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Intelligent transport systems — Public transport — Indirect Fulfilment for Rail

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National foreword

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (CEN/TS 16406:2013) has been prepared by Technical Committee CEN/TC 278 “Road transport and traffic telematics”, the secretariat of which is held by NEN.

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0 Introduction

0.1 General

This document has been prepared as a Technical Specification (TS) because the subject of indirect fulfilment for rail is a volatile and fast-moving business and technical subject. Moreover, it is expected that a revision to the TS will be needed, specifically to make changes related to the indirect fulfilment of "Non-integrated reservation tickets" (NRT tickets"), and will take place no longer than two years after its bringing into force. At that time it is expected that the TS after having become an EN will have been referenced by the TAP-TSI and any variation will require to be approved not only by CEN/TC 278 but the European Rail Agency's Change Control Management process for changes to TSIs.

The purpose of the TAP-TSI is to introduce a statutory framework of requirements and obligations for railway operators, infrastructure managers and others that will ensure interoperability in rail transport ticketing and information provision. Within the 2011 version of the TAP-TSI text there are some open points related to indirect fulfilment and Security.

This document is intended to become a European standard contributing towards closing these open points relating to the subsystem 'Telematics applications for passenger services' of the trans-European rail system (TAP-TSI) as well as to the relevant technical documents listed in Annex III of the TAP TSI (see Annex A).

0.2 Indirect fulfilment open points

The open points in the TAP-TSI cover indirect fulfilment used for international services and cross-border sales. In these cases, the TAP-TSI already has layout specifications for the RCT2 paper ticket used in direct fulfilment, based on UIC leaflet 918-2, and for the A4 print-at-home indirect fulfilment method, based on UIC leaflet 918-3.

Fulfilment specifications are missing

— for ticket on departure (TOD - where the passenger is given a code at the time of sale, and uses the code or a payment card to collect the RCT2 paper ticket at the station), and

— for manifest-on-list (or e-ticket or paperless ticket – where there is no ticket at all, the ticket control staff having pre-loaded or over-the-air access to the reservation database, and the passenger proves they can travel by showing some ID).

To meet the indirect fulfilment needs of the open points, a set of specifications are needed for a generic indirect fulfilment request framework and for a security method for fulfilment requests. These specifications are given by this TS.

In order to ensure the compatibility between this TS and in particular between the future standard and the TAP-TSI, several changes to the TAP-TSI are needed after agreement by the ERA and the rail sector. The changes are in three main parts. The first is the change to the Basic Parameters in chapter 4 of the TAP-TSI where the obligations are defined. The second change is to the technical documents being annexes to the TAP-TSI (see Annex A) that specify the method by which timetable, fares, reservation and other data has to be exchanged. For indirect fulfilment, the Technical Document affected is B5, covering reservations. The third change is to the glossary, which defines what the terms used in the TAP-TSI mean.

The analysis later in this document demonstrates that, although security requirements are relevant for indirect fulfilment, no rail-specific requirements exist at this time and open standards for key distribution and management are sufficient. As a result, no specification is needed for the TAP-TSI to meet the Open Point.

1 Scope

This Technical Specification provides, in Clause 2, new and changed glossary items needed to define indirect fulfilment and its characteristics and to support the changes to the TAP-TSI and ERA Technical Document B5.

Clause 3 defines the layout formats used for international rail services fulfilled using the ticket on departure and print-at-home ticket methods.

Clause 4 provides the changes to ERA Technical Document B5 that are required to provide the generic indirect fulfilment framework, covering ticket on departure, print-at-home and e-ticket fulfilment methods, although the main use of the specification is expected to be for ticket on departure.

Clause 5 provides the analysis of the security requirements of indirect fulfilment, and the conclusion that no rail-specific specifications are needed.

2 Terms and definitions

For the purposes of this document, the terms and definitions given in TAP-TSI and the following apply.

2.1 Additional terms for the TAP-TSI Glossary

2.1.1
indirect fulfilment
the process of fulfilment where the customer purchases a ticket other than at a station or face to face at a ticket vendor

Note 1 to entry: Indirect fulfilment methods are conventional ticket on departure, print-at-home ticket, e-ticket and smart ticket on departure.

2.1.2
indirect fulfilment message framework
a set of computer-to-computer messages between involved parties including carriers, issuers, retailers, distributors, attributors, station managers and TVMs that allow for the indirect fulfilment of all types of tickets excluding a conventional ticket

2.1.3
indirect fulfilment security framework
the set of equipment, processes and messages that ensures the security of the indirect fulfilment and ticket control of all forms of tickets

2.1.4
product owner
the product owner is responsible for his products

— Functions of Ownership: Specifying pricing, usage rules and commercial rules.

— Functions of Clearing: Trip reconstruction, product aggregation based on received usage data using product definition rules, linking of aggregated usage data with acquisition data, preparation of apportionment data based on product specification rules.

— Functions of Reporting: Detailed acquisition data with no link to usage data within the reporting period, usage data with no link to acquisition data within the reporting period, linked aggregated product data within the reporting period

Note 1 to entry: This term is required as ticketing equipment is not always defined by carrier(s), as it could be defined by an organisation owned wholly or partly by Transport Authorities.

[SOURCE: ISO 24014-1:2007, 5.1]