



Conference

Next presentation at 15.00

MCERTS and EN15267 – Certification of AMS (QAL1)

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MCERTS & EN 15267 - Certification of AMS (QAL1)

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Certification of AMS – The past (pre-EN 15267) approaches (up to 2009/2010)

German „TUV“ - scheme:



- Manufacturer applied for test at TÜV
- TÜV conducted approval test in line with German requirements (Bundeseinheitliche Praxis 2005, VDI 4203).
- TÜV presented test report at German LAI committee for assessment.
- Positive assessment lead to publication as a type-approved AMS in the Bundesanzeiger (Federal Gazette).
- Test report has often served as a basis for English MCERTS certification

English „MCERTS“ - scheme:



- Manufacturer applied for certification by Sira
- Existing test data initially reviewed for acceptability
- Any gaps in evidence required additional testing - conducted at test house chosen by manufacturer
- All reports reviewed by certification committee for approval
- MCERTS certificate issued and posted on Sira website

Certification of AMS –

The present approach according to EN 15267 (QAL1 of EN 14181)

Content

EN 15267-1:2009

General principle

EN 15267-2:2009

Initial assessment of the AMS manufacturer's quality management system and post certification surveillance of the manufacturing process

EN 15267-3:2007

Performance criteria and test procedures for automated measuring systems for monitoring emissions from stationary sources

EN 15267 part 1, General scope

European Standard EN 15267 part 1

specifies the general principles for the product certification of automated measuring systems (AMS) for monitoring emissions from stationary sources and ambient air quality.

This product certification consists of the following sequential steps

- Performance testing of an AMS
- Initial assessment of the AMS manufacturer's quality management system
- Certification
- Surveillance

These steps can be performed by one or different organisations.

EN 15267 part 2

QM system and audit scope

European Standard EN 15267 part 2

specifies the requirements;

- For the QM system of the manufacturer.
- For the initial assessment of the AMS manufacturer.
- For ongoing surveillance to ensure that the AMS fulfills the minimum requirements of the approval test procedure, also after soft- or hardware modifications.

EN 15267 part 3 Minimum requirements and test procedures

European Standard EN 15267 part 3

defines the performance criteria and test procedures for automated measuring systems that

- measure gases and particulate matter in respective flow of the waste gas from stationary sources.
- This European Standard supports the requirements of particular EU Directives
- It provides the detailed procedures covering the **QAL1 requirements of EN 14181**
- It provides input data for **QAL3** procedure described in **EN 14181**

