, gases, and some other changes introduced by the 2006 IPCC Guidelines need to be appraised with a view to identifying business logic, mapping and subsequent analysis of the impact on the current CRF tables;
- Current CRF tables are to be reviewed with a view to improving these templates and their elements, and the intended utility of the reporting format tables;
- Agriculture and LULUCF are to continue to be reported separately under agriculture, forestry and other land use (AFOLU)

Revision of the CRF tables (II)

Approach

- Implementing the suggestions by Parties and
- Updating the methodological basis as set in the 2006 IPCC Guidelines

- While:
 - Ensuring comparability of reported data;
 - Keeping as close as possible to the existing table templates;
 - Keeping integrity of the CRF;
 - Integrating gained reporting and review experience ;
 - Improving transparency of sectoral and cross-sectoral reporting;
 - Simplifying reporting requirements where possible.

Output of the work

Explanatory note

Modified CRF tables (annex III of the note)



Revision of the CRF tables - types of modifications (I)

1. Revised CRF tables

TABLE 2(I).A-G SECTORAL BACKGROUND DATA FOR INDUSTRIAL PROCESSES
Emissions of CO₂, CH₄ and N₂O
(Sheet 1 of 2)

Year
Submission
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	ACTIVITY DATA		IMPLIED EMISSION FACTORS ⁽²⁾			EMISSIONS					
	Production/Consumption quantity		CO ₂	CH ₄	N ₂ O	CO ₂		CH ₄		N ₂ O	
	Description ⁽¹⁾	(kt)				Emissions ⁽³⁾	Recovery ⁽⁴⁾	Emissions ⁽³⁾	Recovery ⁽⁴⁾	Emissions ⁽³⁾	Recovery ⁽⁴⁾
		(t/t)			(Gg)						
A. Mineral Products											
1. Cement Production	e.g. cement or clinker production)										
2. Lime Production											
3. Limestone and Dolomite Use											
4. Soda Ash											
Soda Ash Production											
Soda Ash Use											
5. Asphalt Roofing											
6. Road Paving with Asphalt											
7. Other (please specify)											
Glass Production											



TABLE 2(I).A-G SECTORAL BACKGROUND DATA FOR INDUSTRIAL PROCESSES
Emissions of CO₂, CH₄ and N₂O
(Sheet 1 of 2)

Year
Submission
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	ACTIVITY DATA		IMPLIED EMISSION FACTORS ⁽²⁾			EMISSIONS					
	Production/Consumption quantity		CO ₂	CH ₄	N ₂ O	CO ₂		CH ₄		N ₂ O	
	Description ⁽¹⁾	(kt)				Emissions ⁽³⁾	Recovery ⁽⁴⁾	Emissions ⁽³⁾	Recovery ⁽⁴⁾	Emissions ⁽³⁾	Recovery ⁽⁴⁾
		(t/t)			(Gg)						
A. Mineral Products											
1. Cement Production	e.g. cement or clinker production)										
2. Lime Production											
3. Glass Production											
4. Other Mineral Use of Carbonate											
5. Limestone and Dolomite Use											
6. Soda Ash											
Soda Ash Production											
Soda Ash Use											
7. Asphalt Roofing											
8. Road Paving with Asphalt											
9. Other (please specify)											
Glass Production											
Other use of soda ash											
Manufacture of soda ash production											
Other use of carbonate											



Revision of the CRF tables - types of modifications (II)

2. New CRF tables

TABLE 1.C SECTORAL BACKGROUND DATA FOR ENERGY
CO₂ Transport and Storage
 (Sheet 1 of 1)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	ACTIVITY DATA		IMPLIED EMISSION FACTORS		EMISSIONS	
	CO ₂ transported or injected ⁽¹⁾		CO ₂		CO ₂ ⁽²⁾	
	Gg		Gg/Gg		Gg	
1. Transport of CO₂						
a. Pipelines						
b. Ships						
c. Other						
2. Injection and Storage⁽³⁾						
a. Injection						
b. Storage						
2. Other						
Information item^(4,5)						
Total amount captured for storage						
Total amount of imports for storage						
					<i>Total A</i>	
Total amount of exports for storage						
Total amount of CO ₂ injected at storage sites						
Total leakage from transport, injection and storage						
					<i>Total B</i>	
					<i>Discrepancy (A-B)⁽⁶⁾</i>	

⁽¹⁾ Excluding recycled CO₂ for enhanced recovery.

⁽²⁾ Corrected for baseline background fluxes.

⁽³⁾ Fugitive emissions during above ground operations such as processing and CO₂ recycling during enhanced oil and gas recovery operations should be reported as fugitive emissions from oil and natural gas and reported under the appropriate categories for that sector.

⁽⁴⁾ Once captured, there is no differentiated treatment between biogenic carbon and fossil carbon. Emissions and storage of both biogenic and fossil carbon will be estimated and reported.



