

## Public Transport — Reference Data Model — Informative Documentation

First edition related only to Transmodel Parts 1, 2 and 3

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## Foreword

This document (TC 278 WI 00278387 - "Public Transport - Reference Data Model - Informative Documentation") has been prepared by Technical Committee CEN/TC 278, the secretariat of which is held by NEN. This version is an accompaniment to parts 1, 2 and 3 of the "Public Transport – Reference Data Model" (Transmodel v6) and will be extended and updated when subsequent parts of the Standard are published.

This document is a working document.

The Transmodel v6 series is composed of the following documents:

Public Transport Reference Data Model - Part 1: Common Concepts

Public Transport Reference Data Model - Part 2: Public Transport Network

Public Transport Reference Data Model - Part 3: Timing Information and Vehicle Scheduling

Public Transport Reference Data Model - Part 4: Operations Monitoring and Control\*

Public Transport Reference Data Model - Part 5: Fare Management\*

Public Transport Reference Data Model - Part 6: Passenger Information\*

Public Transport Reference Data Model - Part 7: Driver Management\*

Public Transport Reference Data Model - Part 8: Management Information and Statistics\*

(\* - these Parts are not yet published)

Together these eight Parts create version 6 of the European Standard EN 12896, known as "Transmodel" and thus replace Transmodel V5.1.

The split into eight Parts intends to ease the task of users interested in particular functional domains. Modularisation of Transmodel, undertaken within the NeTEx project, has contributed significantly to this new edition of Transmodel.

This informative document provides supplementary information to that contained in the formal European Standard to help those implementing the Standard.

## 1 Introduction

This Technical Report documents further information related to parts 1, 2 and 3 of version 6 of the "Public Transport – Reference Data Model" (Transmodel) European Standard, EN 12896. This Technical Report will be extended and re-published with additional information when Parts 4, 5, 6, 7, and 8 of the Transmodel standard are published in due course.

The various sections of the document provide

- A Complete Data Dictionary (merging and extending the information contained in each separate Part of the Standard that has been published to date) [chapter 2]
- An overview of the whole of Transmodel to provide an understanding of how the model is structured and how each component model links with other components [chapter 3]
- A set of Frequently Asked Questions to help those new to Transmodel to understand the basics of the Reference Data Model [chapter 4]
- An outline of the main questions which are addressed in a separate web-based on-line tutorial (that itself will be updated from time to time in the light of feedback received from users of the Standard) [chapter 5]
- An Appendix providing a table which shows the evolution of the terms used in Transmodel v6 from the previous Transmodel v5.1 and IFOPT European Standards and from the NeTEx Technical Specification [Appendix 1]

## 2 Complete Data Dictionary

The Data Types shown in the tables in this section are not mandatory.

### 2.1 Transmodel 6 - Attributes Tables Documentation

#### ACCESS

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Place MODEL.ACCESS)

The physical (spatial) possibility for a passenger to access or leave the public transport system. This link may be used during a trip for:- the walking movement of a passenger from a *PLACE* (origin of the trip) to a *SCHEDULED STOP POINT* (origin of the PT TRIP), or- the walking movement from a *SCHEDULED STOP POINT* (destination of the PT TRIP) to a *PLACE* (destination of the trip).

#### ACCESS – Relations

Source	Target
<b>ACCESS</b> Role: Cardinality: Relation type: Generalization	<b>TRANSFER</b> Role: Cardinality:
<b>ACCESS END</b> Role: end of Cardinality: 1 Relation type: Association	<b>ACCESS</b> Role: to Cardinality: 0..*
<b>ACCESS END</b> Role: start of Cardinality: 1 Relation type: Association	<b>ACCESS</b> Role: from Cardinality: 0..*
<b>ACCESS</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

#### ACCESS – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	TRANSFER	::>	<b>ACCESS</b> inherits from <b>TRANSFER</b>
«UID»	<i>Id</i>	AccessIdType	1:1	Identifier of ACCESS link.

#### ACCESS END

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Place MODEL.ACCESS END)

Origin or destination end of an ACCESS link. May indicate a POINT and/or PLACE.

**ACCESS END – Relations**

Source	Target
<b>ACCESS END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>PLACE</b> Role: viewed as Cardinality: 0..1
<b>ACCESS END</b> Role: end of Cardinality: 1 Relation type: Association	<b>ACCESS</b> Role: to Cardinality: 0..*
<b>ACCESS END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>POINT</b> Role: viewed as Cardinality: 0..1
<b>ACCESS END</b> Role: start of Cardinality: 1 Relation type: Association	<b>ACCESS</b> Role: from Cardinality: 0..*

**ACCESS END – Attributes**

Classifi- cation	Name	Type	cardinality	Description
-	-	-	-	-

**ACCESS MODE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Mode MODEL.ACCESS MODE)

A characterisation of the passenger movement according to the means of transport different from public transport (e.g. walk, bicycle, etc)

**ACCESS MODE – Relations**

Source	Target
<b>ACCESS MODE</b> Role: Cardinality: Relation type: Generalization	<b>MODE</b> Role: Cardinality:
<b>NAVIGATION PATH</b> Role: accessed by Cardinality: 0..* Relation type: Association	<b>ACCESS MODE</b> Role: for Cardinality: 0..*
<b>SITE ELEMENT</b> Role: accessed by Cardinality: 0..* Relation type: Association	<b>ACCESS MODE</b> Role: for Cardinality: 0..*

**ACCESS MODE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	MODE	::>	ACCESS MODE inherits from MODE
«UID»	Id		1:1	Identifier of ACCESS MODE.

**ACCESS SPACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.ACCESS SPACE)

A passenger area within a STOP PLACE such as a concourse or booking hall, immigration hall or security area that is accessible by passengers, but without a direct access to vehicles. Direct access to a VEHICLE is always from a QUAY and/or BOARDING POSITION. An ACCESS SPACE may be a Room, Hall, Concourse, Corridor, or bounded open space within a STOP PLACE.

**ACCESS SPACE – Relations**

Source	Target
<b>ACCESS SPACE</b> Role: Cardinality: Relation type: Generalization	<b>STOP PLACE SPACE</b> Role: Cardinality:
<b>ACCESS SPACE</b> Role: in Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE</b> Role: containing Cardinality: 1
<b>ACCESS SPACE</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF PASSAGE</b> Role: a classification for Cardinality: 0..1
<b>ACCESS SPACE</b> Role: Cardinality: 0..* Relation type: Association	<b>ACCESS SPACE</b> Role: Cardinality: 1

**ACCESS SPACE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	STOP PLACE SPACE	::>	<b>ACCESS SPACE</b> inherits from <b>STOP PLACE SPACE</b>
«UID»	<b>Id</b>	AccessSpaceIdType	1:1	Identifier of ACCESS SPACE.
	<b>AccessSpaceType</b>	AccessSpaceTypeEnum	0:1	Type of ACCESS SPACE.

