PD CEN/TS 16794-2:2017

BSI Standards Publication

Public transport - Communication between contactless readers and fare media

Part 2: Test plan for ISO/IEC 14443

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National foreword

This Published Document is the UK implementation of CEN/TS 16794-2:2017. It supersedes PD CEN/TS 16794-2:2015, which is withdrawn.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.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Public transport - Communication between contactless readers and fare media - Part 2: Test plan for ISO/IEC 14443

Transport Public - Communication entre terminaux et objets sans contact - Partie 2 : Plan de test pour l'ISO/IEC 14443

Öffentlicher Verkehr - Kommunikation zwischen berührungslosen Lesegeräten und Fahrscheinmedien - Teil 2: Prüfplan zur ISO/IEC 14443

This Technical Specification (CEN/TS) was approved by CEN on 17 April 2017 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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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (CEN/TS 16794-2:2017) has been prepared by 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 will supersede CEN/TS 16794-2:2015.

This version updates the test plan to verify the requirements expressed within CEN/TS 16794-1:2017 and relies on the test method described in ISO/IEC 10373-6:2016.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1 Scope

This Technical Specification comes as a complement to the technical requirements expressed in CEN/TS 16794-1, for ensuring contactless communication interoperability between Public Transport (PT) devices or between PT devices compliant to CEN/TS 16794-1 and NFC mobiles devices compliant to NFC Forum specifications.

This document lists all the test conditions to be performed on a PT reader or a PT object in order to ensure that all the requirements specified in CEN/TS 16794-1 are met for the PT device under test.

This document applies to PT devices only:

— PT readers which are contactless fare management system terminals acting as a PCD contactless reader based on ISO/IEC 14443 standard series;

— PT objects which are contactless fare media acting as a PICC contactless object based on ISO/IEC 14443 standard series.

This document applies solely to the contactless communication layers described in parts 1 to 4 of the ISO/IEC 14443 standard series. Application-to-application exchanges executed once contactless communication has been established at RF level fall outside the scope of this document. However, a transport ticketing application will need to be used so as to make end-to-end transactions during tests on the RF communication layer.

This document does not duplicate the contents of ISO/IEC 14443 standard series or ISO/IEC 10373-6 standard. It makes reference to the ISO/IEC 10373-6 applicable test methods, specifies the test conditions to be used and describes the additional specific test conditions that may be run.

The list of test conditions applicable to the PT device under test will be conditioned by the Information Conformance Statement (ICS) declaration made by the device manufacturer. For each test case, the test conditions are clearly specified in order to determine the pertinence to run or not the test case in accordance with the device capabilities or in accordance with the device manufacturer's choice.

In order to facilitate the test report issuance, a test report template is included in Annex A of this document.

Although this document aims at becoming the primary basis for certification of contactless communication protocol applicable to PT readers and PT objects, it does not describe any certification or qualification processes as such processes should be defined between local or global transit industry stakeholders.

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.

CEN/TS 16794-1:2017, *Public transport — Communication between contactless readers and fare media — Part 1: Implementation requirements for ISO/IEC 14443*

ISO/IEC 10373-6:2016, *Identification cards — Test methods — Part 6: Proximity cards*

ISO/IEC 14443-1:2016, *Identification cards — Contactless integrated circuit cards — Proximity cards — Part 1: Physical characteristics*

ISO/IEC 14443-2:2016, *Identification cards — Contactless integrated circuit cards — Proximity cards — Part 2: Radio frequency power and signal interface*

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