Stationary source emissions - Data acquisition and handling systems - Part 1: Specification of requirements for the handling and reporting of data



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN 17255-1:2019 sisaldab Euroopa standardi EN 17255-1:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 17255-1:2019 consists of the English text of the European standard EN 17255-1:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 31.07.2019.	Date of Availability of the European standard is 31.07.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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#### ICS 13.040.40

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## EUROPEAN STANDARD

# NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

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EN 17255-1

ICS 13.040.40

#### **English Version**

# Stationary source emissions - Data acquisition and handling systems - Part 1: Specification of requirements for the handling and reporting of data

Émissions de sources fixes - Systèmes d'acquisition et de traitement de données - Partie 1 : Spécification des exigences relatives au traitement et à la déclaration de données Emissionen aus stationären Quellen - Datenerfassungsund Auswerteeinrichtungen - Teil 1: Festlegung von Anforderungen an die Handhabung und den Bericht von Daten

This European Standard was approved by CEN on 26 May 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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#### **European foreword**

This document (EN 17255-1:2019) has been prepared by Technical Committee CEN/TC 264 "Air Quality", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2020, and conflicting national standards shall be withdrawn at the latest by January 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document is Part 1 of the EN 17255 series.

The EN 17255 series, published under the general title *Stationary source emissions* — *Data acquisition and handling systems*, specifies:

- requirements for the handling and reporting of data;
- requirements on data acquisition and handling systems;
- requirements for the performance test of data acquisition and handling systems;
- requirements for the installation and on-going quality assurance and quality control of data acquisition and handling systems.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Republic of North Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### Introduction

This document forms part of a series of standards which, between them, govern the process for the quality assurance of data received by a data acquisition and handling system (DAHS) from automated measuring systems (AMS), being used for monitoring emissions from stationary sources and quality ensured to EN 14181.

The input data can be either in analogue representation or in digital form directly from an AMS or via a digital bus system. Inputs can include the data from the AMS, peripheral data needed for calculation of reported data and information on plant conditions needed to apply data selection criteria.

The data acquisition and handling system (DAHS) receives the raw data, as they are measured, averaged and presented by the AMS, and converts, averages, stores and reports data as required by legislation.

This series of standards suggests that the process of data handling is best performed in a dedicated DAHS. It does not preclude the use of other options for all or part of the process provided that it can be shown that they meet all of the requirements of the standard, particularly in relation to speed, accuracy, access, security and validation.

This series of standards applies to DAHS installed after the date of implementation.

EN 17255-1 relates specifically to the handling of the data. It defines the calculations to be carried out to produce the data outputs that DAHS provide. It specifies the minimum outputs required to meet the requirements of legislation such as the European Industrial Emissions Directive (IED) and the regulations defining the European Pollutant Release and Transfer Register (E-PRTR). The calculations are based on the requirements in these directives and regulations. These two reporting requirements form the basis of this series of standards. However, although DAHS can provide other data outputs, such calculations are ssic inciple. outside the scope of this standard. The European emissions trading regulation defines different validation and procedures for missing data, but the general principles in this standard can be used.

#### 1 Scope

This document specifies the conversion of raw data from an automated measuring system (AMS) to reported data by a data acquisition and handling system (DAHS). This specification includes:

- requirements for the handling of data;
- requirements for the reporting of data;
- calculation procedures required.

The main items covered by this document are given by, but not limited to raw data acquisition, raw data validation, data correction and data averaging.

This document supports the requirements of EN 14181 and legislation such as the IED and E-PRTR. It does not preclude the use of additional features and functions provided the minimum requirements of this document are met and that these features do not adversely affect data quality, clarity or access.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14181:2014, Stationary source emissions — Quality assurance of automated measuring systems

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

#### 3.1

### data acquisition and handling system

#### **DAHS**

system, which automatically receives, processes, stores and outputs data from automated measuring systems

#### 3.2

#### automated measuring system

#### **AMS**

measuring system permanently installed on site for continuous monitoring of emissions or measurement of peripheral parameters

[SOURCE: EN 14181]

Note 1 to entry: Apart from the analyser, an AMS includes facilities for taking samples (e.g. probe, sample gas lines, flow meters and regulator, delivery pump) and for sample conditioning (e.g. dust filter, pre-separator for interferents, cooler, converter). This definition also includes testing and adjusting devices that are required for functional checks and, if applicable, for commissioning.

Note 2 to entry: The term "automated measuring system" (AMS) is typically used in Europe. The term "continuous emission monitoring system" (CEMS) is also typically used in the UK and USA.