**ACCESS ZONE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Site MODEL.ACCESS ZONE)

A ZONE for which the duration to cover any ACCESS link to a particular SCHEDULED STOP POINT is the same.

**ACCESS ZONE – Relations**

Source	Target
<b>ACCESS ZONE</b> Role: Cardinality: Relation type: Generalization	<b>ZONE</b> Role: Cardinality:
<b>SITE</b> Role: a reference for Cardinality: 0..1 Relation type: Association	<b>ACCESS ZONE</b> Role: referenced by Cardinality: 0..*



**ACCESS ZONE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	ZONE	::>	<b>ACCESS ZONE</b> inherits from <b>ZONE</b>
«UID»	<b>Id</b>	AccessZoneIdType	1:1	Identifier of ACCESS ZONE.

**ACCESSIBILITY ASSESSMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.ACCESSIBILITY ASSESSMENT)

The accessibility characteristics of an entity used by passengers such as a STOP PLACE, or a STOP PLACE COMPONENT. Described by ACCESSIBILITY LIMITATIONS, and/or a set of SUITABILITIES

**ACCESSIBILITY ASSESSMENT – Relations**

Source	Target
<b>ACTUAL VEHICLE EQUIPMENT</b> Role: for Cardinality: <b>0..1</b> Relation type: Association	<b>ACCESSIBILITY ASSESSMENT</b> Role: suitable Cardinality: <b>0..1</b>
<b>ACCESSIBILITY ASSESSMENT</b> Role: determined by Cardinality: <b>0..*</b> Relation type: Association	<b>AVAILABILITY CONDITION</b> Role: determining Cardinality: <b>0..*</b>
<b>SUITABILITY</b> Role: determining Cardinality: <b>0..*</b> Relation type: Aggregation	<b>ACCESSIBILITY ASSESSMENT</b> Role: convenient for Cardinality: <b>1</b>
<b>ACCESSIBILITY LIMITATION</b> Role: determining Cardinality: <b>0..*</b> Relation type: Aggregation	<b>ACCESSIBILITY ASSESSMENT</b> Role: limited by Cardinality: <b>1</b>
<b>VALIDITY CONDITION</b> Role: determining Cardinality: <b>0..*</b> Relation type: Aggregation	<b>ACCESSIBILITY ASSESSMENT</b> Role: determined by Cardinality: <b>0..*</b>
<b>NAVIGATION PATH</b> Role: characterised by Cardinality: <b>0..1</b> Relation type: Association	<b>ACCESSIBILITY ASSESSMENT</b> Role: characterising Cardinality: <b>0..*</b>
<b>ACCESSIBILITY ASSESSMENT</b> Role: characterising Cardinality: <b>0..*</b> Relation type: Aggregation	<b>PATH LINK</b> Role: characterised by Cardinality: <b>0..1</b>
<b>ACCESSIBILITY ASSESSMENT</b> Role: characterising Cardinality: <b>0..1</b> Relation type: Aggregation	<b>SITE ELEMENT</b> Role: characterised by Cardinality: <b>0..1</b>
<b>ACCESSIBILITY ASSESSMENT</b> Role: characterising Cardinality: <b>0..1</b> Relation type: Association	<b>LINE</b> Role: characterised by Cardinality: <b>0..1</b>
<b>JOURNEY</b> Role: characterised by Cardinality: <b>0..1</b> Relation type: Association	<b>ACCESSIBILITY ASSESSMENT</b> Role: characterising Cardinality: <b>0..1</b>

**ACCESSIBILITY ASSESSMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>AssessmentIdType</i>	1:1	Identifier of ACCESSIBILITY ASSESSMENT.
	<b>MobilityImpairedAccess</b>	<i>boolean</i>	0:1	Whether the overall assessment is that there is Access for Mobility Impaired users.

**ACCESSIBILITY LIMITATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.ACCESSIBILITY LIMITATION)

A categorisation of the accessibility characteristics of a SITE, e.g. a STOP PLACE or a STOP PLACE COMPONENT to indicate its usability by passengers with specific needs, for example, those needing wheelchair access, step-free access or wanting to avoid confined spaces such as lifts. A small number of well-defined categories are used that are chosen to allow the consistent capture of data and the efficient computation of routes for different classes of user.

**ACCESSIBILITY LIMITATION – Relations**

Source	Target
<b>ACCESSIBILITY LIMITATION</b> Role: classified by Cardinality: 0..* Relation type: Association	<b>TYPE OF ACCESSIBILITY LIMITATION</b> Role: a classification for Cardinality: 1
<b>ACCESSIBILITY LIMITATION</b> Role: determining Cardinality: 0..* Relation type: Aggregation	<b>ACCESSIBILITY ASSESSMENT</b> Role: limited by Cardinality: 1

**ACCESSIBILITY LIMITATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LimitationIdType</i>	1:1	Identifier of ACCESSIBILITY LIMITATION.
	<b>WheelchairAccess</b>	<i>LimitationStatusEnum</i>	0:1	Whether there is Access for Wheelchair users.
	<b>StepFreeAccess</b>	<i>LimitationStatusEnum</i>	0:1	Whether there is Step Free Access..
	<b>EscalatorFreeAccess</b>	<i>LimitationStatusEnum</i>	0:1	Whether there is Escalator Free Access..
	<b>LiftFreeAccess</b>	<i>LimitationStatusEnum</i>	0:1	Whether there is Lift Free Access..
	<b>AudibleSignsAvailable</b>	<i>LimitationStatusEnum</i>	0:1	Whether there are Audible Signs.
	<b>VisualSignsAvailable</b>	<i>LimitationStatusEnum</i>	0:1	Whether there are Visual Signs.

**ACCOMMODATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Facility MODEL.ACCOMODATION)

A combination of accommodation characteristics available on a service, e.g. "First Class Couchette with shower and 2 bunks".

