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Javni prevoz - Referenčni podatkovni model - 2. del: Omrežje javnega prevoza

Public transport - Reference data model - Part 2: Public transport network

Öffentlicher Verkehr - Datenreferenzmodell - Teil 2: Netzwerk des öffentlichen Verkehrs

Transports publics - Modèle de données de référence - Partie 2: Réseau de transports en commun

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English Version

**Public transport - Reference data model - Part 2: Public
transport network**

Transports publics - Modèle de données de référence -
Partie 2: Réseau de transports en commun

Öffentlicher Verkehr - Datenreferenzmodell - Teil 2:
Netzwerk des öffentlichen Verkehrs

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.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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prEN 12896-2:2025 (E)**European foreword**

This document (prEN 12896-2:2025) 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 will supersede EN 12896-2:2016.

Annex C provides details of the significant technical changes between this document and EN 12896-2:2016.

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

- 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.

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 incorporates the following main data packages:

- Network Description;
- Fixed Object;
- Tactical Planning Components;
- Explicit Frame.

It 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 12896-2:2016 (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*

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/>

3.1.1

accessibility

characteristic of a public transport asset (equipment or location) describing the ability to be physically accessed with respect to passengers with various types of mobility impairment

3.1.2

graph

set of vertices and a set of edges (also called arcs)

Note 1 to entry: Transmodel defines the public transport network as a graph where the vertices are points and edges are links between the points.