



Main Developments in the M&R Regulation

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**Compliance Forum Event, Compliance Challenges for
2013 and Beyond: Making it Simpler, more Efficient,
more Effective, Brussels, 7-8 February 2012**



Overview

- *Summary of some of the more significant developments under the proposed M&R Regulation (MRR)*
- *Attention regarding immediate challenges for MS for 2013 and beyond*
- *Note of potential priorities for guidance*
- *Guidance is required to support simpler, more efficient and more effective implementation of the MRR*

GOOD REGULATION IS HALF THE STORY - GOOD GUIDANCE ALSO REQUIRED



MRR compared to the MRG

- *Clarification of areas of confusion*
- *Requirements encouraging greater consistency*
- *Requirements encouraging greater efficiency*
- *Requirements encouraging greater fairness*
- *Simplifications to improve cost-effectiveness*
- *Approaches that have worked well are kept*
- *Reduction of duplications*
- *Clearer identification of responsibilities*
- ***Need for supplementary guidance***

MRR Chapters

- I General Provisions*
- II Monitoring Plan*
- III Monitoring of Emissions of Stationary Installations*
- IV Monitoring of Emissions and Tonne-kilometre Data from Aviation*
- V Data Management and Control*
- VI Reporting Requirements*
- VII Information Technology*
- VIII Final Provisions*



MRR Annexes

- I Minimum content of the Monitoring Plan*
- II Tier thresholds/requirements for calculation-based methodologies related to installations*
- III Monitoring methodologies for aviation*
- IV Activity-specific monitoring methodologies related to installations*
- V Minimum tier requirements for calculation-based methodologies*
- VI Reference values for calculation factors*
- VII Minimum frequency of analyses*
- VIII Measurement-based methodologies*
- IX Minimum data and information to be retained*
- X Minimum content of annual reports*



Chapter I: General Provisions

Section 1: Subject Matter, scope and **definitions**

Section 2: General Principles:

- Article 4 (General obligation): ***Operators and aircraft operators shall carry out their obligations related to monitoring and reporting of greenhouse gas emissions under Directive 2003/87/EC in accordance with the principles laid down in Articles 5 to 9.***
- Article 5: Completeness; 6: Consistency, Comparability and Transparency; 7: Accuracy; 8: Integrity of methodology; 9: Continuous improvement approach
- Article 10: **Coordination (of CAs)**





Chapter II: Monitoring Plan: Articles 11-18

- *All operators/AOs require CA approved MPs*
- *MP shall consist of a detailed, complete and transparent documentation of the monitoring methodology*
- *At least the elements laid down in Annex I*
- *Supplementary requirements:*
 - ✓ *Written procedures*
 - ✓ *Evidence of compliance with uncertainty thresholds*
 - ✓ *Risk assessment – evidence of control activities appropriate to the risks identified*
- ***NEEDS TO BE IN PLACE BY 1st JANUARY 2013!***





Annex I: Minimum Content of the Monitoring Plan

Part I: Installations:

- *General information: description of installation, activities, source streams, emission sources, procedures*
- *Details of calculation-based methodology: formulae, tiers, measurement systems, calculation factors, analysis methods, sampling plan (procedures), laboratories*
- *Additionally: details of fall-back methodology, measurement-based methodology, N₂O methodology, PFC methodology, inherent and transferred CO₂ methodology*

Part II: Aviation emissions

Part III: Aviation tonne-kilometre data





Article 12(2): Procedures

- *The operator/AO shall establish, document, implement and maintain procedures (as required under Annex I)*
- ***Summary details required in the MP:***
 - ✓ *Title*
 - ✓ *Traceable and verifiable reference (to identify the procedure)*
 - ✓ *Identification of responsible posts/departments*
 - ✓ *Brief description*
 - ✓ *Location of relevant records and information*
 - ✓ *Identity of relevant IT system*
 - ✓ *List of relevant ENs/other standards*





Article 13: Standardised and Simplified MPs

- *MSs may allow use of standardised or simplified MP templates based on **templates and guidelines published by the Commission***
- *Before CA approval of any simplified MP, the use shall be justified and a **simplified risk assessment** carried out to demonstrate proposed control activities and procedures are sufficient*
- ***Guidance can be expected to clarify the difference in meaning between standardised and simplified MPs.***
(N.B. Standardisation is a form of simplicity)