**ACCOMMODATION – Relations**

Source	Target
<b>ACCOMMODATION</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE FACILITY SET</b> Role: Cardinality:

**ACCOMMODATION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>SERVICE FACILITY SET</i>	::>	<b>ACCOMMODATION</b> inherits from <b>SERVICE FACILITY SET</b>
	<b>FareClass</b>	<i>FareClassEnum</i>	0:1	FARE CLASS of ACCOMMODATION.
	<b>AccommodationFacility</b>	<i>AccommodationFacilityEnum</i>	0:1	Type of accommodation Facility in ACCOMMODATION.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of ACCOMMODATION.
	<b>CouretteFacility</b>	<i>CouretteFacilityEnum</i>	0:1	Toilet Facility in ACCOMMODATION.
	<b>ShowerFacility</b>	<i>SanitaryFacilityEnum</i>	0:1	Shower Facility in ACCOMMODATION.
	<b>ToiletFacility</b>	<i>SanitaryFacilityEnum</i>	0:1	Toilet Facility in ACCOMMODATION
«UID»	<b>Id</b>		1:1	Identifier of ACCOMMODATION.
	<b>Gender</b>	<i>GenderLimitationEnum</i>	0:1	
	<b>BerthType</b>	<i>BerthTypeEnum</i>	0:1	Berth levels in compartment
	<b>NuisanceFacility</b>	<i>NuisanceFacilityEnum</i>	0:*	Nuisance Facility in ACCOMMODATION

**ACTIVATED EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.ACTIVATED EQUIPMENT)

An equipment activated by the passage of a vehicle at an ACTIVATION POINT or on an ACTIVATION LINK.

**ACTIVATED EQUIPMENT – Relations**

Source	Target
<b>ACTIVATED EQUIPMENT</b> Role: related to Cardinality: * Relation type: Association	<b>TRAFFIC CONTROL POINT</b> Role: controlled by Cardinality: 1..*
<b>ACTIVATED EQUIPMENT</b> Role: used to define Cardinality: 1 Relation type: Association	<b>ACTIVATION ASSIGNMENT</b> Role: for Cardinality: *
<b>ACTIVATED EQUIPMENT</b> Role: used to trigger Cardinality: * Relation type: Association	<b>TYPE OF ACTIVATION</b> Role: triggered by Cardinality: 1..*

**ACTIVATED EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ActivatedEquipmentIdType</i>	1:1	Identifier of ACTIVATED EQUIPMENT.

**ACTIVATION ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.ACTIVATION ASSIGNMENT)

An assignment of an ACTIVATION POINT/LINK to an ACTIVATED EQUIPMENT related on its turn to a TRAFFIC CONTROL POINT. The considered ACTIVATION POINT/LINK will be used to influence the control process for that TRAFFIC CONTROL POINT (e.g. to fix priorities as regards the processing of competing requests from different ACTIVATION POINTs/LINKs).

#### ACTIVATION ASSIGNMENT – Relations

Source	Target
<b>ACTIVATED EQUIPMENT</b> Role: used to define Cardinality: 1 Relation type: Association	<b>ACTIVATION ASSIGNMENT</b> Role: for Cardinality: *
<b>ACTIVATION LINK</b> Role: used to define Cardinality: 1 Relation type: Association	<b>ACTIVATION ASSIGNMENT</b> Role: for Cardinality: *
<b>ACTIVATION POINT</b> Role: used to define Cardinality: 1 Relation type: Association	<b>ACTIVATION ASSIGNMENT</b> Role: for Cardinality: *

#### ACTIVATION ASSIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	ActivatedAssignmentIdType	1:1	Identifier of ACTIVATION ASSIGNMENT.
	<b>Order</b>	positiveInteger	0:1	Order of ASSIGNMENT relative to other ASSIGNMENTs.

#### ACTIVATION LINK

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.ACTIVATION LINK)

A LINK where a control process is activated when a vehicle passes it.

#### ACTIVATION LINK – Relations

Source	Target
<b>ACTIVATION LINK</b> Role: used to define Cardinality: 1 Relation type: Association	<b>ACTIVATION ASSIGNMENT</b> Role: for Cardinality: *
<b>ACTIVATION LINK</b> Role: to Cardinality: * Relation type: Association	<b>ACTIVATION POINT</b> Role: end of Cardinality: 1
<b>ACTIVATION POINT</b> Role: start of Cardinality: 1 Relation type: Association	<b>ACTIVATION LINK</b> Role: from Cardinality: *
<b>ACTIVATION LINK</b> Role: used to trigger Cardinality: * Relation type: Association	<b>TYPE OF ACTIVATION</b> Role: triggered along Cardinality: 1..*
<b>ACTIVATION LINK</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**ACTIVATION LINK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ActivationLinkIdType</i>	1:1	Identifier of ACTIVATION LINK.

**ACTIVATION POINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.ACTIVATION POINT)

A POINT where a control process is activated when a vehicle passes it. Equipment may be needed for the activation.

**ACTIVATION POINT – Relations**

Source	Target
<b>ACTIVATION LINK</b> Role: to Cardinality: * Relation type: Association	<b>ACTIVATION POINT</b> Role: end of Cardinality: 1
<b>ACTIVATION POINT</b> Role: Cardinality: Relation type: Generalization	<b>POINT</b> Role: Cardinality:
<b>ACTIVATION POINT</b> Role: used to define Cardinality: 1 Relation type: Association	<b>ACTIVATION ASSIGNMENT</b> Role: for Cardinality: *
<b>ACTIVATION POINT</b> Role: located in Cardinality: * Relation type: Association	<b>TARIFF ZONE</b> Role: including Cardinality: *
<b>BEACON POINT</b> Role: Cardinality: Relation type: Generalization	<b>ACTIVATION POINT</b> Role: Cardinality:
<b>ACTIVATION POINT</b> Role: start of Cardinality: 1 Relation type: Association	<b>ACTIVATION LINK</b> Role: from Cardinality: *
<b>ACTIVATION POINT</b> Role: used to trigger Cardinality: * Relation type: Association	<b>TYPE OF ACTIVATION</b> Role: triggered at Cardinality: 1..*
<b>ACTIVATION POINT</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**ACTIVATION POINT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>POINT</i>	::>	<b>ACTIVATION POINT</b> inherits from <b>POINT</b>
«UID»	<b>Id</b>	<i>ActivationPointIdType</i>	1:1	Identifier of ACTIVATION POINT.
	<b>ActivationPointNumber</b>	<i>normalizedString</i>	0:1	Number of ACTIVATION POINT.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of ACTIVATION POINT.

**ACTUAL VEHICLE EQUIPMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Actual Vehicle Equipment MODEL.ACTUAL VEHICLE EQUIPMENT)

An item of equipment of a particular type in an individual VEHICLE.

