



BSI Standards Publication

Electronic fee collection — Test procedures for user and fixed equipment

Part 2: Conformance test for the on-board unit application interface (ISO/TS 14907-2:2016)

National foreword

This Published Document is the UK implementation of CEN ISO/TS 14907-2:2016. It supersedes DD CEN ISO/TS 14907-2:2011 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ISBN 978 0 580 92444 6

ICS 35.240.60; 43.040.15

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This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 August 2016.

Amendments issued since publication

Date	Text affected
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English Version

Electronic fee collection - Test procedures for user and fixed equipment - Part 2: Conformance test for the on-board unit application interface (ISO/TS 14907-2:2016)

Perception du télépéage - Modes opératoires relatifs aux équipements embarqués et aux équipements fixes -
Partie 2: Essai de conformité de l'interface d'application de l'unité embarquée (ISO/TS 14907-2:2016)

Elektronische Gebührenerhebung - Testverfahren für straßenseitige und fahrzeugseitige Einrichtungen - Teil 2: Konformitätsprüfungen für die Anwendungsschnittstelle der fahrzeugseitigen Einrichtung (ISO/TS 14907-2:2016)

This Technical Specification (CEN/TS) was approved by CEN on 26 June 2016 for provisional application.

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European foreword

This document (CEN ISO/TS 14907-2:2016) has been prepared by Technical Committee ISO/TC 204 “Intelligent transport systems” in collaboration with Technical Committee CEN/TC 278 “Intelligent transport systems” the secretariat of which is held by NEN.

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 supersedes CEN ISO/TS 14907-2:2011.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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.

Endorsement notice

The text of ISO/TS 14907-2:2016 has been approved by CEN as CEN ISO/TS 14907-2:2016 without any modification.

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	4
3 Terms and definitions	5
4 Abbreviated terms	6
5 OBU and supporting information	8
5.1 ICS.....	8
5.2 IXIT.....	8
6 Testing requirements	9
6.1 Conceptual test architecture.....	9
6.2 Conformance test system.....	10
6.2.1 Functionality of tester.....	10
6.2.2 Conformance testing.....	11
6.3 Test documentation.....	11
6.3.1 Tester.....	11
6.3.2 Test methods and test cases.....	11
6.3.3 Test results.....	11
Annex A (normative) Implementation conformance statement proforma	12
Annex B (normative) Implementation of extra information for testing (IXIT) proforma	25
Annex C (informative) OBU test cases	29
Annex D (informative) OBE conformance test procedures conducted in Japan	70
Bibliography	75

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 204, *Intelligent transport systems*.

This third edition cancels and replaces the second edition (ISO/TS 14907-2:2011), which has been technically revised with the following changes:

- updated references to clauses and annexes in accordance with ISO 14906:2011/Amd1:2015;
- updated [Annex D](#) to reflect current situation in Japan.

ISO/TS 14907 consists of the following parts, under the general title *Electronic fee collection — Test procedures for user and fixed equipment*:

- *Part 1: Description of test procedures*
- *Part 2: Conformance test for the on-board unit application interface*

Introduction

This part of ISO/TS 14907 describes tests that verify on-board unit (OBU) conformance of implementations of functions and data structures for electronic fee collection (EFC) applications.

Electronic fee collection — Test procedures for user and fixed equipment —

Part 2: Conformance test for the on-board unit application interface

1 Scope

This part of ISO/TS 14907 describes tests that verify on-board unit (OBU) conformance of implementations of functions and data structures, as defined in the implementation conformance statement based on ISO 14906:2011/Amd1:2015, for electronic fee collection (EFC) applications. After the tests of isolated data items and functions ([C.2](#) to [C.4](#)), an example is given for testing of a complete EFC transaction ([C.3](#)).

The scope of this part of ISO/TS 14907 comprises definitions of OBU conformance assessment tests of

- basic dedicated short-range communication (DSRC) L7 functionality,
- EFC application functions,
- EFC attributes (i.e. EFC application information),
- the addressing procedures of EFC attributes and (hardware) components [e.g. integrated circuit cards (ICC) and man-machine interfaces (MMI)],
- the EFC transaction model, which defines the common elements and steps of any EFC transaction, and
- the behaviour of the interface so as to support interoperability on an EFC-DSRC application interface level, see [Figure 1](#).