Article 18: Unreasonable Costs

- *Lays down a more transparent and consistent approach to determination of unreasonable costs*
 - ✓ *Does cost exceed benefit?*
 - ✓ *Benefit = improvement factor * 20 euro per allowance*
 - ✓ *Improvement factor = the difference between current uncertainty and the uncertainty threshold of tier to be reached*
 - * *the average annual emissions for the source concerned*
 - ✓ *1% of annual emissions (for the sources affected) is assumed regarding improvements that are not related to activity data and tier uncertainty thresholds, e.g. analytical improvements*
- ***Exemplars to help to clarify further***





Chapter III: Monitoring of Installations (General Provisions)

- *Article 19: Categorisation of installations (Category A, B and C) and source streams (major, minor, de-minimis)*
 - ✓ *Source streams selected by the operator*
- *Article 20: Monitoring boundaries (all relevant GHG from all emission sources and source streams of Directive Annex I or Article 24 activities)*
 - ✓ *Annex IV (Activity-specific monitoring methodologies)*
- *Article 21: Choice of monitoring methodology*
 - ✓ *Calculation-based: **standard (Article 24) or mass balance (Article 25); and/or measurement-based***





Hierarchy of Applicable Tiers (Article 26) – **NEW!**

- *Highest tier default for Category B and C installations*
- *At least the minimum tiers specified in Annex V for category A installations (and commercial standard fuels)*
- *Subject to CA satisfaction concerning technical feasibility and unreasonable costs, one level lower for Category C installations and up to two tier levels lower for Category A and B installations*
- *Where this is still technically not feasible or involves unreasonable costs, the CA may allow the operator to apply an even lower tier to a minimum of tier 1 subject to a suitable plan for necessary improvement within three years*



Activity Data (Articles 27-29)

N.B. Recital No.7: The burden regarding uncertainty assessment requirements should be minimised without reducing accuracy (.....in particular where measuring instruments are under 'national legal metrological control')

- *Continual metering or aggregation including account of stock changes*
- *Article 28: Measurement systems under the operator's control (uncertainty assessment: calibration, conservative adjustment, stock capacities >5%, **MPE-maximum permissible error for instruments under national legal metrological control**)*
- *Article 29: Measurement systems outside the operator's own control (where at least meeting as high a tier, more reliable results, less control risks)*



Calculation Factors (Articles 30-35)

According to tier requirement:

- *Default values (Article 31):*
 - ✓ *Standard/stoichiometric factors (listed in Annex VI)*
 - ✓ *Country-specific values (submitted to the UNFCCC)*
 - ✓ *Literature values endorsed by the CA (compatible with country-specific values but representative of more disaggregated sources of fuel)*
 - ✓ *Supplier guarantee of carbon content according to a 95% confidence interval of not more than $\pm 1\%$*
 - ✓ *Analytical values that remain representative*
- *Determination of calculation factors by analysis (Articles 32 to 35)*





Analytical Determinations

- *Article 32: EN standards >ISO/national> draft standards>industry best practice*
- *Article 32(3): Batch specific, representative, and all results must be taken into account (no 'cherry-picking')*
- *Article 33: **Sampling plan** (written procedure for each source stream)*
- *Article 34: EN ISO/IEC 17025 accredited laboratories unless*
 - ✓ *technically not feasible/unreasonable costs, and*
 - ✓ ***non-accredited laboratory meets equivalence requirements (quality management and technical competence)***
- *Article 35: **Frequency for analyses***





Non-ISO 17025 Accredited Laboratory Technical Competence

- *Laboratory competent to provide valid results; evidence of:*
 - ✓ *Management of personnel competence*
 - ✓ *Suitable accommodation and environment*
 - ✓ *Suitable analytical methods (standards); and where applicable method development*
 - ✓ *Uncertainty estimation*
 - ✓ *Management of equipment (including procedures for calibration, adjustment, maintenance)*
 - ✓ *Management and control: data, calibration materials, outsourced processes, complaints system*
 - ✓ *Quality assurance (including proficiency testing)*