**ACTUAL VEHICLE EQUIPMENT – Relations**

Source	Target
<b>TRAIN ELEMENT</b> Role: equipped with Cardinality: <b>1</b> Relation type: Association	<b>ACTUAL VEHICLE EQUIPMENT</b> Role: in Cardinality: *
<b>ACTUAL VEHICLE EQUIPMENT</b> Role: in Cardinality: * Relation type: Association	<b>VEHICLE TYPE</b> Role: equipped with Cardinality: <b>1</b>
<b>WHEELCHAIR EQUIPMENT</b> <b>VEHICLE</b> Role: Cardinality: Relation type: Generalization	<b>ACTUAL VEHICLE EQUIPMENT</b> Role: Cardinality:
<b>VEHICLE ACCESS EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>ACTUAL VEHICLE EQUIPMENT</b> Role: Cardinality:
<b>ACTUAL VEHICLE EQUIPMENT</b> Role: in Cardinality: <b>0..*</b> Relation type: Aggregation	<b>VEHICLE</b> Role: equipped with Cardinality: <b>1</b>
<b>ACTUAL VEHICLE EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>INSTALLED EQUIPMENT</b> Role: Cardinality:
<b>ACTUAL VEHICLE EQUIPMENT</b> Role: for Cardinality: <b>0.. 1</b> Relation type: Association	<b>ACCESSIBILITY ASSESSMENT</b> Role: suitable Cardinality: <b>0..1</b>
<b>PASSENGER EQUIPMENT</b> Role: used as Cardinality: <b>0..1</b> Relation type: Association	<b>ACTUAL VEHICLE EQUIPMENT</b> Role: using Cardinality: <b>0..1</b>

**ACTUAL VEHICLE EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INSTALLED EQUIPMENT	::>	<b>ACTUAL VEHICLE EQUIPMENT</b> inherits from <b>INSTALLED EQUIPMENT</b>
«UID»	<b>Id</b>	ActualVehicleEquipmentIdType	1:1	Identifier of ACTUAL VEHICLE EQUIPMENT.
	<b>Units</b>	nonNegativeInteger	0:1	How many instances of ACTUAL VEHICLE EQUIPMENT there are on vehicle.

**ADDRESS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Topographic Place MODEL.ADDRESS)

The descriptive data associated with a *PLACE* that can be used to describe the unique geographical context of a *PLACE* for the purposes of identifying it. May be refined as either a *ROAD ADDRESS*, a *POSTAL ADDRESS* or both.

#### ADDRESS – Relations

Source	Target
<b>COUNTRY</b> Role: hosting Cardinality: 1 Relation type: Association	<b>ADDRESS</b> Role: hosted by Cardinality: 0..*
<b>POSTAL ADDRESS</b> Role: Cardinality: Relation type: Generalization	<b>ADDRESS</b> Role: Cardinality:
<b>ROAD ADDRESS</b> Role: Cardinality: Relation type: Generalization	<b>ADDRESS</b> Role: Cardinality:
<b>ADDRESSABLE PLACE</b> Role: described by Cardinality: 1 Relation type: Association	<b>ADDRESS</b> Role: describing Cardinality: 0..*
<b>ADDRESS</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

#### ADDRESS – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>AddressIdType</i>	1:1	Identifier of a ADDRESS.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short name of a ADDRESS.

#### ADDRESSABLE PLACE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Topographic Place MODEL.ADDRESSABLE PLACE)

A type of *PLACE* to which passengers may refer to indicate the origin or a destination of a trip and that is so specific that it has an *ADDRESS*.

#### ADDRESSABLE PLACE – Relations

Source	Target
<b>ADDRESSABLE PLACE</b> Role: described by Cardinality: 1 Relation type: Association	<b>ADDRESS</b> Role: describing Cardinality: 0..*
<b>ADDRESSABLE PLACE</b> Role: Cardinality: Relation type: Generalization	<b>PLACE</b> Role: Cardinality:
<b>SITE ELEMENT</b> Role: Cardinality: Relation type: Generalization	<b>ADDRESSABLE PLACE</b> Role: Cardinality:

**ADDRESSABLE PLACE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE	::>	<b>ADDRESSABLE PLACE</b> inherits from <b>PLACE</b>
	<b>Image</b>	anyUri	0:1	Image associated with ADDRESSABLE PLACE..
	<b>Url</b>	anyUri	0:1	URL associated with ADDRESSABLE PLACE..

**ADMINISTRATIVE ZONE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.ADMINISTRATIVE ZONE)

The area of a district, a region, a city, a municipality, or other area with which an ORGANIZATION has a RESPONSIBILITY ROLE.

**ADMINISTRATIVE ZONE – Relations**

Source	Target
<b>AUTHORITY</b> Role: managing Cardinality: 1 Relation type: Association	<b>ADMINISTRATIVE ZONE</b> Role: managed by Cardinality: *
<b>ADMINISTRATIVE ZONE</b> Role: Cardinality: Relation type: Generalization	<b>ZONE</b> Role: Cardinality:
<b>ADMINISTRATIVE ZONE</b> Role: managed by Cardinality: 0..* Relation type: Association	<b>ORGANISATION PART</b> Role: managing Cardinality: 1
<b>ADMINISTRATIVE ZONE</b> Role: in charge of Cardinality: 0..1 Relation type: Association	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> Role: delegated to Cardinality: 0..*
<b>ADMINISTRATIVE ZONE</b> Role: Cardinality: 1 Relation type: Association	<b>CLASS IN REPOSITORY</b> Role: Cardinality: 0..*
<b>ENTITY IN VERSION</b> Role: referring to Cardinality: 0..* Relation type: Association	<b>ADMINISTRATIVE ZONE</b> Role: Cardinality: 1..

**ADMINISTRATIVE ZONE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ZONE	::>	<b>ADMINISTRATIVE ZONE</b> inherits from <b>ZONE</b>
«UID»	<b>id</b>	AdministrativeZoneIdType	1:1	Identifier of an ADMINISTRATIVE ZONE.
	<b>ShortName</b>	MultilingualString	0:1	Short name of ADMINISTRATIVE ZONE..

**ALLOWED LINE DIRECTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND NetworkD Description MODEL.NT Route MODEL.ALLOWED LINE DIRECTION)



An allowed DIRECTION that can be used on a given ROUTE. This can be used to validate the selection of allowed values.

#### ALLOWED LINE DIRECTION – Relations

Source	Target
<b>ALLOWED LINE DIRECTION</b> <i>Role:</i> used by <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>LINE</b> <i>Role:</i> uses <i>Cardinality:</i> 1
<b>ALLOWED LINE DIRECTION</b> <i>Role:</i> allowed for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DIRECTION</b> <i>Role:</i> allowing for <i>Cardinality:</i> 1

#### ALLOWED LINE DIRECTION – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>AllowedDirectionIdType</i>	1:1	Identifier of ALLOWED LINE DIRECTION.