EN 15267 Summary

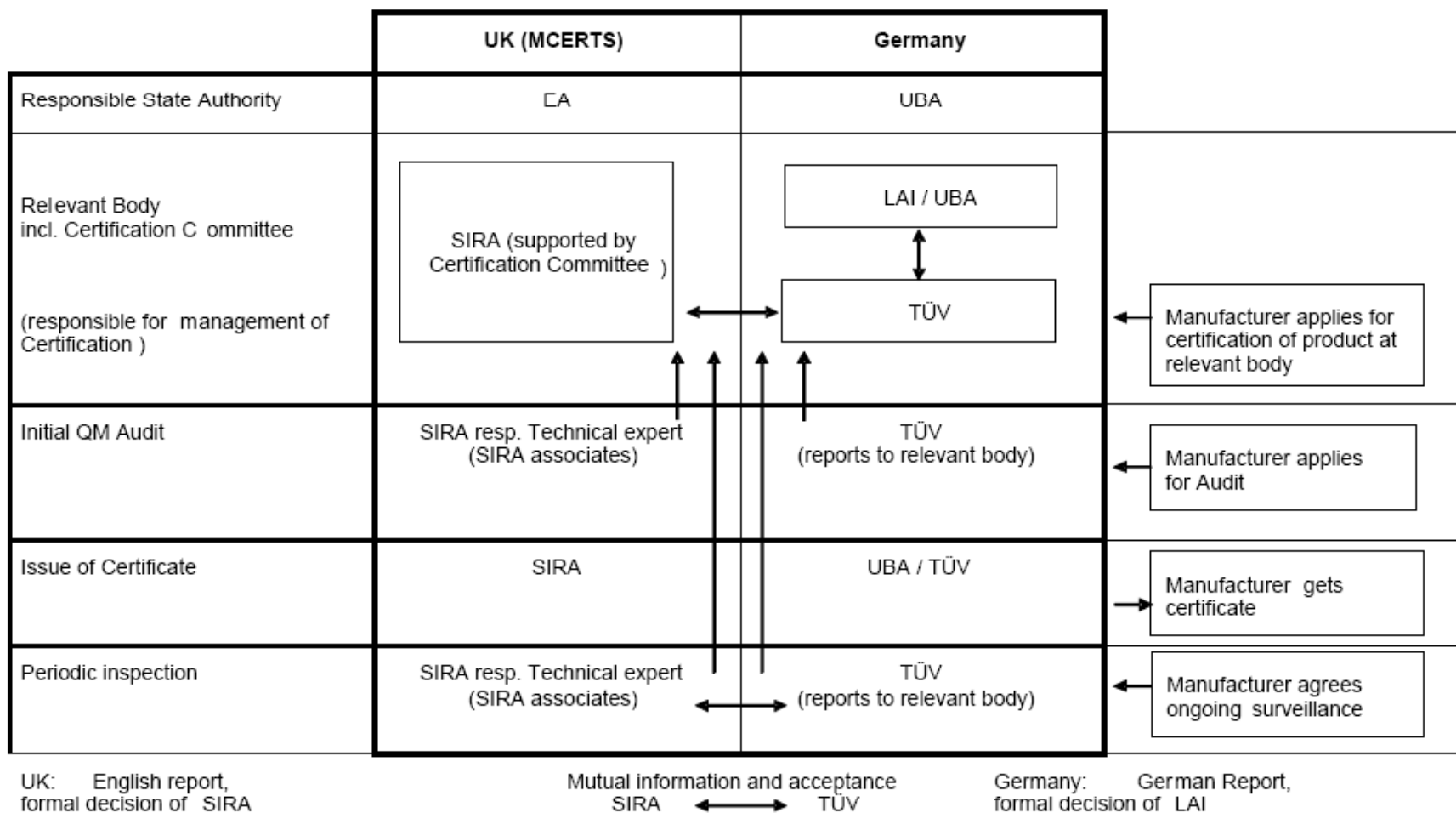
With EN 15267 for the first time in Europe a uniform and obligatory certification scheme to test and certify AMS is available

In the future, one test and one certificate in Europe is sufficient!

What has to be done in the future:

- Cooperation between the relevant bodies in Europe
- Example is the successful cooperation between UK and Germany

Comparison of German and British system of Product Certification according to EN 15267



Possible options of certification for manufacturers:

- **The German approach:**

EN 15267 certificate issued by TÜV and the UBA. In order to be EN 15267 compliant, the “German” certificate is issued by both UBA (representing LAI as relevant body) and TÜV. Certificates are published on www.qal1.de

Status: Implemented

- **The MCERTS approach:**

UKAS accredited certificate issued by a “certification body” (Sira) and accepted by the Environment Agency. Certificates are published on www.siraenvironmental.com or www.mcerts.net

Status: Implemented

Possible options of certification for manufacturers:

“Vision” for the future:

- UBA and MCERTS approval:
One harmonized certificate issued by UK “certification body” and German relevant body, accepted by both UBA and EA. The certification work must go through both the Sira and UBA process. This implies that all relevant documents must be available in English and German language.

Status: To be developed

Possibilities of transfer of “old” certifications to the current certification scheme of EN 15267:

Motivation:

- Many “old” AMS are well-trying and in successful practical use since many years.
- Many of these “old” AMS are capable to fulfil the requirements of EN 15267.
- “Old” AMS with Type1/Type 2 changes applied after 5 years since initial type-approval, are not type-approved anymore according to the German procedures.