Article 35: Frequency for analyses

- *Minimum frequencies as listed in Annex VII (to be reviewed within two years)*
- *Where the operator demonstrates Annex VII values are not available or appropriate, the CA may allow a different frequency:*
 - ✓ *A frequency **based on analytical variation of results** that is no more than 1/3 of the uncertainty value of the corresponding activity data tier*
 - ✓ *A frequency that does not incur unreasonable costs*





Biomass

- *Definitions: Article 3(20), (21) and (22)*
- *Recital 2: Article 17 Directive 2009/28/EC applies to bioliquids and biofuels (as defined)*
- *Article 38:*
 - ✓ *No-tier option (for activity data) for exclusively biomass source streams (analytical evidence of biomass content not required)*
 - ✓ *Peat, xylite and fossil fractions are not biomass and emissions need to be reported*
 - ✓ *Operator may apply no-tier methodology to determine factors for fossil fractions < 3%*
- *Article 39: Determination of biomass and fossil fraction by default factor/specific analysis > use of standard EFs/fractions and estimation methods (where published by the Commission) > assumed 0% biomass or estimation method approved by the CA*





Inherent and Transferred CO₂

- *Article 48: Inherent CO₂ is part of a fuel that must be included in the fuel's emission factor, and reported as an emission, except in the event of transfer in a fuel to another EU ETS installation*
- *Article 49: Transferred CO₂ - An operator may subtract from their reported emissions CO₂ that is transferred out of the installation, but only where the transfer is to an EU ETS carbon capture, transport or geological storage activity*





Chapter IV: Aviation Articles 50-56

- *Submission of MPs (51), monitoring methodology (52), specific provisions for biomass (53), small emitters (54), sources of uncertainty (55), determination of tonne-kilometre data (56)*
- *MP submission 4-months before the relevant period or without undue delay on identifying the relevant CA (emissions MP)*
- *On-board or fuel supplier density measurement*
- *Small emitter threshold raised to 25000 tonnes CO2 emission per year*





Specific Provisions for Aviation Biomass (Article 53)

- *CA shall allow a common methodology, as appropriate*
- *Under that common methodology, the biomass fraction and net calorific value of the fuel used shall be determined using fuel purchase records*
- ***The common methodology shall be based on guidance provided to facilitate consistent application in all Member States***
- *Use of aviation biofuel shall be assessed in accordance with Directive 2009/28/EC, Article 18, an appropriate certification scheme*





Chapter V Data Management and Control

Article 57: Data flow activities

Article 58: Control system

Article 59: Quality assurance

Article 60: Quality assurance of information technology

Article 61: Segregation of duties

Article 62: Internal reviews and validation of data

Article 63: Corrections and corrective action

Article 64: Out-sourced processes

Article 65: Treatment of data gaps

Article 66: Records and documentation





Chapter VI Reporting Requirements

Article 67: Timing and obligations for reporting

✓ **Annex X: Minimum content of annual reports**

Article 68: Force Majeure (t-km data)

*Article 69: **Reporting on improvements** to the monitoring methodology*

Article 70: Determination of emissions by the competent authority

Article 71: Access to information

Article 72: Rounding of data

Article 73: Ensuring consistency with other reporting





Chapter VII Information Technology (IT) Requirements

Article 74: Electronic data exchange formats

Article 75: Use of automated systems





Guidance material in Support of the M&R Regulation

Types of guidance and tools:

- *User manual*
- *General guidance*
- *Specific Guidance Notes*
- *Templates*
- *Exemplars, examples*
- *Frequently Asked Questions*





Guidance material in Support of the M&R Regulation

Process:

- *Timing: present project finishes end 2012, additional guidance material project in 2013*
- *Need to set priorities: General Issues, Specific Issues, Templates – first priorities geared to submission and approval of MPs*
- *Cooperation with ETS Compliance Forum: Monitoring, Aviation, E-reporting, CCS Task Forces*
- *Important need for continued dialogue with MSs to maximise the effective use of the guidance: TWG meetings planned, WGIII, CCC endorsements, further Compliance Forum Events*





Thank You for your attention

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DG CLIMA.A.3

EU ETS Monitoring Reporting and Verification

