

EU GREENHOUSE GAS EMISSION INVENTORY

EU GHG inventory is unique! ~ compilation and review

- ❑ The EU GHG inventory: 2 submissions to UNFCCC
 - i. EU-27 ~ UNFCCC [26 MS 'Annex I' + Cyprus 01/01/13]
 - ii. EU-15 ~ Kyoto Protocol

- ❑ 3 pillars/instruments to make things work!
 - i. Legal basis: EU GHG Monitoring Mechanism Decision
 - ii. Institutional arrangements: EU National System for GHG inventories
 - iii. EU's WG1 of the Climate Change Committee: 27MS + EU National System

Effective cooperation/coordination between EU & MS is essential!

Reporting obligation under the EC GHG Monitoring Mechanism

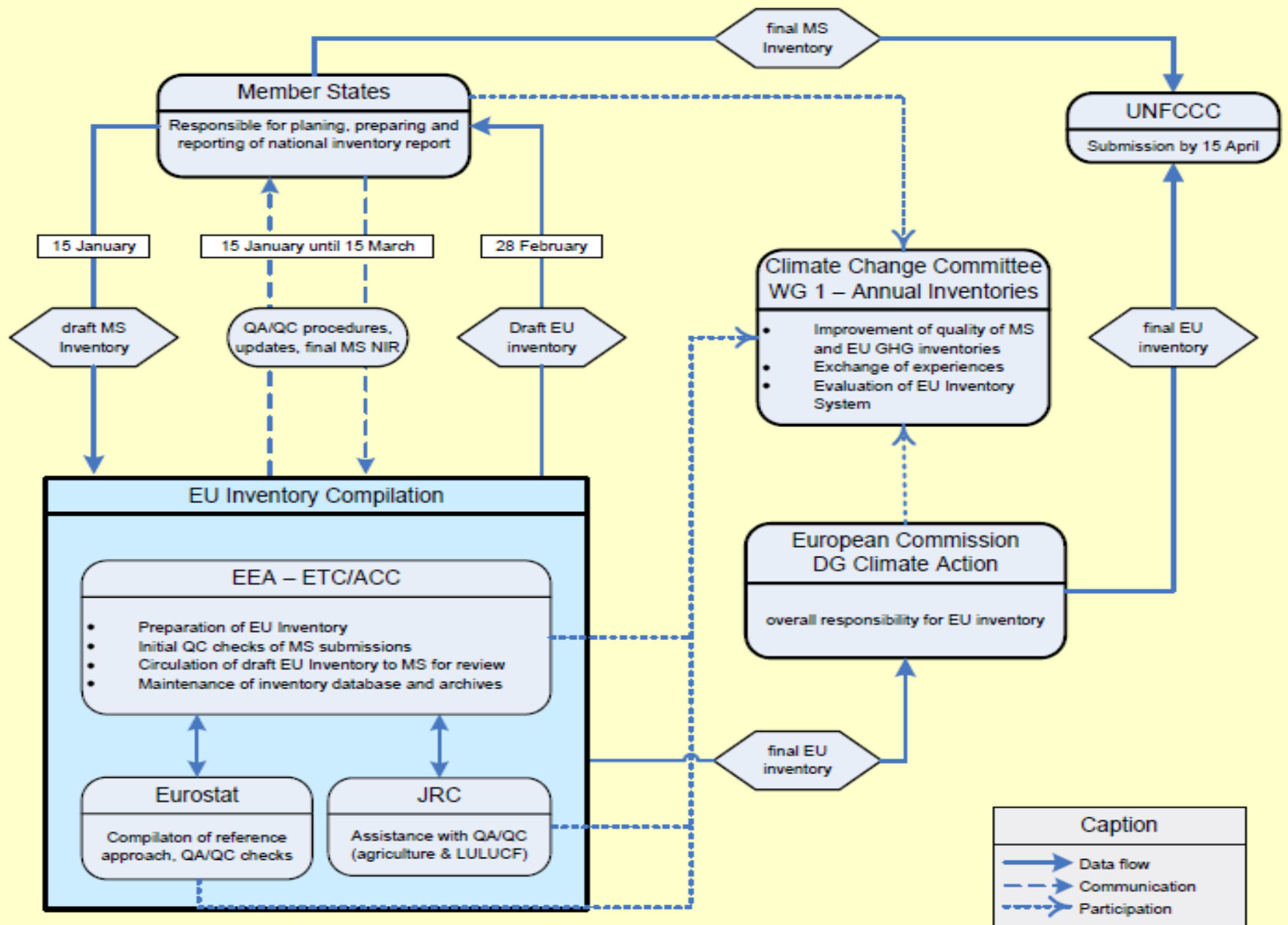
Legal basis:

- Council Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol
 - Includes reporting requirements in particular Article 3.1 (GHG emission inventories) and Article 3.2 (GHG projections)
- Commission Decision 2005/166/EC laying down rules implementing Decision No 280/2004/EC
 - Includes details for reporting requirements and time schedule e.g. Annexes I-VI

Who is the EU's National Inventory System?

