
**Javni prevoz - Izmenjava omrežnih in voznorednih podatkov (NeTEx) - 4. del:
Evropski profil za potovalne informacije**

Public transport - Network and Timetable Exchange (NeTEx) - Part 4: Passenger
Information European Profile

Öffentlicher Verkehr - Netzwerk- und Fahrplan-Austausch (NeTEx) - Teil 4:
Europäisches Profil für Fahrgastinformationen

Transport public - Échange des données réseau et horaires (NeTEx) - Partie 4 : Profil
Européen pour l'Information Voyageur

Ta slovenski standard je istoveten z: FprCEN/TS 16614-4

[kSIST-TS FprCEN/TS 16614-4:2025](https://standards.iteh.ai/catalog/standards/sist/23640f10-8c21-47db-8985-defd8ed6c8/k SIST-TS FprCEN/TS 16614-4:2025)

<https://standards.iteh.ai/catalog/standards/sist/23640f10-8c21-47db-8985-defd8ed6c8/k SIST-TS FprCEN/TS 16614-4:2025>

ICS:

03.220.01	Transport na splošno	Transport in general
35.240.60	Uporabniške rešitve IT v prometu	IT applications in transport

kSIST-TS FprCEN/TS 16614-4:2025 **en,fr,de**

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

FINAL DRAFT
FprCEN/TS 16614-4

October 2025

ICS

Will supersede CEN/TS 16614-4:2020

English Version

**Public transport - Network and Timetable Exchange
(NeTEx) - Part 4: Passenger Information European Profile**

Transport public - Échange des données réseau et
horaires (NeTEx) - Partie 4 : Profil Européen pour
l'Information Voyageur

Öffentlicher Verkehr - Netzwerk- und Fahrplan-
Austausch (NeTEx) - Teil 4: Europäisches Profil für
Fahrgastinformationen

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

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

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.

Warning : This document is not a Technical Specification. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a Technical Specification.

[ksIST-TS FprCEN/TS 16614-4:2025](https://standards.iteh.ai/catalog/standards/sist/23640f10-8c21-47db-8985-dcfd6c8/ksist-ts-fprcen-ts-16614-4-2025)

<https://standards.iteh.ai/catalog/standards/sist/23640f10-8c21-47db-8985-dcfd6c8/ksist-ts-fprcen-ts-16614-4-2025>



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

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

Contents

Page

European foreword	8
Introduction	9
1 Scope.....	13
2 Normative references.....	13
3 Terms and definitions	13
4 Presentation conventions	18
4.1 Recap of NeTEx presentation conventions.....	18
4.2 Additional EPIP presentation conventions	19
4.3 Transmodel definitions and EPIP	20
5 Framework.....	21
5.1 Introduction.....	21
5.2 DataManagedObject, Version and Codespace.....	21
5.2.1 Overview	21
5.2.2 Entity (Abstract).....	23
5.2.3 EntityInVersion (Abstract)	24
5.2.4 DataManagedObject (Abstract)	26
5.2.5 AlternativeText (Subcomponent of DataManagedObject)	27
5.2.6 KeyValue (Subcomponent of DataManagedObject)	28
5.2.7 Version.....	28
5.2.8 Codespace	29
5.2.9 ValidityCondition	31
5.2.10 ValidBetween	32
5.2.11 ResponsibilitySet	33
5.2.12 ResponsibilityRoleAssignment (Subcomponent of ResponsibilitySet)	34
5.2.13 DataSource	37
5.3 Relationships and entity references	37
5.3.1 General rules	37
5.3.2 VersionOfObjectRef.....	39
5.3.3 Integrity Checking of XML Documents	40
5.3.4 Identity uniqueness scope	41
5.4 Frames	43
5.4.1 Overview	43
5.4.2 Version Frame (Abstract)	44
5.4.3 TypeOfFrame	45
5.4.4 Specific frames and General Frames.....	47
5.4.5 Composite Frame	48
5.4.6 FrameDefaults.....	49
5.5 Generic elements	50
5.5.1 Introduction.....	50
5.5.2 TypeOfValue (Abstract)	50
5.5.3 ValueSet.....	51
5.5.4 GroupOfEntities (Abstract)	52
5.5.5 Point (Abstract)	53
5.5.6 Location (Subcomponent of Point)	54

