Task Force on Emission Inventories and Projections

Proposed revision of the 2009 LRTAP Emission Inventory Reporting Guidelines

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Reasons for updating the 2009 Guidelines

- To implement recent changes arising from recent amendments of LRTAP protocols, but noting these amendments have not entered into force:
 - Gothenburg (2012) (e.g. mandatory IIR and PM_{2.5} reporting, voluntary BC reporting, adjustments etc)
 - Heavy metals (2012)
 - POPs (2009 PCBs)
- To ensure improved information on emissions is available for the work of EMEP and the Convention by strengthening quality requirements and best practice requirements
- To implement changes agreed to the EMEP grid by the Executive Body
- To ensure continued alignment with forthcoming UNFCCC/IPCC changes for post-Kyoto CP1 (note: to be agreed at COP19)
- To simplify current text and to correct errors in the existing Guidelines



General principles in the revision process

- New reporting requirements are limited to the politically-agreed Protocol changes. Definitions or requirements are not re-written
- Ensure continued alignment with new UNFCCC definitions on notation keys, TCCCA, and general CRF/NFR alignment
- The proposed Guidelines text has been amended to create a selfstanding legal document. Supplementary (and now out-dated) EB decisions defining various aspects of reporting may therefore be rescinded (i.e. 2002/10, 2005/1, 2008/16)
- The current proposal represents the views of the TFEIP following its May meeting, subsequent contributions from an ad-hoc group of Parties, and consultation with the centres MSC-E and MSC-W



Process and next steps

- 1. Draft Guidelines and annexes submitted to EMEP SB
- Subsequent amendment and update after EMEP SB. Written comments welcomed by 30 September 2013 to Secretariat and TFEIP co-chairs
- 3. Legal check of Reporting Guidelines text
- 4. Translation of Guidelines and Annexes for submission to Executive Body in Dec 2013 (some detailed NFR changes in the Annex I reporting template may need to await UNFCCC COP decisions in late November 2013)
- 5. Publishing by UNECE/CEIP in early 2014 for implementation by Parties from 2015 onwards



Key changes - structure

Guidelines:

- Information on definitions contained in one 'definitions' section (previously provided throughout the Guidelines text and in annexes)
- New section on 'reporting of adjusted national inventories' added

Annexes

- Information to be reported annually is grouped in Annexes I-IV (templates for emissions, projections, IIR and notification form)
- Information to be reported less frequently is grouped in Annex V-VII (gridded emissions, large point sources, and adjustments summary template



Key changes – quality criteria and notation keys

Paragraph 4. Quality criteria 'TCCCA'

 Updated definitions added from the Revised UNFCCC Reporting Guidelines (Decision 15/CP.17)

Paragraph 11. Notation key definitions

- Updated definitions of notation keys added from the Revised UNFCCC Reporting Guidelines (Decision 15/CP.17)
- The UNFCCC definition of 'Not estimated' introduces a significance threshold above which emissions may not be reported as NE. Use of a similar threshold was discussed but not supported by TFEIP
- Use of notation keys for reporting national totals. The Secretariat notes that some Parties use NE to report national totals where values are formally required under Protocol commitments. Is additional guidance on this needed?



Key changes - substances

Improved distinction between mandatory and voluntary reporting

Paragraph 6. Substances for mandatory reporting

- Sulphur dioxide and sulphur oxides (SO₂ and SO_x)
- Nitrogen oxides (NO_x)
- Ammonia (NH₃)
- PM_{2.5} and PM₁₀
- Carbon monoxide (CO) (not covered by any protocol)
- Cadmium (Cd), mercury (Hg) and lead (Pb)
- PAHs, dioxins/furans, PCBs, HCB

The original Gothenburg protocol required reporting for sulphur (defined as including all sulphur compounds expressed as SO₂). But the amended Gothenburg protocol now requires Parties to establish and report emission inventories just for 'SO2', not sulphur. Ceilings for 2010 and 2020 are now similarly defined as SO2 and not SOx.

Key changes - substances

Paragraph 7. Voluntary reporting

- black carbon (as per amended protocol text support to strengthen reporting requirement?)
- total suspended particulate matter (TSP)
- additional heavy metals (As, Cr, Cu, Ni, Se, Zn)
- The TFEIP questioned whether the emission data for all these substances are in fact used within the Convention? If not, some might be removed from the list of voluntary reporting. On balance it was preferred to retain their inclusion but stress the voluntary nature of reporting for these additional substances.
- The TFEIP also considered the addition of benzene to the list of substances for which reporting is voluntary, but this was not supported.



Key changes - Methods

General – paragraph 18 and onwards

- There is significant support within TFEIP to clarify and strengthen the reporting requirements by changing many of the present 'shoulds' (i.e. voluntary) to 'shalls' (i.e. mandatory).
- This will improve clarity on expectations from Parties and align also with long-established reporting practices under UNFCCC. It will further improve the consistency, comparability and transparency of emission information available under EMEP and thus assist in improving assessment activities
- Protocol legal aspects may need to be considered
- No change: All parties SHALL report transport emissions on 'fuel sold' basis.
 IN ADDITION, Parties may report on a fuel 'used basis' and certain Parties to have this data used for compliance purposes.
- Are there instances where the proposed 'shalls' are considered inappropriate?