- ❑ European Environment Agency <http://www.eea.europa.eu/>
'Inventory Agency': Coordination role in compilation & implementation of QA/QC Programme
- ❑ **European Topic Centre on Air Pollution and Climate Change Mitigation**
<http://acm.eionet.europa.eu/>
EEA's right hand: technical compilation & QA/QC (Umweltbundesamt in Vienna)
- ❑ DG Joint Research Centre
Agriculture and LULUCF
- ❑ DG Eurostat
IPCC reference approach for CO2 emissions from fossil fuel combustion
- ❑ DG CLIMA
European Commission's official submission to UNFCCC on behalf of the EU
- ❑ and ... 27 EU Member States!
Full consistency between the EU GHG inventory and MS GHG national inventories

Inventory System of the European Union



The process of compiling the EC inventory 1/2

* IPCC Guidance QA/QC

* EU legislation: EU GHG Monitoring Mechanism Decision and its Implementing Provisions

□ 15/01 > Draft GHG inventory submissions by MS

□ 15-01/28-02 > ‘initial QA/QC checks’ of MS Draft submissions

1. ‘Status Reports’: completeness & recalculations (Tier I, general QC procedures)
2. ‘Consistency Reports’: sectoral QA/QC checks (Tier 2, source category-specific QC procedures)

□ 28-02/15-03 > Consultation EU-MS experts on the ‘initial checks’

□ 15-03 > Final GHG inventory submissions under MMD

The process of compiling the EC inventory 2/2

- ❑ 15-03/end March > ‘additional QA/QC checks’ of MS 15-03 submissions
 1. Follow-up to ‘Consistency Reports’: issues for clarification
 2. Description of methodological changes and recalculations in MS NIRs
 3. Description of how MS have dealt with previous UNFCCC recommendations
 4. Preparation of missing GHG estimates by MS (gap-filling)
- ❑ 15-04 > Draft submissions of MS and EU GHG inventories to UNFCCC
- ❑ 15-04/15-05 > Potential resubmissions by some MS
- ❑ 27-05 > Final submissions of (some) MS and the EU to UNFCCC
- ❑ End May / early June > EEA publication ~ communication aspect
 1. Full GHG inventory submission (NIR and 26 Annexes, EU-15 & EU-27)
 2. Press release
 3. Analysis ‘Why did greenhouse gas emissions fall/increase in the EU in t-2?’
 4. Updated ‘GHG data viewer’ (32 EEA member countries)
<http://dataservice.eea.europa.eu/PivotApp/pivot.aspx?pivotid=475>

Objectives of the QA/QC Programme

The EU's National Inventory System established the *EU QA/QC Programme*: Four key objectives:

1. The EU inventory should be fully consistent with MS inventories!!!
2. To contribute to the improvement of quality of MS inventories
3. To assist MS in the implementation of QA/QC programmes
4. Development of a QA/QC Plan and quality objectives

Quality objectives in the EU GHG inventory

- ❑ Overall objective: Implementation of the UNFCCC/KP and conformity with UNFCCC & IPCC Guidelines
- ❑ Quality principles are defined in the UNFCCC Reporting Guidelines (TACCC)
 - i. Transparency: Clear assumptions and methodologies
 - ii. Accuracy: unbiased estimates reflecting true emissions (no systematic error) + reduce uncertainty (improve precision)
 - iii. Consistency: Over all its elements and over time (time series)
 - iv. Comparability: Spatial, through agreed methodologies
 - v. Completeness: All countries + all sources & gases
 - vi. + Timeliness: Process for EU (internal) inventory compilation moved 3 months forward compared to official submissions to UNFCCC

The quality of EU GHG estimates reflects the quality of MS GHG estimates!

Similarities between Air pollutants and GHG inventory

- Activity data
- Underlying methods
- QA/QC
- Key category analysis
- Uncertainty analysis
- NIR and IIR

Contact & Information

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