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Javni prevoz - Referenčni podatkovni model - 7. del: Upravljanje voznega osebja

Public transport - Reference data model - Part 7: Driver management

Öffentlicher Verkehr - Referenzdatenmodell - Teil 7: Fahrermanagement

Transports publics - Modèle de données de référence - Partie 7 : Gestion des conducteurs

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English Version

**Public transport - Reference data model - Part 7: Driver
management**

Transports publics - Modèle de données de référence -
Partie 7 : Gestion des conducteurs

Öffentlicher Verkehr - Referenzdatenmodell - Teil 7:
Fahrermanagement

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 278.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 12896-7:2025) has been prepared by Technical Committee CEN/TC 278 “Intelligent transport systems”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

This document supersedes EN 12896-7:2019

This document is part of the European standard EN 12896, known as “Transmodel”. This European standard is a series of documents that comprises of the following ones:

- EN 12896-1 Public transport - Reference data model - Part 1: Common concepts,
- EN 12896-2 Public transport - Reference data model - Part 2: Public transport network,
- EN 12896-3 Public transport - Reference data model - Part 3: Timing information and vehicle scheduling,
- EN 12896-4 Public transport - Reference data model - Part 4: Operations monitoring and control,
- EN 12896-5 Public transport - Reference data model - Part 5: Fare management,
- EN 12896-6 Public transport - Reference Data model - Part 6: Passenger information,
- EN 12896-7 Public transport - Reference data model - Part 7: Driver management,
- EN 12896-8 Public transport - Reference data model - Part 8: Management information and statistics,
- EN 12896-10 Public transport – Reference data model – Part 10: Alternative modes.

Together these documents create Transmodel version 6.2 and thus replace Transmodel V6.0.

In addition to the nine normative Parts of this European Standard, a Technical Report (Public Transport – Reference Data Model – Informative Documentation) was published in 2016 under the reference CEN/TR 12896-9. It provides additional information to help those implementing projects involving the use of Transmodel. It is intended that this Technical Report will be extended and republished as soon as all the normative parts are revised.

The split into several documents is intended to ease the task of users interested in particular functional domains. It corresponds to the modularisation of Transmodel into functionally related parts, each made up of distinct UML packages and subpackages that describe a particular aspect of public transport. The NeTEx UML model follows the same modularisation, allowing a direct mapping from the conceptual model to the implementation.

Annex C provides details of the significant technical changes between this document and EN 12896-7:2019

For information on the conventions, methodology and notations for conceptual modelling, for a clear overview to help understand the core principles, structure and purpose of Transmodel, and for information on the Functional domains and Modes of operation, refer to EN 12896-1.

1 Scope

This document is composed of the following data packages:

- Driver;
- Driver Schedule;
- Rostering;
- Personnel Disposition;
- Driver Control Action.

This document itself is composed of the following parts:

- main document representing the data model for the concepts shared by the different domains covered by Transmodel (normative);
- Annex A containing the data dictionary and attribute tables, i.e., the list of all the concepts presented in the main document together with their definitions (normative);
- Annex B presenting the model evolution (informative).
- Annex C, providing details of the significant technical changes between this document and EN 12896-7:2019 (informative)

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 12896-1, *Public transport - Reference data model - Part 1: Common concepts* 76644b/osist-pren-12896-7-2026

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12896-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 relief

person taking the place of another person as responsible for a certain task (such as driving a bus)

3.2 roster

plan showing turns of duty or leave for individuals in an organization

3.2 Abbreviations

API	Application Programming Interface
GIS	Geographical Information System
GPS	Global Positioning System
HTTP	Hypertext Transfer Protocol
IFOPT	Identification of Fixed Objects in Public Transport
ISO	International Standards Organisation
IT	Information Technology
NeTEx	Network and Timetable Exchange
PT	Public Transport
OJP	Open API for Distributed Journey Planning
OpRa	Operating Raw Data and statistics exchange
SIRI	Service Interface for Real-time Information
TM	Transmodel
UML	Unified Modelling Language
URI	Uniform Resource Identifier
URL	Universal Resource Locator

4 General information

The following standards series are based on the Transmodel conceptual data model for public transport domain to provide a harmonized, interoperable, and consistent approach for public transport data, service interfaces, and journey planning across Europe.:

- EN 15531 Series [11–17] – Service interfaces for real-time public transport operations.
- CEN/TS 16614 Series (NeTEx) [18–23] – Network and timetable data exchange, including passenger information and accessibility.
- CEN/TS 17118 [24] – Open API for distributed journey planning.

5 Driver Management

5.1 Introduction

The description of driver management is divided into three main parts.

The first main part concerns *driver scheduling*, in essence creating the day-type related driver schedules where the required work is divided into duties that represents a set of work to be performed by one driver on one day.

The second main part concerns *rostering*, describing how the driver duties are ordered into sequences, according to some chosen method, to obtain a starting point for a balanced work share among the personnel over the planning period.

The third main part is the *personnel disposition*, describing how physical drivers are assigned to do the work of a logical driver. This part also covers the recording of driver performance.