Data Collection & Management
Experience and Insight from Germany

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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)
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
  - ......
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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