
**Javni prevoz - Izmenjava omrežnih in voznorednih podatkov (NeTEx) - 5. del:
Izmenjavni format za alternativne načine**

Public transport - Network and timetable exchange (NeTEx) - Part 5: Alternative modes exchange format

Öffentlicher Verkehr - Netzwerk- und Fahrplan-Austausch (NeTEx) - Teil 5:
Austauschformate für alternative Modi

Transport Public - Échanges des informations planifiées (NeTEx) - Partie 5: Format d'échange pour les modes alternatifs

Ta slovenski standard je istoveten z: FprCEN/TS 16614-5

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**Public transport - Network and timetable exchange
(NeTEx) - Part 5: Alternative modes exchange format**

Transport Public - Échanges des informations
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les modes alternatifs

Öffentlicher Verkehr - Netzwerk- und Fahrplan-
Austausch (NeTEx) - Teil 5: Austauschformate für
alternative Modi

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

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

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FprCEN/TS 16614-5:2022 (E)

European foreword

This document (CEN/TS 16614-5:2025) 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 Vote on TS.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive(s) /Regulation(s).

In addition, it supports the fundamental requirements for Urban Rail of CEN-CENELEC Guide 26.

This document will supersede CEN/TS 16614-5:2022.

This document presents Part 5 of the European Technical Specification known as “NeTEx”. NeTEx provides a framework for specifying communications and data exchange protocols for organisations wishing to exchange scheduled information relating to public transport operations. As defined by Transmodel, 'Public transport' has to be understood as services advertised and available for use by the general public carried out by any means of transport.

The full NeTEx Technical Specification is made up of six parts defining a single European Standard series, which provides a complete exchange format for public transport networks, timetable description and fare information.

- Part 1 is the description of the public transport network topology exchange format. It also contains use cases shared with part 2, and modelling rules and the description of a framework shared by all parts.
- Part 2 is the description of the scheduled timetables exchange format.
- Part 3 is the description of the fare information exchange format.
- Part 4 is the description of the passenger information European profile.
- Part 5 (this document) is the description of the alternative modes exchange format.
- Part 6 is the description of the European passenger information accessibility profile.

Part 1 is fully standalone. Parts 2,3, 4, 5 and 6 rely on Part 1 and possibly any other previous part.

The XML schema can be downloaded from <http://netex-cen.eu> (or directly from <https://github.com/NeTEx-CEN/NeTEx>), along with available guidance on its use, example XML files, and case studies of national and local deployments.

This document is highly technical, and a special care has been taken to keep the text readable. In particular a set of formatting conventions is followed that enhances the usual CEN writing rules in order to distinguish references to elements of the formal models within text:

- Transmodel terms and NeTEx conceptual model elements are in capital letters (JOURNEY PATTERN for example).
- NeTEx physical model names are in bold italic font and use CamelCase style with no spaces (***JourneyPattern***, for example).
- NeTEx physical model attribute types are in italic font and use CamelCase style with no spaces (*TypeOfEntity*, for example).

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

0 Introduction

Public transport services rely increasingly on information systems to ensure reliable, efficient operation and widely accessible, accurate passenger information. These systems are used for a range of specific purposes: setting schedules and timetables; managing vehicle fleets; publicising fares, issuing tickets and receipts; providing real-time information on service running, and so on.

Services already present in the urban environment such as multimodal information and traffic management and control are already well understood. Reference data models and data exchange formats for the use of these services, in particular data sets describing the public transport offer, are already standardised and available. However, there is a need for reference data models to accommodate emerging modes of transport to allow seamless transitions for the traveller between all available modes. Examples of these new modes include car and cycle sharing, car-pooling, and intelligent parking (Park & Ride).

The first three parts of the European Technical Specification NeTEx specify a Network, Timetable, and Fare Exchange format for Public Transport. The purpose of NeTEx is to exchange data relating to scheduled public transport between the systems of PT organisations. It can be seen as complementary to the SIRI (Service Interface for Real-time Information) standard, as SIRI needs a prior exchange of reference data from NeTEx's scope to provide the necessary context for the subsequent exchange of a real-time data. A fourth part describes a profile for using NeTEx for the cross-border exchange of timetable data (European Passenger Information profile – EPIP).

This document (NeTEx – Part 5) specifies exchanges of data for alternative transport modes between systems and organisations. It encompasses alternative (i.e. non-traditional) modes of personal use of transport (such as cycle sharing, car-pooling, rental, etc.) often provided as mobility services. Such services may be provided by organisations other than conventional transport operators and use of them may involve the passengers themselves steering the vehicles and determining the exact route. Part 5 describes some extensions and additions to the prior NeTEx model. It is a complement to Parts 1, 2, 3 in the sense that it uses a subset of the concepts defined there.

Well-defined, open interfaces have a crucial role in improving the economic and technical viability of Public Transport Information Systems of all kinds. Using standardised interfaces, systems can be implemented as discrete pluggable modules that can be chosen from a wide variety of suppliers in a competitive market, rather than as monolithic proprietary systems from a single supplier. Different data sets can be integrated and systems linked together to provide services that cover a wide area and proved advanced multimodal function for travellers. Interfaces also allow the systematic automated testing of each functional module, vital for managing the complexity of increasing large and dynamic systems. Furthermore, individual functional modules can be replaced or evolved, without unexpected breakages of obscurely dependent function.

This standard will improve the ease of integration of public transport information with other modes of transport making it easier to provide service that allow passengers to plan and make multi-modal journeys that seamlessly combine legs made on both conventional public transport and self-guided modes.

By generalising and extending a standard already in place, the standard is able to reuse an existing context and many existing components, minimizing the effort required to deploy it.