#### ALTERNATIVE NAME

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Alternative Name MODEL.ALTERNATIVE NAME)

*Alternative name for the entity.*

#### ALTERNATIVE NAME – Relations

Source	Target
<b>ALTERNATIVE NAME</b> <i>Role:</i> alias for <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>SITE ELEMENT</b> <i>Role:</i> provided with <i>Cardinality:</i> 1
<b>ALTERNATIVE NAME</b> <i>Role:</i> alias for <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>ENTITY</b> <i>Role:</i> provided with <i>Cardinality:</i> 1
<b>ALTERNATIVE NAME</b> <i>Role:</i> alias for <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PLACE</b> <i>Role:</i> provided with <i>Cardinality:</i> 1

#### ALTERNATIVE NAME – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>AliasIdType</i>	1:1	Identifier of alternative name.
	<b>NameType</b>	<i>NameTypeEnum</i>	0:1	Type of alternative name.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short version of alternative name.
	<b>Abbreviation</b>	<i>MultilingualString</i>	0:1	Abbreviation associated with alternative name.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Text for alternative name.
	<b>QualifierName</b>	<i>MultilingualString</i>	0:1	Name used to qualify alternative name .

**ASSISTANCE SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .ASSISTANCE SERVICE)

Specialisation of LOCAL SERVICE for ASSISTANCE providing information like language, accessibility trained staff, etc.

**ASSISTANCE SERVICE – Relations**

Source	Target
<b>ASSISTANCE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>ASSISTANCE SERVICE</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF STAFFING</b> Role: description of Cardinality: 0..*
<b>ASSISTANCE SERVICE</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF ASSISTANCE SERVICE</b> Role: classification for Cardinality: 0..1
<b>ASSISTANCE SERVICE</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF EMERGENCY SERVICE</b> Role: description of Cardinality: 0..*
<b>ASSISTANCE SERVICE</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF ACCESSIBILITY TOOLS</b> Role: description of Cardinality: 0..*

**ASSISTANCE SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>ASSISTANCE SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>	AssistanceService	1:1	Identifier of ASSISTANCE SERVICE.
	<b>Languages</b>	lang	1:*	Which languages are spoken.
	<b>AssistanceAvailability</b>	AssistanceAvailabilityEnum	0:*	When assistance is available
	<b>Staffing</b>	StaffingEnum	0:1	Whether the service is staffed.
	<b>AccessibilityTools</b>	AccessibilityToolEnum	0:*	Whether accessibility tools such as wheelchairs are available.
	<b>AccessibilityTrainedStaff</b>	boolean	0:1	Whether staff are accessibility trained.
	<b>EmergencyServices</b>	EmergencyServicesEnum	0:*	Emergency services available that may be relevant for accessibility.
	<b>SafetyFacilities</b>	SafetyFacilityEnum	0:*	Safety facilities available

**AUTHORITY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Organisations MODEL.AUTHORITY)

The organisation under which the responsibility of organising the transport service in a certain area is placed.

**AUTHORITY – Relations**

Source	Target
<b>GROUP OF OPERATORS</b> Role: serving PT for Cardinality: 0..* Relation type: Association	<b>AUTHORITY</b> Role: ordering PT service from Cardinality: *
<b>OPERATOR</b> Role: serving PT for Cardinality: * Relation type: Association	<b>AUTHORITY</b> Role: ordering PT service from Cardinality: *
<b>AUTHORITY</b> Role: managing Cardinality: 1 Relation type: Association	<b>ADMINISTRATIVE ZONE</b> Role: managed by Cardinality: *
<b>AUTHORITY</b> Role: Cardinality: Relation type: Generalization	<b>ORGANISATION</b> Role: Cardinality:
<b>AUTHORITY</b> Role: managing Cardinality: 0..1 Relation type: Association	<b>CLASS IN REPOSITORY</b> Role: managed by Cardinality: 0..*
<b>AUTHORITY</b> Role: managing Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: managed by Cardinality: *
<b>AUTHORITY</b> Role: managing Cardinality: 0..1 Relation type: Association	<b>JOURNEY PATTERN</b> Role: managed by Cardinality: *
<b>SPECIAL SERVICE</b> Role: operated for Cardinality: * Relation type: Association	<b>AUTHORITY</b> Role: managing Cardinality: 0..1

**AUTHORITY – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ORGANISATION	::>	<b>AUTHORITY</b> inherits from <b>ORGANISATION</b>
«UID»	<b>Id</b>	AuthorityIdType	1:1	Identifier of AUTHORITY.

**AVAILABILITY CONDITION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Availability Condition MODEL.AVAILABILITY CONDITION)

A **VALIDITY CONDITION** expressed in terms of temporal parameters and referring to **DAY TYPE**s.

**AVAILABILITY CONDITION – Relations**

Source	Target
<b>FACILITY SET</b> Role: available at Cardinality: <b>0..*</b> Relation type: Association	<b>AVAILABILITY CONDITION</b> Role: determining the availability of Cardinality: <b>0..1</b>
<b>OPERATING DAY</b> Role: determining Cardinality: <b>0..*</b> Relation type: Aggregation	<b>AVAILABILITY CONDITION</b> Role: valid for Cardinality: <b>0..*</b>
<b>TIME BAND</b> Role: determining Cardinality: <b>0..*</b> Relation type: Aggregation	<b>AVAILABILITY CONDITION</b> Role: valid for Cardinality: <b>0..*</b>
<b>AVAILABILITY CONDITION</b> Role: valid for Cardinality: <b>1..*</b> Relation type: Association	<b>DAY TYPE</b> Role: characterized by Cardinality: <b>0..*</b>
<b>ACCESSIBILITY ASSESSMENT</b> Role: determined by Cardinality: <b>0..*</b> Relation type: Association	<b>AVAILABILITY CONDITION</b> Role: determining Cardinality: <b>0..*</b>
<b>AVAILABILITY CONDITION</b> Role: Cardinality: Relation type: Generalization	<b>VALIDITY CONDITION</b> Role: Cardinality:
<b>AVAILABILITY CONDITION</b> Role: applicable for Cardinality: <b>0..*</b> Relation type: Aggregation	<b>STOP ASSIGNMENT</b> Role: for Cardinality: <b>0..1</b>

**AVAILABILITY CONDITION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	VALIDITY CONDITION	::>	<b>AVAILABILITY CONDITION</b> inherits from <b>VALIDITY CONDITION</b>
«UID»	<b>Id</b>	AvailabilityConditionIdType	1:1	Identifier of AVAILABILITY CONDITION.
	<b>IsAvailable</b>	boolean	0:1	Whether the Condition makes the resource available or not available.
	<b>FromDate</b>	dateTime	0:1	Inclusive start date for validity of AVAILABILITY CONDITION.
	<b>ToDate</b>	dateTime	0:1	Inclusive End date for validity of AVAILABILITY CONDITION.

