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I.S. EN 15876-2:2011

Electronic fee collection - Evaluation of on-board and roadside equipment for conformity to EN 15509 - Part 2: Abstract test suite

I.S. EN 15876-2:2011

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English Version

**Electronic fee collection - Evaluation of on-board and roadside
equipment for conformity to EN 15509 - Part 2: Abstract test
suite**

Perception de télépéage - Evaluation de conformité de
l'équipement embarqué et de l'équipement au sol à l'EN
15509 - Partie 2: Suite d'essais abstraite

Elektronische Gebührenerhebung - Konformitätsprüfung
von Fahrzeuggeräten und straßenseitigen Einrichtungen
mit der EN 15509 - Teil 2: Abstrakte Prüfreihe

This European Standard was approved by CEN on 17 December 2010.

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Foreword

This document (EN 15876-2:2011) has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.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

CEN/TC 278 (WG 1) has produced a set of standards that support interoperable DSRC-EFC-systems (e.g. EN ISO 14906), a "toolbox" for defining EFC-application transaction, and CEN ISO/TS 14907-2 (EFC application interface conformance tests for On Board Units). However, these standards are only of an enabling nature and do not guarantee unambiguous technical interoperability. Therefore the standard profile Electronic fee collection – Interoperable application profile for DSRC (EN 15509) was developed to support technical interoperability between EFC-systems.

To evaluate the conformity of On-Board and Roadside Equipment to EN 15509 a two-part standard has been prepared:

Electronic fee collection – Evaluation of on-board and roadside equipment for conformity to EN 15509:

- *Part 1: Test suite structure and test purposes*
- *Part 2: Abstract test suite*

Part 1 of the standard defines the test suite structure and the test purposes for conformity evaluation of OBUs and RSE designed for compliance with the requirements set up in EN 15509. A test standard for evaluation of conformity of on-board and roadside equipment is a necessary element for coherent, practical and effective appraisal of products' compliance to EN 15509.

Part 2 of the standard (this standard) provides the Abstract Test Suites (ATS), which are translations of the "human-readable" TSS&TP suite into Tree and Tabular Combined Notation (TTCN). The ATS will be based on the Tree and Tabular Combined Notation test script language that is suitable for implementation in computer-aided test tools. TTCN is a test language that is widespread, dedicated test programming language for compliance testing and is standardized in ISO/IEC 9646-3.

Together, the two parts of the present standard provide the necessary foundation for implementation of the interoperability requirements as stated in EN 15509:

- industry is provided with an easy-to-use toolbox for product assessment;
- operators can easily assess conformity to EN 15509 and reference to the standard in tendering processes;
- authorities and joint undertakings may reference to the test standard when stating interoperability requirements;
- certification organisations are given an effective tool for certification of products.

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.

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