Paragraph 37. Years for emission inventory reporting

- Change of first year of mandatory reporting from 1980 to 1990 for main pollutants, HMs and POPs, as well as the reference year(s) where applicable for Parties.
- PM 2.5 and PM10, and where available BC emissions, shall be reported from 2000 onward
- Parties may voluntarily report earlier years
- All years in the time series must be reported and not only the latest year (as at present). Significant quality issues in timeseries presently occur because Parties do not follow the Guidelines and EMEP/EEA Guidebook by ensuring they report consistent timeseries. Again this change is consistent with established UNFCCC practices.



Paragraph 40(a). Reporting deadlines.

EMEP/CEIP proposes changes to the reporting deadlines.

- Emission inventories and projections from 15 Feb to 1 Feb (and allowing a 2 week resubmission 'window').
- Gridded data and LPS data from 1 March (same date)
- Informative Inventory Report (IIR) 15 March (same date)
- There were mixed views from TFEIP, while appreciating the need that improved timeliness of data is required for the centres to perform their activities.
- One option supported by a number of countries is retaining 15 Feb for reporting, but with no resubmission window. Late submissions would not be accepted by CEIP. (it is noted that the timeliness of CLRTAP submissions is poor compared to UNFCCC, where reporting deadlines are much more strictly observed by Parties and enforced)



Paragraph 40(b). Reporting formats.

- Use of the latest reporting template becomes mandatory. Data submitted in old or incorrect templates will not be accepted by CEIP – Parties will have to resubmit in the correct template.(new)
- An informal transitional period (suggested 1 year) could give Parties flexibility in changing to the new template.
- This reduces resource requirements for CEIP much unnecessary time is presently spent by CEIP converting old data formats to NFR09. It also improves the comparability of data received from Parties and aligns CLRTAP with standard practices under UNFCCC for GHG inventory reporting by Annex I parties, where any data reported in non-approved formats is not accepted by the Secretariat.



Paragraph 40(b). Reporting formats – changes to the Nomenclature For Reporting (NFR)

 UNFCCC has agreed a new CRF coding system for emission sources for 2015 reporting onward.

_	Current NFR09	Changes NFR14	ion
	1 Energy	1 Energy	osed
	2 Industrial process		emplate)
-	3 Solvent and product use	-	
	4 Agriculture	3 Agriculture	
	6 Waste	5 Waste	
	7 Other	6 Other	
	11 Natural sources	11 Natural sources	



Paragraphs 42-46. Reporting frequencies

- i. Annual reporting:
 - Emission inventories and accompanying activity data of mandatory pollutants, and where available BC and other voluntary pollutants
 - New. Parties shall regularly update and annually report 'latest available' projections for years 2020, 2025, 2030 and where available 2040 and 2050 (only for substances having ceilings/reduction commitments and where available BC). Includes mandatory reporting of underlying projection parameters.
 - Informative inventory report (IIR)
- Note there is no requirement that projections be updated annually, only 'regularly' updated. The latest available projections should however be reported each year (even if unchanged). Annual/biennial?
- Require projections of other substances? (HMs, POPs?). Who would use this data? Who uses the projection data for main pollutants?

Paragraph 47. Reporting frequencies

- i. Five yearly change to two-yearly reporting
 - Gridded data
 - LPS data
 - For all mandatory substances and BC where available for gridded data
- LPS data stack heights. The TFEIP has been surprised to learn that the EMEP Centers MSC-W and MSC-E are not using the stack height data currently required from Parties. The TFEIP requested the Steering Body to consider if this information should continue to be compulsorily reported in the future, or if such information might be better voluntarily reported on a one-off basis if it should ever be needed in the future.



Key changes – Reporting of 'adjusted' national inventories

Paragraph 36.

- The revised Guidelines presently only include information relevant to the reporting of 'adjusted' emission inventories (i.e. only information expected as part of regular inventory submissions once an 'adjustment' application has been approved).
- Information on the one-off application process needed for each adjustment is not presently included – these requirements are already specified in detail elsewhere in EB decisions (2012/3 and 2012/12).
- Is the text on adjustments satisfactory? Should all information on processes relating to adjustments be included (e.g. the application process) even if this leads to substantial repetition of information across different official documents?



General questions

- Is further clarification required in the Guidelines on accounting in national inventories of:
 - Intentionally vs. unintentionally produced emissions (e.g. accidental emissions, fires etc)
 - Anthropogenic vs. non-anthropogenic: make it (even more) explicit in the text that reporting of all anthropogenic emissions are required, including agricultural crop emissions of NMVOC, NOx from agricultural soils etc.?)



Thank you for your attention