FprCEN/TS 16614-4:2025 (E)

5.5.7	Link (Abstract).....	55
5.5.8	LinkSequence (Abstract).....	56
5.5.9	PointInLinkSequence (Abstract).....	58
5.5.10	Zone (Abstract).....	59
5.5.11	Transport Mode and Submode	59
5.5.12	Assignment (Abstract)	60
5.5.13	Presentation (Subcomponent – Multipurpose)	61
5.5.14	Locale (Subcomponent – Multipurpose)	62
5.5.15	Booking Arrangements (Subcomponent – Multipurpose).....	63
5.5.16	ContactDetails (Subcomponent – Multipurpose)	65
5.6	Accessibility.....	66
5.6.1	Overview	66
5.6.2	AccessibilityAssessment (Subcomponent – Multipurpose)	67
5.6.3	AccessibilityLimitation (Subcomponent of AccessibilityAssessment).....	68
5.7	Facility sets	69
5.7.1	Overview	69
5.7.2	FacilitySet (Abstract).....	70
5.7.3	ServiceFacilitySet.....	71
5.7.4	Accommodation – (Subcomponent of ServiceFacilitySet)	72
5.7.5	SiteFacilitySet.....	73
6	Stop Profile.....	74
6.1	Overview	74
6.2	Stop Place hierarchies.....	76
6.3	Other types of Place	78
6.3.1	Introduction.....	78
6.3.2	Place (Abstract).....	79
6.3.3	AddressablePlace (Abstract).....	79
6.3.4	SiteElement (Abstract)	80
6.3.5	Site (Abstract)	83
6.3.6	Address (Abstract)	85
6.3.7	PostalAddress (Subcomponent of SITE in EPIP)	85
6.3.8	RoadAddress (Subcomponent of SITE in EPIP).....	86
6.3.9	Topographic Place.....	87
6.3.10	TopographicPlaceDescriptor (Subcomponent).....	89
6.3.11	Point of Interest.....	90
6.4	Stop Places.....	91
6.4.1	StopPlace	91
6.4.2	SiteComponent (Abstract)	96
6.4.3	StopPlaceSpace (Abstract)	97
6.4.4	Quay (Subcomponent of Quay)	97
6.4.5	Entrance (Abstract).....	99
6.4.6	StopPlaceEntrance	100
6.5	GroupOfStopPlaces	101
6.6	TariffZone.....	101
7	Network and Timetables.....	102
7.1	General	102
7.2	Basic network topology	102
7.2.1	Overview	102
7.2.2	Line	103
7.2.3	AllowedLineDirection (Subcomponent of Line).....	107
7.2.4	GroupOfLines	107

FprCEN/TS 16614-4:2025 (E)

