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English Version

**Winter maintenance equipment - Road weather information  
systems - Part 4: Test methods for stationary equipment**

Matériel de viabilité hivernale - Systèmes d'information  
météorologique routière - Partie 4 : Méthodes d'essai pour  
les matériels fixes

Winterdienstausrüstung - Straßenzustands- und  
Wetterinformationssysteme - Teil 4: Prüfverfahren bei  
stationären Einrichtungen

This Technical Specification (CEN/TS) was approved by CEN on 30 July 2012 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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## Contents

Page

Foreword.....	3
Introduction .....	4
1 Scope.....	5
2 Normative references.....	5
3 Type reception test definition.....	5
3.1 Introduction .....	5
3.2 Pavement surface temperature .....	6
3.3 Road surface condition.....	10
3.4 Water film thickness .....	16
3.5 Freezing temperature.....	17
3.6 Road body temperature .....	21
3.7 Air temperature .....	21
3.8 Relative humidity .....	23
3.9 Dew point temperature.....	25
3.10 Precipitation detection time.....	25
3.11 Precipitation type.....	26
3.12 Precipitation intensity .....	27
3.13 Snow depth.....	28
3.14 Wind speed.....	28
3.15 Gust of wind .....	29
3.16 Wind direction .....	29
3.17 Visibility .....	31
Bibliography.....	33

## Foreword

This document (CEN/TS 15518-4:2013) has been prepared by Technical Committee CEN/TC 337 “Winter maintenance and road service area maintenance equipment”, the secretariat of which is held by AFNOR.

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

This document *Winter maintenance equipment — Road weather information systems* comprises of the following parts:

- *Part 1: Global definitions and components;*
- *Part 2: Road weather — Recommended observation and forecast;*
- *Part 3: Requirements on measured values of stationary equipments;*
- *Part 4: Test methods for stationary equipment* (the present document).

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

## Introduction

Road Weather Information Systems (RWIS) are complex structures used for road maintenance decision support, which feature as a rule the following components: meteorological sensors and instruments, transmission technology, computer systems for processing, representation and storing of information, road weather forecasts, alarms, in relation to traffic control and traffic information systems and more.

This European Specification lays down the test procedures to verify the requirements on stationary equipment defined in EN 15518-3.

The aim is to allow for objective and reproducible measurement analysis and evaluation.

## 1 Scope

This Technical Specification specifies the test methods, the experimental set-up and result analysis for the laboratory qualification of stationary equipment within a RWIS.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13108-5, *Bituminous mixtures — Material specifications — Part 5: Stone Mastic Asphalt*

EN 15518-3, *Winter maintenance equipment — Road weather information systems — Part 3: Requirements on measured values of stationary equipments*

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025)*

ISO 17714, *Meteorology — Air temperature measurements — Test methods for comparing the performance of thermometer shields/screens and defining important characteristics*

## 3 Type reception test definition

### 3.1 Introduction

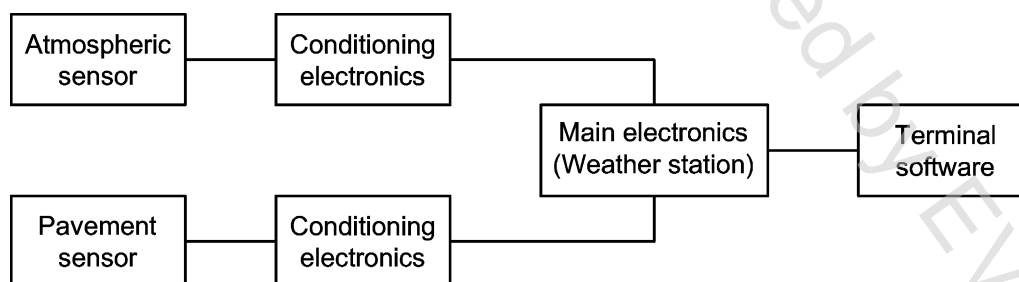
#### 3.1.1 General

The tests described hereafter apply to either a complete system (which can influence the measured value) consisting of sensor, processing electronics and associated terminal program software necessary to acquire, display and store the measurements in a digital form, or to some specific parts of the whole system when the inputs can be simulated, as specified by the manufacturer. Figure 1 below is an illustration of the possible functional components of a system.

The manufacturer shall specify and supervise the material set-up for the test set-up.

The manufacturer may not change the test set-up during the tests. The data shall be readable during the whole test. The whole test shall stop in case the manufacturer changes the test set-up.

If a single sensor provides measurements subject to more than one test procedure, it shall always be tested against all these procedures within the same test campaign and by the same laboratory. This is also valid for tests after technical changes to a sensor.



**Figure 1 — Possible functional components of a system**

Test protocols shall state the version and type of hardware, firmware and software components as well as the material set-up during the test.