Revision of the CRF tables - types of modifications (III)

3. Options

TABLE 3.1. SECTORAL REPORT FOR AGRICULTURE
(Sheet 1 of 2)

GREENHOUSE GAS SOURCE AND EMISSION CATEGORIES	CH ₄	N ₂ O	NO _x (CH ₄)	CO ₂	NMVOC
1. Agricultural sources and non-CO ₂ emission sources on land					
1.1. Rice cultivation					
1.2. Enteric fermentation					
1.3. Manure management					
1.4. Field burning of agricultural residues					
1.5. Other (please specify)					
2. Agricultural sources and non-CO ₂ emission sources in the atmosphere					
2.1. Direct N ₂ O emissions from managed soils					
2.2. Indirect N ₂ O emissions from managed soils					
2.3. Direct N ₂ O emissions from animal manure management					
2.4. Other (please specify)					
3. Field burning of agricultural residues					
3.1. Cereals					
3.2. Pulses					
3.3. Other (please specify)					
4. Other (please specify)					

Option 1

Notes: Parties should provide detailed explanations on the agriculture sector in Chapter 6, Agriculture (CRF sector 4) of the NSR. Use the documentation box to provide references to relevant sections of the NSR if any additional information or further details are needed to understand the content of this table.
If emissions are reported under "Other", use the documentation box to provide information regarding activities covered under this category and to provide reference to the section in the NSR where background information can be found.

GREENHOUSE GAS SOURCE AND EMISSION CATEGORIES	CH ₄	N ₂ O	NO _x (CH ₄)	CO ₂	NMVOC
1. Agricultural sources and non-CO ₂ emission sources on land					
1.1. Rice cultivation					
a. Irrigated rice cultivation					
b. Field burning of agricultural residues					
c. Cereals					
d. Pulses					
e. Other (please specify)					
1.2. Enteric fermentation					
1.3. Manure management					
1.4. Field burning of agricultural residues					
1.5. Other (please specify)					
2. Agricultural sources and non-CO ₂ emission sources in the atmosphere					
2.1. Direct N ₂ O emissions from managed soils					
2.2. Indirect N ₂ O emissions from managed soils					
2.3. Direct N ₂ O emissions from animal manure management					
2.4. Other (please specify)					
3. Field burning of agricultural residues					
3.1. Cereals					
3.2. Pulses					
3.3. Other (please specify)					
4. Other (please specify)					

Option 2



Revision of the CRF tables - Groups of tables

- Energy, IPPU, Waste
- AFOLU
- Summary and cross-sectoral tables



Revision of the CRF tables – Energy, IPPU, Waste (I)

Energy

Modest modifications – in the category and fuel lists. Only one completely new table (CO_2 transportation and storage).

Discussion issues:

Reporting of feedstock and non-energy use of fuels and reflecting the decision in the relevant tables: (Options exist. Verification needed (proposed revision of table 1.A(d) or IPCC table 2.12

IPPU Background Table: Allocation of CO_2 emissions from Non-Energy Use of fossil fuels)

Finalization of the category tree: level of details, non standard IPCC categories to be included (e.g. sub-category for reporting combustion emissions related to oil and gas extraction under Other Energy Industries; Coke Production and Charcoal production under solid fuel transformation).

Finalization of the list of fuels and fuel groups: (e.g. biofuels, peat, derived gases).

Reporting waste fuel: (cross-sectoral issue + biomass and fossil fraction).

Refinement of the comparison between the sectoral and reference approaches.

Usefulness of IEFs for fugitive emissions (oil and natural gas).

Revision of the CRF tables – Energy, IPPU, Waste (II)

IPPU

Modifications in the category structure. Joining IP and Solvents and other product use in one sector. Inclusion of new F-gases and sources.

Discussion issues:

CO₂, CH₄ and N₂O:

Reporting of feedstock and non-energy use of fuels and reflecting the decision in the relevant tables

Finalization of the category tree (level of disaggregation)

Usefulness of IEFs

F-gases:

Nomenclature and aggregation of F-gases

New table for reporting F-gases suggested

Potential emissions



Revision of the CRF tables – Energy, IPPU, Waste (III)

Waste

Modifications in the category structure. One new table (*Biological Treatment of Solid Waste*)

Discussion issues:

New and revised tables: (suggested templates to be considered and modified as needed)

Energy recovery: (defining an approach allowing transparent cross-sectoral reporting)

Additional information boxes: (to be considered and removed, as appropriate)

Units: the units for the IEF to be defined.

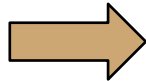


Revision of the CRF tables – AFOLU (I)

Agriculture/LULUCF

Joining of the Agriculture and LULUCF into one sector in the 2006 IPCC guidelines

Consensus of the Parties that Agriculture and LULUCF should be reported and accounted separately under AFOLU sector



- Importance of mapping of the categories and keeping the time series consistency
- Splitting the new category
3.C. Aggregate sources and non-CO2 emissions sources on land

Revision of the CRF tables – AFOLU (II)