7.2.5	Network.....	108
7.2.6	DestinationDisplay.....	109
7.2.7	Via.....	110
7.2.8	DestinationDisplayVariant.....	111
7.2.9	Organisation (Abstract).....	112
7.2.10	Operator.....	115
7.2.11	Authority.....	116
7.3	Routes.....	117
7.3.1	Overview.....	117
7.3.2	RoutePoint.....	117
7.3.3	RouteLink.....	118
7.3.4	Route.....	119
7.3.5	PointOnRoute (Subcomponent of Route).....	120
7.4	Service patterns.....	121
7.4.1	Overview.....	121
7.4.2	JourneyPattern (Abstract in EPIP).....	122
7.4.3	ServicePattern.....	124
7.4.4	PointInJourneyPattern (Abstract in EPIP).....	125
7.4.5	StopPointInJourneyPattern (Subcomponent of JourneyPattern).....	127
7.4.6	Direction.....	129
7.4.7	TimingPoint (Abstract in EPIP).....	130
7.4.8	ScheduledStopPoint.....	131
7.4.9	Service Link.....	134
7.5	Assigning Stops.....	134
7.5.1	Overview.....	134
7.5.2	StopAssignment (Abstract).....	135
7.5.3	PassengerStopAssignment.....	136
7.5.4	DynamicStopAssignment.....	137
7.5.5	TrainStopAssignment (Subcomponent of Passenger Stop Assignment).....	138
7.6	Connections, transfers and interchanging.....	139
7.6.1	Overview.....	139
7.6.2	Transfer (Abstract).....	139
7.6.3	Transfer Duration (Subcomponent of Transfer).....	141
7.6.4	Connection.....	141
7.6.5	ConnectionEnd (Subcomponent of Connection).....	142
7.6.6	SiteConnection.....	143
7.6.7	SiteConnectionEnd (Subcomponent of SiteConnection).....	143
7.6.8	DefaultConnection.....	145
7.6.9	DefaultConnectionEnd (Subcomponent of DefaultConnection).....	146
7.7	Vehicle journeys and passing times.....	146
7.7.1	Overview.....	146
7.7.2	Journey (Abstract).....	147
7.7.3	ServiceJourney.....	149
7.7.4	PassingTime.....	154
7.7.5	PassingTime (Abstract).....	154
7.7.6	TimetabledPassingTime (Subcomponent – Service Journey).....	155
7.7.7	GroupOfServices.....	156
7.7.8	GroupOfServicesMember (Subcomponent of GroupOfServices).....	158
7.8	Very frequent journeys.....	159
7.8.1	Introduction.....	159
7.8.2	TemplateVehicleJourney.....	159
7.8.3	JourneyFrequencyGroup (Abstract).....	160

FprCEN/TS 16614-4:2025 (E)

7.8.4	HeadwayJourneyGroup (Subcomponent of TemplateJourney).....	161
7.9	Transferring between services.....	162
7.9.1	Introduction.....	162
7.9.2	Interchange (Abstract)	163
7.9.3	ServiceJourneyInterchange	165
7.10	Trains and train coupling	166
7.10.1	Overview	166
7.10.2	TrainNumber.....	167
7.10.3	JourneyPart (Subcomponent of ServiceJourney).....	167
7.10.4	JourneyPartCouple.....	169
7.10.5	JourneyPartPosition (Subcomponent of JourneyPartCouple)	170
7.11	Vehicles and Trains.....	171
7.11.1	Overview	171
7.11.2	VehicleType	172
7.11.3	Train	174
7.11.4	TrainElement (Subcomponent of Train).....	175
7.11.5	TrainComponent (Subcomponent of Train)	176
7.12	Notices	177
7.12.1	Introduction.....	177
7.12.2	Notice (Subcomponent - Multipurpose)	178
7.12.3	NoticeAssignment (Subcomponent - Multipurpose)	179
7.13	Calendars.....	181
7.13.1	Overview	181
7.13.2	DayType	181
7.13.3	PropertyOfDay (Subcomponent of DayType).....	183
7.13.4	Timeband (Subcomponent of DayType)	185
7.13.5	ServiceCalendar	186
7.13.6	OperatingDay (Subcomponent of ServiceCalendar)	187
7.13.7	DayTypeAssignment (Subcomponent of ServiceCalendar).....	188
7.13.8	Operating Period (Abstract in EPIP).....	190
7.13.9	UicOperatingPeriod (Subcomponent of ServiceCalendar)	191
7.14	Flexible services.....	192
7.14.1	Introduction.....	192
7.14.2	FlexibleLine	192
7.14.3	FlexiblePointProperties (Subcomponent - Multipurpose)	193
7.14.4	FlexibleServiceProperties (Subcomponent of SERVICE JOURNEY)	194
8	Common rules	195
8.1	Version management of data.....	195
8.2	Use of validity conditions in EPIP	197
8.3	Populating creation and change dates.....	197
8.4	Codespaces and the structure of identifiers	198
8.4.1	Introduction.....	198
8.4.2	Use of codespaces in EPIP	199
8.4.3	Identifier structure for EPIP data objects.....	199
8.4.4	Identifier structure for EPIP version frames	201
8.5	Versions of the EPIP	207
8.6	Dependencies between frames.....	207
8.7	Organisation and nesting of elements within an EPIP document.....	208
8.8	Responsibility for data.....	209
8.9	Handling large data sets.....	209
8.10	Available types of frame.....	210