⇒ A transfer to the current certification scheme of EN 15267 would

- allow the manufacturers to keep their AMS on state-of-art certification status
- open the way for a controlled development of AMS
- serve much better the actual needs and requirements on quality for AMS

Requirements for the transfer of “old” certifications to the current certification scheme of EN 15267 according to a resolution of the German relevant body

General:

- The “old” AMS must fulfil all requirements of EN 15267 part 3.
- The scope and the layout of the complete AMS must be clearly worked out.
- The current AMS must be unchanged compared to the already certified “old” AMS.
- The requirements according to EN 15267 part 2 (initial assessment of QMS, ongoing surveillance) must be fulfilled.

Requirements for the transfer of “old” certifications to the current certification scheme of EN 15267 according to a resolution of the German relevant body

Re-evaluation of suitable test data from existing type approval and comparison with requirements of EN 15267.

Case A:

All tests and data are already available and suitable (tests in 2008/2009).

- Re-calculation and re-evaluation of the data, incl. meas. Uncertainty
- Preparation of test report

Requirements for the transfer of “old” certifications to the current certification scheme of EN 15267 according to a resolution of the German relevant body

Case B:

Not all tests and data are already available and suitable (tests prior to 2008).

- Re-calculation and re-evaluation of the available and suitable data
- Repeating of lab test with 2 complete and identical AMS for missing test points.



Requirements for the transfer of “old” certifications to the current certification scheme of EN 15267 according to a resolution of the German relevant body

Case B:

A new field test is not necessarily required, if it can be demonstrated, that the AMS has proven its suitability at existing applications.

For this the data for the test points “response time in field” and “lack-of-fit in field” can be taken from suitable reports on functional testing (AST).

Furthermore the 2 necessary calibrations for each component in line with EN 14181 can also be taken from suitable reports (QAL2) from existing applications.

Requirements for the transfer of “old” certifications to the current certification scheme of EN 15267 according to a resolution of the German relevant body

Reporting:

A complete new test report according to EN 15267-3 has to be written.

Results which have been transferred from old test reports must be marked.

Test reports where additional data (e.g. AST or QAL2) has been used for the re-evaluation, must be attached to the test report as appendices.

Requirements for the transfer of “old” certifications to the current certification scheme of EN 15267 according to a resolution of the German relevant body

Important:

- All test results used for the evaluation of the AMS, must have been obtained by a test house, which has held an accreditation on the performance of type approval tests according to **EN ISO/IEC 17025** during the time of testing.
- Prior to any practical test work, the concept of the re-evaluation of the AMS according to EN 15267 must be submitted as a **test plan** to the "relevant body" for approval / permission. The decision on the test plan is generally made after 2 weeks since submission.

Requirements for the transfer of “old” certifications to the current certification scheme of EN 15267 according to a resolution of the UK relevant body (Sira) – ‘Recertification’

- Existing test data can be used, and any gaps in evidence need to be filled in order to meet the EN15267-3 requirements.
- A new evaluation report according to EN15267-3 is prepared, alongside a revised MCERTS certificate
- All tests should be conducted in a laboratory accredited to EN ISO/IEC 17025
- However, if a small number of validity tests are required, they can be conducted by the manufacturer, and witnessed during the EN15267-2 audit, subject to agreement by the certification committee.
- Any gaps in field data can usually be met by submission of QAL 2 reports from existing installations.

Where are we now?

- Over 100 MCERTS certificates for CEMS have been issued, a number which is continuing to grow
- In Germany there are far more than 100 publications of type-approved CEMS available – the number of most actual certificates according to EN 15267 is currently 15 and more than 20 are in progress.....
 - **Reliable, quality emissions monitoring data**

The future / other developments

- EN15859 has now been issued for Dust Arrestment Plant Monitors (Previously 'Class 2' and 'Class 3' Particulate CEMS)
- WG 23 - Velocity and flow measurement for stack emissions monitoring
- WG9 - Stationary source emissions — Quality assurance of data obtained from automated measuring systems



Thank you for your attention