



The Federal Ministry
for the Environment,
Nature Conservation
and Nuclear Safety

Data Collection & Management Experience and Insight from Germany

Fourth PMR Technical Workshop

Sydney, 21 October 2012

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Data Management in Germany

- Germany transposed the **Monitoring & Reporting Guidelines** of the Commission in **national law** for the 1. and 2. Trading Period
- Emission reporting is based on an **installation-specific Monitoring Plan (MP)**
- MP describes **methods** used for determination of CO₂ emissions
- MP explains, how to **fulfill requirements** according to Monitoring and Reporting Rules and declares **deviations** thereof
- MP has to be **approved by the authority**
 1. and 2. Trading Period: Regional Regulator
 3. Trading Period: Centralized Approval by DEHSt



The Monitoring Plan (MP) - Assistance for operators

2nd trading period:

- Exemplary activity-specific MP for Combustion Installation
 - can be used in Germany to set up an individual MP
 - helps ensuring a complete MP regarding requirements of the Monitoring Guidelines 2007
 - facilitates and helps to adapt the MP to the individual installation;
 - simplifies the compliance cycle and checks by verifiers, regional regulators and DEHSt.
- Exemplary activity specific MP
- FAQs and national guidance

3rd trading period:

- server-based **electronic monitoring plan** (FMS - Form Management System)



Compliance Checks of Monitoring Reports

DEHSt examines reports more closely with additional automatic checks for all and manual checks for some questionable reports

• **Summary Result of automatic check:** Green/yellow/red „traffic light“

• **Detailed Results**

- missing data
- missing/negative verification statement
- miscalculation
- significant deviations from historical data
- data for emission factor etc. beyond a typical range
- new fuels/materials
- fuels/materials with biogenic content
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Typical Errors

- Missing and incorrect data, e.g. missing emission sources
- wrong units or mistyping of numbers, e.g. decimal point fault
- Inconsistent information, e.g. between Monitoring Plan and Report
- insufficient sampling and analysis frequency and quality
- Missing installation boundaries concerning ETS and non-ETS installations or parts of installations (in case of multi-unit plants);
- None or only insufficient revision of MP in case of increased capacity or significant changes of an installation;
- Deviations between monitoring practices and descriptions in MP;
- No description of procedures to substitute missing or inconsistent data;
- Insufficient description of data management and control procedures.



Conclusions

- Emission reports are only as good as the underlying **monitoring plans**.
- **Templates, guidelines and assistance** to operators when preparing monitoring plans are important elements of MRV.
- **Sufficient and professional capacity** needs to be available in competent authority to check monitoring plans.
- Competent authority should supply **continuous service and assistance**
- **IT-based reporting** facilitates reporting for operators as well as handling of data for competent authority.
- **Centralized approach** is recommended.
- **Verifiers need to be checked by competent authority** especially in the beginning
- Few cases of deliberate fraud because of **detection risk**



Thank you for your attention!

Vielen Dank für Ihre Aufmerksamkeit!

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