

English Version

Public transport - Network and Timetable Exchange (NeTEx) - Examples, guidelines and explanatory materials

Transport Public - Échange des données de réseau et
d'horaires (NeTEx)

Öffentlicher Verkehr - Netzwerk- und Fahrplan
Austausch (NeTEx) - Beispiele, Vorgaben und
erläuterndes Material

This Technical Report was approved by CEN on 4 April 2016. It has been drawn up by the Technical Committee CEN/TC 278.

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European foreword

This document (CEN/TR 16959:2016) has been prepared by Technical Committee CEN/TC 278 “Intelligent transport systems”, the secretariat of which is held by NEN.

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Introduction

0.1 General information

NeTEx is a series of CEN Technical Specifications dedicated to the exchange of Public Transport scheduled data (network, timetable and fare information) based on:

- Transmodel V5.1 (see [T1], [T1] and [T3]);
- IFOPT (see [I1]);
- SIRI (see [S1], [S2], [S3], [S4], [S5]);

It supports information exchange of relevance to public transport services for passenger information and AVMS (Automated Vehicle Monitoring Systems). Many NeTEx concepts are taken directly from Transmodel and IFOPT; the definitions and explanation of these concepts are extracted directly from the respective documents and reused in NeTEx, sometimes with further adaptations in order to fit the NeTEx context.

The data exchanges targeted by NeTEx are predominantly oriented towards passenger information and also for data exchange between transit scheduling systems and AVMS. However it is not restricted to these purposes, and it can provide an effective solution to many other use cases for transport data exchange

The NeTEx series of documents is divided into three parts, each covering a functional subset of the CEN Transmodel for Public Transport Information:

- Part 1 describes the Public Transport **Network topology** (see [N1]);
- Part 2 describes **Scheduled Timetables** (see [N2]);
- Part 3 covers **Fare information** (see [N3]).

NeTEx is intended to be a general purpose XML format designed for the efficient, updateable exchange of complex transport data among distributed systems. This allows the data to be used in modern web services based architectures and to support a wide range of passenger information and operational applications.

Most public transport modes are taken into account by NeTEx, including train, bus, coach, metro, tramway, ferry, and their submodes. Moreover, it is possible to describe airports and air journeys, but there has not been any specific consideration of any additional provisions that apply especially to air transport.

While there are a number of existing documents available for Timetables, NeTEx is the first systematically engineered document that also covers multimodal Fares.

0.2 Compatibility with existing standards and recommendations

The concepts covered in NeTEx that relate in particular to long-distance train travel include:

- rail operators and related organizations;
- stations and related equipment's;
- journey coupling and journey parts;
- train composition and facilities;