**BEACON POINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.BEACON POINT)

A POINT where a beacon or similar device to support the automatic detection of vehicles passing by is located.

**BEACON POINT – Relations**

Source	Target
<b>BEACON POINT</b> Role: Cardinality: Relation type: Generalization	<b>ACTIVATION POINT</b> Role: Cardinality:
<b>BEACON POINT</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**BEACON POINT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ACTIVATION POINT	::>	<b>BEACON POINT</b> inherits from <b>ACTIVATION POINT</b>
«UID»	<b>Id</b>	BeaconPointIdType	1:1	Identifier of BEACON POINT.

**BLOCK**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.BLOCK)

The work of a vehicle from the time it leaves a PARKING POINT after parking until its next return to park at a PARKING POINT. Any subsequent departure from a PARKING POINT after parking marks the start of a new BLOCK. The period of a BLOCK has to be covered by DUTIES.

**BLOCK – Relations**

Source	Target
<b>DAY TYPE</b> Role: for Cardinality: 1..* Relation type: Association	<b>BLOCK</b> Role: worked on Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>BLOCK</b> Role: managed by Cardinality: *
<b>BLOCK PART</b> Role: part of Cardinality: * Relation type: Aggregation	<b>BLOCK</b> Role: subdivided in Cardinality: 1
<b>NORMAL DATED BLOCK</b> Role: using Cardinality: * Relation type: Association	<b>BLOCK</b> Role: used by Cardinality: 1
<b>BLOCK</b> Role: used as Cardinality: 1 Relation type: Association	<b>BLOCK PART</b> Role: use of Cardinality: *

<b>BLOCK</b> <i>Role: started at</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>PARKING POINT</b> <i>Role: start of</i> <i>Cardinality: 1</i>
<b>BLOCK</b> <i>Role: ended at</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>PARKING POINT</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>BLOCK</b> <i>Role: using</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>VEHICLE TYPE</b> <i>Role: assigned to</i> <i>Cardinality: 1</i>
<b>BLOCK</b> <i>Role: including</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>RELIEF OPPORTUNITY</b> <i>Role: in</i> <i>Cardinality: *</i>
<b>BLOCK</b> <i>Role: subdivided in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>COURSE OF JOURNEYS</b> <i>Role: a part of</i> <i>Cardinality: *</i>
<b>BLOCK</b> <i>Role: part of</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>VEHICLE SERVICE PART</b> <i>Role: including</i> <i>Cardinality: 0..1</i>
<b>BLOCK</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>VEHICLE SCHEDULE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>BLOCK</b> <i>Role: including</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>SPECIAL SERVICE</b> <i>Role: in</i> <i>Cardinality: *</i>
<b>BLOCK</b> <i>Role: including</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>VEHICLE JOURNEY</b> <i>Role: in</i> <i>Cardinality: *</i>

**BLOCK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>BlockIdType</i>	1:1	Identifier of BLOCK.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of BLOCK.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of BLOCK.
	<b>PreparationDuration</b>	<i>duration</i>	0:1	How long needed to prepare to run BLOCK.
	<b>StartTime</b>	<i>time</i>	0:1	Start time of BLOCK in principle this can be derived from the Start time of the first journey and the preparation duration. .
	<b>EndTime</b>	<i>time</i>	0:1	End time of BLOCK in principle this can be derived from the Start time of the last journey and the finishing duration. .
	<b>StartTimeDayOffset</b>	<i>DayOffsetType</i>	0:1	Day offset of start time from OPERATING DAY.
	<b>EndTimeDayOffset</b>	<i>Integer</i>	0:1	Day offset of end time from start time
	<b>FinishingDuration</b>	<i>duration</i>	0:1	How long needed to prepare to complete BLOCK.

**BLOCK PART**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.BLOCK PART)

Part of a BLOCK corresponding to the different JOURNEY PARTs of the VEHICLE JOURNEYs in a BLOCK.

**BLOCK PART – Relations**

Source	Target
<b>VEHICLE TYPE</b> Role: assigned to Cardinality: * Relation type: Association	<b>BLOCK PART</b> Role: using Cardinality: *
<b>BLOCK PART</b> Role: included in Cardinality: * Relation type: Association	<b>COMPOUND BLOCK</b> Role: including Cardinality: 0..1
<b>BLOCK PART</b> Role: part of Cardinality: * Relation type: Aggregation	<b>BLOCK</b> Role: subdivided in Cardinality: 1
<b>BLOCK</b> Role: used as Cardinality: 1 Relation type: Association	<b>BLOCK PART</b> Role: use of Cardinality: *
<b>TYPE OF COUPLING</b> Role: classification for Cardinality: 0..1 Relation type: Association	<b>BLOCK PART</b> Role: classified by Cardinality: 0..*
<b>JOURNEY PART</b> Role: in Cardinality: * Relation type: Association	<b>BLOCK PART</b> Role: including Cardinality: 0..1

**BLOCK PART – Attributes**

Classifi- cation	Name	Type	cardinality	Description
	<b>Order</b>	<i>integer</i>	0:1	Order of BLOCK PART within BLOCK
«UID»	<b>Id</b>	<i>BlockPartIdType</i>	1:1	Identifier of BLOCK PART.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of BLOCK PART.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Description of COURSE OF JOURNEYs.

**BOARDING POSITION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.BOARDING POSITION)

A location within a QUAY from which passengers may directly board, or onto which passengers may directly alight from a VEHICLE.

**BOARDING POSITION – Relations**

Source	Target
<b>BOARDING POSITION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i>
<b>STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>BOARDING POSITION</b> <i>Role:</i> to <i>Cardinality:</i> 0..1
<b>VEHICLE POSITION ALIGNMENT</b> <i>Role:</i> serving <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>BOARDING POSITION</b> <i>Role:</i> linked to <i>Cardinality:</i> 1
<b>TRAIN STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>BOARDING POSITION</b> <i>Role:</i> to <i>Cardinality:</i> 0..1
<b>BOARDING POSITION</b> <i>Role:</i> a part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>QUAY</b> <i>Role:</i> composed by <i>Cardinality:</i> 1
<b>BOARDING POSITION</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF BOARDING POSITION</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1

**BOARDING POSITION – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	STOP PLACE SPACE	::>	<b>BOARDING POSITION</b> inherits from <b>STOP PLACE SPACE</b>
«UID»	<b>Id</b>	BoardingPositionIdType	1:1	Identifier of BOARDING POSITION.

