M 248

STANDARDIZATION MANDATE TO CEN AND CENELEC
FOR QUALITY ASSURANCE OF AUTOMATED MEASURING SYSTEMS

I. MOTIVATION

Council Directive 94/67/EC on incineration of hazardous waste establishes harmonised measures and procedures including emission limit standards operating and monitoring conditions to ensure a high level of environmental protection in all Member States. The Commission is also currently preparing the revision of the Directive on the incineration of municipal waste, aiming to achieve the same level of environmental protection. One of the elements to this end is the compliance with the emission limit values of certain pollutants, in particular HCl, SO₂, TOC, CO, and Total dust which are required to be measured on-site by automated systems.

In order to ensure the comparable implementation of Directive 94/67/EC in all Member States a quality assurance standard of the automated measuring system is needed. The quality assurance provides a procedure which not only increases the confidence in the reliability of the measurement but also increases its repeatability and reproducability by the verification of the results obtained by the automated system with those resulting from the application of the standard measurement method. In this particular case, there is a CEN standard method.

This procedure must include the determination of the confidence intervals of the measurement necessary to verify the compliance with the Community emission limit values.
The standard will comprise two parts:

1. a procedure for validation of the automated equipment system and its operation which compares the measurement results with those obtained with the standard reference method and the determination of the confidence intervals or uncertainty.

2. a procedure to determine the reliability of the results produced by the automated measuring system at normal functioning between two validations, based on selected operating parameters relevant to the automated measuring systems.

The standard will be based on international or national standards on quality assurance and complemented with field tests. Within the Community there are no standard reference methods for the quality assurance of automated measuring systems. The availability of such standards is therefore fundamental to the efficient implementation, not only of the Directives on incineration of waste but also other Directives, such as the Directive on large combustion plants.

II. DESCRIPTION OF THE MANDATED WORK

1. The Commission entrusts CEN with the following work:

Preparing a standard for the quality assurance of automated measuring systems. This should allow the use of a procedure to increase the reliability of the measurements produced, not only by the same automatic equipment, but also when other equipment is used in the same Member State or in another Member State, allowing the verification of the compliance and the comparison of the results.

2. The standard is to cover:

- field of application;
- basic principles of the procedures;
- validation of the methodology based on existing data and on field test data collected according to the preliminary CEN standard;
- Evaluation and interpretation of the experimental data obtained by field tests using at least 2-3 different kinds of equipment and obtained by parallel measurements at a number of plants;
- calculation of results and uncertainties.

3. The Commission recommends CEN to take account, as much as possible, of standards or rules currently available in this area at a national or international level.
III. EXECUTION OF THE MANDATE

1. CEN will present the draft standard (prEN) to the Commission before 1.09.1998.

2. The European standard (EN) will be adopted before 1.03.2000. At this date, the three linguistic versions (DE,EN,FR) will be available as well as the correct titles in other Community languages.

3. Within six months of its adoption, the harmonised standard (EN) will be transposed into a national standard and all the different national standards of the Member States will be withdrawn.


5. The Commission reserves the possibility of specifying more precisely, if necessary, the essential requirements in function of the final version of Council Directive on incineration of non-hazardous waste and on large combustion plants. The present order may be modified by common agreement if that proves to be necessary during the course of the work.

6. CEN will present a report, at least once a year, on the progress of the work.