

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15518-3:2011 sisaldab Euroopa standardi EN 15518-3:2011 ingliskeelset teksti.

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English Version

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

Matériels de viabilité hivernale - Systèmes d'information
météorologique routière - Partie 3: Exigences relatives aux
valeurs mesurées par des matériels fixes

Winterdienstausrüstung - Straßenzustands- und
Wetterinformationssysteme - Teil 3: Anforderungen an
gemessene Werte der stationären Anlagen

This European Standard was approved by CEN on 1 January 2011.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 15518-3:2011) 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.

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of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

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.

EN 15518, *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*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland 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 and alarms, in relation to traffic control and traffic information systems and more.

Stationary equipment performs the acquisition of road and meteorological information at a fixed location.

This part of EN 15518 lays down the requirements for the recommended components of a stationary equipment of a RWIS. In the description of requirements a distinction is made between the components forming a basis stationary equipment for winter use and the recommended complementary components.

The aim is to ensure extensive combination and interchangeability within the systems.

With a set terminology for the components and the meteorological expressions an attempt is made to counteract a diversity of terms and designations for identical phenomena.

1 Scope

This European Standard specifies the terminology and performance requirements for all components of stationary equipment within a Road Weather Information Systems (RWIS).

2 Normative references

The following referenced documents are indispensable for the application 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 15144:2007, *Winter maintenance equipment — Terminology — Terms for winter maintenance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15144:2007 and the following apply.

NOTE The following definitions have been established specifically for the RWIS domain.

3.1 surface

3.1.1 pavement surface temperature
effective radiation temperature of a pavement surface

3.1.2 road surface condition
qualification of the status of road surface affected by road weather phenomenon

3.1.3 water film thickness
mean thickness of the film of water present on a flat surface

3.2 aerial

3.2.1 relative humidity
filling rate of the mass of air with water vapour

NOTE It is determined in relation to water, in liquid phase, and recorded under a screen at a height between 1,5 m and 4,0 m from the ground.

3.2.2 precipitation
exclusion of falling water from the atmosphere in liquid and/or solid form which can be observed and measured on ground

3.2.3 rain
precipitation in liquid form