**BOOKING ARRANGEMENTS**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Flexible Network MODEL.BOOKING ARRANGEMENTS)

Booking arrangements for FLEXIBLE LINE.

**BOOKING ARRANGEMENTS – Relations**

Source	Target
<b>BOOKING ARRANGEMENTS</b> <i>Role:</i> for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>FLEXIBLE LINE</b> <i>Role:</i> admitting <i>Cardinality:</i> *



**BOOKING ARRANGEMENTS – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of BOOKING ARRANGEMENTS.
	<b>BookingMethods</b>	<i>BookingMethodEnum</i>	0:*	Booking method for FLEXIBLE LINE.
	<b>BookingAccess</b>	<i>BookingAccessEnum</i>	0:1	Who can make a Booking.
	<b>LatestBookingTime</b>	<i>MultilingualString</i>	0:1	Latest time in day that booking can be made.
	<b>MinimumBookingPeriod</b>	<i>duration</i>	0:1	Minimum interval in advance of departure day or time that service may be ordered.

**CATERING SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.CATERING SERVICE)

Specialisation of LOCAL SERVICE dedicated to catering service.

**CATERING SERVICE – Relations**

Source	Target
<b>CATERING SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>TYPE OF CATERING SERVICE</b> Role: classification for Cardinality: 1 Relation type: Association	<b>CATERING SERVICE</b> Role: classified as Cardinality: 0..*

**CATERING SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>CATERING SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>		1:1	Identifier of REFRESHMENTS SERVICE.

**CHECK CONSTRAINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Check Constraint MODEL.CHECK CONSTRAINT)

Characteristics of a process that takes place at a SITE COMPONENT, such as check-in, security screening, ticket control or immigration, that may potentially incur a time penalty that should be allowed for when journey planning.

## CHECK CONSTRAINT – Relations

Source	Target
<b>CHECK CONSTRAINT</b> <i>Role: limited to</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>CLASS OF USE</b> <i>Role: for</i> <i>Cardinality: 0..1</i>
<b>VALIDITY CONDITION</b> <i>Role: determining</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>CHECK CONSTRAINT</b> <i>Role: determined by</i> <i>Cardinality: 0..1</i>
<b>CHECK CONSTRAINT</b> <i>Role: limited to</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>FACILITY</b> <i>Role: for</i> <i>Cardinality: 0..1</i>
<b>CHECK CONSTRAINT</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF ACCESS FEATURE</b> <i>Role: determining</i> <i>Cardinality: 0..1</i>
<b>CHECK CONSTRAINT</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF SERVICE NATURE</b> <i>Role: determining</i> <i>Cardinality: 0..1</i>
<b>CHECK CONSTRAINT</b> <i>Role: classified as</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF CHECK CONSTRAINT</b> <i>Role: classification for</i> <i>Cardinality: 1</i>
<b>CHECK CONSTRAINT DELAY</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>CHECK CONSTRAINT</b> <i>Role: determining</i> <i>Cardinality: 1</i>
<b>CHECK CONSTRAINT</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF CONGESTION</b> <i>Role: determining</i> <i>Cardinality: 0..1</i>
<b>CHECK CONSTRAINT THROUGHPUT</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>CHECK CONSTRAINT</b> <i>Role: determining</i> <i>Cardinality: 1</i>
<b>CHECK CONSTRAINT</b> <i>Role: affecting</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>PATH LINK</b> <i>Role: affected by</i> <i>Cardinality: 1</i>
<b>CHECK CONSTRAINT</b> <i>Role: characterising</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>SITE COMPONENT</b> <i>Role: characterised by</i> <i>Cardinality: 1</i>
<b>CHECK CONSTRAINT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE JOURNEY</b> <i>Role: affected by</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>CHECK CONSTRAINT</b> <i>Role: a process for</i> <i>Cardinality: 0..*</i>

**CHECK CONSTRAINT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>CheckConstraintIdType</i>	1:1	Identifier of CHECK CONSTRAINT.
	<b>Order</b>	<i>integer</i>	0:1	Order of CHECK CONSTRAINT.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of CHECK CONSTRAINT.
	<b>CheckDirection</b>	<i>CheckDirectionEnum</i>	0:1	Direction in which CHECK CONSTRAINT applies: forwards, back or both. For CHECK CONSTRAINT associated with links, corresponds to direction of link. For CHECK CONSTRAINT associated with ENTRANCES corresponds to direction from outside SITE to inside SITE.
	<b>AccessFeatureType</b>	<i>AccessFeatureEnum</i>	0:1	Access feature associated with CHECK CONSTRAINT.

**CHECK CONSTRAINT DELAY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Check Constraint MODEL.CHECK CONSTRAINT DELAY)

Time penalty associated with a CHECK CONSTRAINT.

**CHECK CONSTRAINT DELAY – Relations**

Source	Target
<b>CHECK CONSTRAINT DELAY</b> <i>Role:</i> determined by <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>CHECK CONSTRAINT</b> <i>Role:</i> determining <i>Cardinality:</i> 1
<b>VALIDITY CONDITION</b> <i>Role:</i> determining <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>CHECK CONSTRAINT DELAY</b> <i>Role:</i> applicable for <i>Cardinality:</i> 0..1
<b>CHECK CONSTRAINT DELAY</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**CHECK CONSTRAINT DELAY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>CheckConstraintDelayIdType</i>	1:1	Identifier of CHECK CONSTRAINT DELAY.
	<b>AverageDuration</b>	<i>duration</i>	0:1	Average duration of delay of CHECK CONSTRAINT DELAY.
	<b>MinimumDuration</b>	<i>duration</i>	0:1	Minimum expected duration of delay of CHECK CONSTRAINT DELAY.
	<b>MaximumDuration</b>	<i>duration</i>	0:1	Maximum expected duration of delay of CHECK CONSTRAINT DELAY.

**CHECK CONSTRAINT THROUGHPUT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Check Constraint MODEL.CHECK CONSTRAINT THROUGHPUT)

Throughput of a CHECK CONSTRAINT: the number of passengers who can pass through it in a specified interval.

