TECHNICAL SPECIFICATION

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CEN ISO/TS 16410-2

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English Version

Electronic fee collection - Evaluation of equipment for conformity to ISO/TS 17575-3 - Part 2: Abstract test suite (ISO 16410-2:2012)

Perception du télépéage - Évaluation de la conformité de l'équipement à l'ISO/TS 17575-3 - Partie 2: Suite d'essais abstraite (ISO 16410-2:2012)

Elektronische Gebührenerhebung - Konformitätsevaluierung von Einrichtungen nach CEN ISO/TS 17575-3 - Teil 2: Abstrakte Prüfreihe (ISO 16410-2:2012)

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (CEN ISO/TS 16410-2:2012) has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 204 "Intelligent transport systems".

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Introduction

This part of ISO/TS 16410 is part of a set of standards that supports interoperability of autonomous EFC-systems, which includes ISO/TS 17575 parts 1 to 4 that define the EFC context data, their charge reports and their use of communication infrastructure.

Within the suite of EFC standards this conformance evaluation procedure defines the process and tests for conformity evaluation of Front End and Back End that comply with the requirements in ISO/TS 17575-3.

This part of ISO/TS 16410 is intended to

— assess Front End and Back End capabilities,

— assess Front End and Back End behaviour,

— serve as a guide for Front End and Back End conformance evaluation and type approval,

— achieve comparability between the results of the corresponding tests applied in different places at different times, and

— facilitate communications between parties.

This part of ISO/TS 16410 is based on

— ISO/TS 17575-3, and

— the ISO/IEC 9646 family of standards on conformance test methodology.

Electronic fee collection — Evaluation of equipment for conformity to ISO/TS 17575-3 —

Part 2:
Abstract test suite

1   Scope

This part of ISO/TS 16410 specifies the Abstract Test Suite (ATS) to evaluate the conformity of Front End and Back End to ISO/TS 17575-3.

The objective of this part of ISO/TS 16410 is to provide a basis for conformance tests for the Front End and the Back End in Electronic Fee Collection to enable interoperability between different equipment supplied by different manufacturers.

The present abstract test suite is directly derived from ISO/TS 17575-1.

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.

ISO/TS 17575-1:2010, *Electronic fee collection — Application interface definition for autonomous systems — Part 1: Charging*

ISO/TS 17575-2, *Electronic fee collection — Application interface definition for autonomous systems — Part 2: Communication and connections to the lower layers*

ISO/TS 17575-3, *Electronic fee collection — Application interface definition for autonomous systems — Part 3: Context data*

3   Terms and definitions

For the purposes of this document the following terms and definitions apply.

3.1
conformance testing
testing the extent to which an IUT is a conforming implementation

[ISO/IEC 9646-1:1994, definition 3.3.23]

3.2
implementation under test
an implementation of one or more OS1 protocols in an adjacent user/provider relationship, being that part of a real open system which is to be studied by testing

[ISO/IEC 9646-1:1994, definition 3.3.43]