2006 IPCC categories	CRF categories
3. AFOLU	4. Agriculture
A. Livestock	A. Enteric Fermentation
1. Enteric Fermentation	B. Manure Management
2. Manure Management	C. Rice Cultivation
B. Land	D. Agricultural Soils
1. Forest land	E. Prescribed Burning of Savannas
2. Cropland	F. Field Burning of Agricultural Residues
3. Grassland	G. Other
4. Wetlands	5. Land Use, Land-Use Change and Forestry
5. Settlements	A. Forest Land
6. Other Land	B. Cropland
C. Aggregate sources and non-CO2 emissions sources on land	C. Grassland
1. Emissions from biomass burning	D. Wetlands
2. Liming	E. Settlements
3. Urea application	F. Other Land
4. Direct N2O Emissions from managed soils	G. Other
5. Indirect N2O Emissions from managed soils	HWP
6. Indirect N2O Emissions from manure management	
7. Rice cultivations	
8. Other (please specify)	
D. Other	
1. Harvested Wood Products	
2. Other (please specify)	



Revision of the CRF tables – AFOLU (III)

What was done:

- Proposed approach to split AFOLU to Agriculture and LULUCF, but still keeping information at the AFOLU aggregate level (one of the numerous options)
- Two options for structuring the AFOLU reporting suggested
- Suggested new tables and revisions of existing tables

Revision of the CRF tables – AFOLU (IV)

Option 1	Option 2
Table 3 AFOLU (new)	Table 3 AFOLU (new)
	Table 3.C.1 Emissions from biomass burning (CRF tables 4.E, 4.F and 5(V))
	Table 3.C.2-8 Aggregate sources and non-CO ₂ emissions sources on land (combined CRF tables 4.C, 4.D, 5(I)-(IV) + new elements)
Table 3(I) Agriculture (old table 4)	Table 4 Agriculture
Table 3(I)A.1 Enteric Fermentation (CRF 4.A)	Table 4.A Enteric Fermentation
Table 3(I)A.2a+b Manure Management (CRF 4.Ba+b)	Table 4.Ba+b Manure Management
Table 3(I)C.1.a Prescribed Burning of Savannas (CRF 4.E)	
Table 3(I)C.1.b Field Burning of Agricultural Residues (CRF 4.F)	
Table 3(I)C.4-6 Direct and indirect N ₂ O emissions from Agricultural Soils and Manure Management (part of old CRF 4.D)	
Table 3(I)C.7. Rice cultivations (CRF 4.C)	
Table 3(II) LULUCF	Table 5 LULUCF
Table 3(II)B Land transition matrix	Table 5.1 Land transition matrix
Table 3(II)B.1 Forest land (CRF 5.A)	Table 5.A Forest land
Table 3(II)B.2 Cropland (CRF 5.B)	Table 5.B Cropland
Table 3(II)B.3 Grassland (CRF 5.C)	Table 5.C Grassland
Table 3(II)B.4 Wetlands (CRF 5.D)	Table 5.D Wetlands
Table 3(II)B.5 Settlements (CRF 5.E)	Table 5.E Settlements
Table 3(II)B.6 Other Land (CRF 5.F)	Table 5.F Other Land
Table 3(II)C.1 Emissions from biomass burning (CRF table 5(V))	
Table 3(II)C.2-8 Aggregate sources and non-CO ₂ emissions sources on land (new)	
Table 3(II)D Harvested wood products	Table 5.? Harvested wood products



Revision of the CRF tables – AFOLU (V)

Discussion issues:

General

Mapping: decision on the mapping of the new AFOLU sector between agriculture and LULUCF and how it would be reflected in the sectoral reports for the LULUCF and agriculture sectors. Clear split of category 3.C Aggregate sources and non-CO2 emissions sources on land reporting between agriculture and LULUCF and reflecting of the split in the sectoral reports, SBDTs and in the aggregation rules.

New and revised tables (considering suggested templates and modifying them as necessary).

Agriculture

Nomenclature: List of MMS and animals

Additional information tables: Which of them to be kept and what to be modified

LULUCF

Reporting at national/land category level for 3.C categories

Usefulness of IEFs: for the IEFs in the carbon stock changes tables and for IEFs for biomass burning



Revision of the CRF tables – Summary and cross-sectoral tables

Not a priority at this stage since those depend on decisions to be taken for the sectoral tables and decisions on the accounting

Discussion issues:

General issues: accounting issues (e.g. Reporting indirect CO₂ and N₂O emissions; GHG total; coverage of F-gases; AFOLU accounting)

Finalization of the category tree for the summary tables: propagating the change in all relevant summary tables.

Which tables and for which years to be included in an annual submission.

Considering the need for new tables – e.g. uncertainty, verification (cross-sectoral) tables

Table specific issues: Table Summary 3: (simplification); Table 7: (removal); Table 8: (threshold); Table 9: (info moved to SBDTs); Table 10: (year coverage)

Revision of the CRF tables

For further implementation:

- a) Changing the category numbering;
- b) Formatting the tables ;
- c) Fixing the shading of the tables;
- d) Fixing the text of existing footnotes;
- e) Adding new footnotes;
- f) Setting default AD in some cases (if agreed);
- g) Fixing the text of the documentation boxes in line with the new structure of the tables and the NIR and the new reporting requirements;
- h) Ensuring consistency between sectoral and cross-sectoral tables.
- i) ...



Thank you!

Productive workshop!

