CEN

**CWA 16060** 

# **WORKSHOP**

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# **AGREEMENT**

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English version

# Environmental technology verification - Air emission abatement technologies

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

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Contents		Page
Forew	vord	3
Introd	ductionduction	
1	Scope	6
2	Terms and definitions	6
3	Prerequisite and general requirements	8
4	Procedure	9
5	Procedure  Test process and report  General	10
5.1	General	10
5.2	Brief explanation of kind and purpose of the technology	11
5.3	Schematic overview of the technology or method	11
5.4	Technology description	11
5.5 5.6	Testing strategy and test description	13
5.7	Documentation of the test results	14
6	Verification	15
6.1	Interpretation	15
6.2	Review report	15
6.3	Verification report	17
7	Data dissemination	17
8	Verification Interpretation Review report Verification report  Data dissemination  Liability  x A Monitoring standards for verification Purpose Over-arching conditions for standards Requirements for test laboratories  x B Measurement uncertainty Definition	17
Annos	ν Δ Monitoring standards for verification	18
Δ111167	Purnose	18
A.2	Over-arching conditions for standards	18
A.3	Requirements for test laboratories	18
Anno	x B Massurament uncortainty	20
R 1	Nefinition	20
B.1	Procedure for calculation	20
D.L	Definition	20
RIDIIO	ography	21
	Ó.	

## **Foreword**

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 16 September 2009, the constitution of which was supported by CEN following the public call for participation made on 15 February 2008.

The list of the organizations/entities which supported the technical consensus represented by the CEN Workshop Agreement is listed below. These organizations were drawn from the following economic sectors: suppliers offering environmental technologies, consultants, institutions and authorities dealing with environmental issues.

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards of legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by EN and its members.

The final review/endorsement round for this CWA was started on 11 June 2009 and was successfully closed on 16 September 2009. The final text of his CWA was submitted to CEN for publication on 16 October 2009.

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Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN Management Centre.

The present Workshop has mainly been proposed by the AIRTV consortium, which is conducting a Specifically Targeted Research Project for developing an Environmental Technology Verification (ETV) system for air emission abatement technologies. AIRTV is apported under the 6<sup>th</sup> Framework Programme of the EU, Priority 1.1.6.3, Global Change and Ecosystems.

List of organizations/entities who have supported the CWA:

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# Introduction

This CEN Workshop Agreement covers three parts:

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  Jof terms to be used consistently for all ver.
  cope of this CWA;

  standard reporting system demanding particular concessments for the contents of a verification report. a set of terms to be used consistently for all verifications in the fields of environmental technologies within
- a standard reporting system demanding particular contents, graphs and tables that are mandatory and b)

# 1 Scope

This CEN Workshop Agreement (CWA) provides a guideline for the verification of air emission abatement technologies and it specifies a reporting structure for a verified vendor claim for the performance of a specific air emission abatement technology. The technology can comprise hardware (devices, apparatus and tools), software (e.g. for process control and improvement) and physical, chemical and biotechnological processes with their adaptation to site-specific conditions.

Following this CWA gives a report for a verified product. This report provides standardized key information about an air emission abatement technology when applied. The report aims to illustrate the technology's performance and can be used to help all stakeholders (e.g. expert, regulator, administrator, potential customer) for decision making the to evaluate if a particular technology is suitable for the specific pollutant(s) and conditions for the application that is under consideration.

The CWA provides substantial input to a future European ETV system. The CWA gives guidance on technology verification on a voluntary basis to bridge the time until a European ETV system is established.

# 2 Terms and definitions

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

#### 2.1

#### application

<environmental technology> use of an environmental technology (see 2.5) in a context defined by specifications given in respect to matrix (see 2.9) with all emissions as scope of this CWA, target (see 2.15), effect (see 2.4) and limitations

## 2.2

# claim

#### performance claim

effects foreseen by the vendor of an environmental technology on the target(s) in the matrix (matrices) of the intended use

NOTE If innovative aspects have to be considered, they have to be integrated into the claim.

## 2.3

### demonstration project

post-pilot stage, full scale implementation of an environmental technology, providing comprehensive test plans and a transparent performance documentation/reporting

#### 2.4

#### effect

quantitative description how the target (see 2.15) is impacted by the application of the environmental technology, including the description of relevant side effects

### 2.5

## environmental technology

particular system, device or method applied in the fields of environment that is based on technology or technology application, including engineering, and that is presumably, i.e. upon scientific and engineering measures, providing reproducible results

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- [6] EN ISO 14956, Air quality Evaluation of the suitability of a measurement procedure by comparison with a required measurement uncertainty (ISO 14956:2002)
- [7] EN 13284-1, Stationary source emissions Determination of low range mass concentration of dust Part 1: Manual gravimetric method
- [8] EN ISO 23210, Stationary source emissions Determination of  $PM_{10}/PM_{2,5}$  mass concentration in flue gas Measurement at low concentrations by use of impactors (ISO 23210:2009)
- [9] EN 13211, Air quality Stationary source emissions Manual method of determination of the concentration of total mercury
- [10] EN 14385, Stationary source emissions—Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V
- [11] EN 14791, Stationary source emissions Determination of the mass concentration of sulphur dioxide Reference method
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- [14] prEN 1911, Stationary source emissions Determination of mess concentration of gaseous chlorides expressed as HCl Standard reference method
- [15] ISO 15713, Stationary source emissions Sampling and determination of gaseous fluoride content
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- [19] ISO 11338-1, Stationary source emissions Determination of gas and particle-phase polycyclic aromatic hydrocarbons Part 1: Sampling
- [20] ISO 11338-2, Stationary source emissions Determination of gas and particle-phase polycyclic aromatic hydrocarbons Part 2: Sample preparation, clean-up and determination

- [21] EN 13725, Air quality Determination of odour concentration by dynamic olfactometry
- [22] EN 14181, Stationary source emissions Quality assurance of automated measuring systems

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