



Overview of the specific LULUCF issues in EU MS based on latest EU QA/QC and UNFCCC/KP review

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Findings from EU QAQC 2013

Un-resolved issues:

- mismatches between NIR2 and background tables (BG, RO, ESP)
- 3.3 offset not activated (LV)

Partially resolved:

- mismatches of organic soils area under 5B,C and Table 4.Ds1 – (see further Agenda item on this)
- KP CRF for 1990 filled in with not-elected activities data (NA should be used for irrelevant data)
- mismatches between area of conversions from forest reported under convention and KP (NLD, SI)



Issues highlighted over 2013 review week of the EU

- 5F was a key category in the EU GHG inventory (by PT-increasing area of 5F2 and FR – large interannual variation of 5F2.1)
- Inappropriate use of notation keys (non transparent justification, also for “not a source”)
- Tables mismatches: NIR2 ≠ background tables
- More transparent reporting of requirements under D16

Issues from annual improvement plan for EU inventory

- Uncertainty estimation for both UNFCCC and KP LULUCF



MS's Saturday papers

2 MS (1 of EU15) (total of 8 issues)

Activity	Problem identified
ARD & FM	Reporting ' NO ' or inconsistent or non-transparent method for C stock change in Living Biomass pool
5(KP-II)4	CO2 emissions from liming of deforested lands
5(KP-II)5	Misallocation of GHG emissions from forest fires



MS's KP LULUCF lists

10 MS from EU28 (2 from EU 15) = 33 issues

(Potential) problem identified

Missing systematic QA/QC
 Non-transparent NIRs,
 "IE" of some DW in LB loss,
 Inconsistent methods for C pools (LB) and not a source (SOC, DW, LT),
 Missing data on loss from disturbances,
 Neglect of preexisting vegetation in CL converted FL,
 Underestimation of N2O emissions from SOM in land conversions,
 NE for N2O from drainage of FM soils,
 Misallocation of GHG emissions from fires,
 Under/over estimation of lime emissions on D lands,
 Reporting inconsistent with art 4 of Annex to 16/CMP 1,
 Land tracking and identification,
 Lack of demonstration of dhi,
 Underestimation of AR area,
 Inconsistent application of forest definition



EU's KP list

EU's KP list (total of 21 issues)

Potential issue

FM and AR sinks estimated based on their area share (IT)
 LT, DW reported as NE (NLD, ESP) or blanks (GRC)
 Carbon emissions from lime application (ESP) (see later presentation)
 Belowground biomass reported as NE (FIN)
 Litter reported as NE in FL converted to peatlands (FIN)
 NE for N2O emissions from disturbance associated with land-use conversion to cropland on mineral and organic soils (BEL, FRA)
 Carbon emissions from lime application (ESP)
 NE for LT (GRC, ESP), DW (GRC, ESP) and SOC min (GRC, ITA, ESP)
 NE for N2O from drainage of soils (FIN)
 Carbon emissions from lime application (ESP)
 LT and DW reported as NE (ESP)
 Carbon emissions from lime application (ESP)
 CO2, CH4, N2O from biomass burning as NE (AR-NLD, D-FIN, FM-ESP)
 Additional documentation may be needed to justify the use of the notation key "NO" on some lands, in some Member States (e.g. AUT, BEL, FRA, GRC, ITA, LUX, PRT, ESP is reported for ARD on organic soils).



EU's KP list – way forward and potential consequences

- Demonstration of "not a source" (or, not enough transparent and verifiable). This would have negligible accuracy impact (or national system issue) on the EU15 estimate.
- "Not estimated" for required sink/sources:
 - 'LT in conversions from forest on organic soils' on reason that method is not available. Requirements are defined in GPG for LULUCF, 2013 (para 2, 4.2.3) and methods should be set according to the sentence 1 of para 5 in section 4.2.6.3. Since NE associates with underestimation of emissions it may have an accuracy impact for MS and EU15 so it can be a case of gap-filling if not quantitatively estimated by the MS or demonstrated it is "not a source".
- "Not estimated" when a GPG method is missing:
 - "N2O emissions from forest drainage" method is provided in Appendix 3a2.1 (so voluntary). Participants required more guidance, possibly from next Lead Reviewer meeting (please also see next presentation by Blujdea et al. on "Consistent reporting and accounting of N2O emissions from organic soils, liming and fires")
- Underestimation of GHG emissions (generally negligible, probably wildfire emissions more relevant for 1MS). EU has to proceed to gap-filling
- Some likely minor issues with negligible or no impact on accuracy: additional documentation when reporting notation keys



General issues on EU's submission

ERT 2013 also noticed:

- **Inconsistency within NIR** (CRF, figures vs. text)
- **Justifications for NE's** have been improved but not complete, e.g. for:
 - area of conversions to OTL
 - reasons for annual fluctuations (descriptive)
 - verifiable demonstration of not a source not enough transparent
- **Low tiers** are generally used for conversions (especially from/to CL, GL)
- Need of more **description** and tables to **compare with previous submission**

ERT recommended to **improve transparency** on specific issues and to **work with MS** to harmonize the reporting

Improvements were also commended and highlighted by ERT (on general consistency and transparency, text information on recalculations)!



Conclusions and Recommendations

- This is final reporting under CP1 of KP
- Follow recommendations in the latest UNFCCC review reports
- Transparency of submissions is crucial (e.g. complete information, functional on-line links), especially useful if a centralized review
- Transparently explain any NE (by note in CRF, support info in NIRs)
- "Not a source" – quantitative data and information, Tier 1 assumptions is not enough
- Check overestimation of removals and underestimation of emissions by comparison in GHG locator (UNFCCC reviewers) or UNFCCC web site (GHG data): <http://unfccc.int/di/FlexibleQueries/Event.do?event=go>
- Next EU's QAQC: 15 January 2014 on