**CHECK CONSTRAINT THROUGHPUT – Relations**

Source	Target
<b>CHECK CONSTRAINT THROUGHPUT</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>CHECK CONSTRAINT</b> <i>Role: determining</i> <i>Cardinality: 1</i>
<b>VALIDITY CONDITION</b> <i>Role: determining</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>CHECK CONSTRAINT THROUGHPUT</b> <i>Role: applicable for</i> <i>Cardinality: 0..1</i>

**CHECK CONSTRAINT THROUGHPUT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ThroughputIdType</i>	1:1	Identifier of CHECK CONSTRAINT THROUGHPUT.
	<b>Period</b>	<i>duration</i>	0:1	Identifier of PERIOD for CHECK CONSTRAINT THROUGHPUT.
	<b>MaximumPassengers</b>	<i>NumberOfPassengers</i>	0:1	Maximum number of passengers for CHECK CONSTRAINT THROUGHPUT.
	<b>AveragePassengers</b>	<i>NumberOfPassengers</i>	0:1	Average number of passengers for CHECK CONSTRAINT THROUGHPUT.
	<b>WheelchairPassengers</b>	<i>NumberOfPassengers</i>	0:1	Maximum number of wheelchair passengers for CHECK CONSTRAINT THROUGHPUT.

**CLASS IN FRAME**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Version Frame MODEL.CLASS IN FRAME)

The different CLASSEes IN REPOSITORY which can be relevant for corresponding VERSION FRAMEs.

**CLASS IN FRAME – Relations**

Source	Target
<b>CLASS IN FRAME</b> <i>Role: restricting</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>ENTITY IN VERSION</b> <i>Role: restricted by</i> <i>Cardinality: *</i>
<b>CLASS IN FRAME</b> <i>Role: parent of</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>CLASS IN FRAME</b> <i>Role: derived from</i> <i>Cardinality: *</i>
<b>TYPE OF FRAME</b> <i>Role: a classification for</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>CLASS IN FRAME</b> <i>Role: classified as</i> <i>Cardinality: *</i>
<b>CLASS IN REPOSITORY</b> <i>Role: comprising</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>CLASS IN FRAME</b> <i>Role: belonging to</i> <i>Cardinality: *</i>

**CLASS IN FRAME – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of the class (name) of a CLASS IN REPOSITORY belonging to a VERSION FRAME.

**CLASS IN REPOSITORY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Entity MODEL.CLASS IN REPOSITORY)

Any ENTITY name belonging to the repository. E.g. DAY TYPE, PROPERTY OF DAY, TIME BAND, VEHICLE TYPE, etc, are relevant instances of CLASS IN REPOSITORY in the context of version management.

**CLASS IN REPOSITORY – Relations**

Source	Target
<b>ENTITY</b> Role: instance of Cardinality: * Relation type: Association	<b>CLASS IN REPOSITORY</b> Role: filled by Cardinality: 1
<b>ADMINISTRATIVE ZONE</b> Role: Cardinality: 1 Relation type: Association	<b>CLASS IN REPOSITORY</b> Role: Cardinality: 0..*
<b>ORGANISATIONAL UNIT</b> Role: operationally responsible for Cardinality: 0..1 Relation type: Association	<b>CLASS IN REPOSITORY</b> Role: operationally managed by Cardinality: 0..*
<b>CLASS IN REPOSITORY</b> Role: comprising Cardinality: 1 Relation type: Association	<b>CLASS IN FRAME</b> Role: belonging to Cardinality: *
<b>AUTHORITY</b> Role: managing Cardinality: 0..1 Relation type: Association	<b>CLASS IN REPOSITORY</b> Role: managed by Cardinality: 0..*
<b>CLASS IN REPOSITORY</b> Role: defining Cardinality: * Relation type: Association	<b>TYPE OF VALIDITY</b> Role: defined by Cardinality: *

**CLASS IN REPOSITORY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	NameOfClass	1:1	Unique Identifier of Class of ENTITY. There will only be a Single instance, which must be the class name, e.g. Day Type, Property of Day, etc

**CLASS OF USE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Restriction MODEL.CLASS OF USE)

A classification of fare and other service classes by category of user entitled to use them.

## CLASS OF USE – Relations

Source	Target
<b>CLASS OF USE</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE RESTRICTION</b> Role: Cardinality:
<b>CHECK CONSTRAINT</b> Role: limited to Cardinality: 0..* Relation type: Association	<b>CLASS OF USE</b> Role: for Cardinality: 0..1
<b>WAITING ROOM EQUIPMENT</b> Role: assigned to Cardinality: 0..* Relation type: Association	<b>CLASS OF USE</b> Role: characterising Cardinality: 0..1

## CLASS OF USE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	SERVICE RESTRICTION	::>	CLASS OF USE inherits from SERVICE RESTRICTION
«UID»	Id		1:1	Identifier of CLASS OF USE.

## COMMON SECTION

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Common Section MODEL.COMMON SECTION)

A part of a public transport network where the ROUTES of several JOURNEY PATTERNS are going in parallel and where the synchronisation of SERVICE JOURNEYS may be planned and controlled with respect to commonly used LINKs and SCHEDULED STOP POINTs. COMMON SECTIONs are defined arbitrarily and need not cover the total lengths of topologically bundled sections.

## COMMON SECTION – Relations

Source	Target
<b>POINT</b> Role: included in Cardinality: 2..* Relation type: Association	<b>COMMON SECTION</b> Role: comprising Cardinality: *
<b>COMMON SECTION</b> Role: marked by Cardinality: 0..1 Relation type: Association	<b>NOTICE ASSIGNMENT</b> Role: assigned to Cardinality: *
<b>LINE SECTION</b> Role: Cardinality: Relation type: Generalization	<b>COMMON SECTION</b> Role: Cardinality:
<b>COMMON SECTION</b> Role: defined for Cardinality: 0..* Relation type: Association	<b>JOURNEY PATTERN</b> Role: used to define Cardinality: 1..*
<b>COMMON SECTION</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**COMMON SECTION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>CommonSectionIdType</i>	1:1	Identifier of COMMON SECTION
	<b>Description</b>		0:1	Description of COMMON SECTION.

**COMMUNICATION SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.COMMUNICATION SERVICE)

Specialisation of LOCAL SERVICE dedicated to communication services.

**COMMUNICATION SERVICE – Relations**

Source	Target
<b>TYPE OF COMMUNICATION SERVICE</b> Role: classification for Cardinality: 1 Relation type: Association	<b>COMMUNICATION SERVICE</b> Role: classified as Cardinality: 0..*
<b>COMMUNICATION SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:

**COMMUNICATION SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>LOCAL SERVICE</i>	::>	<b>COMMUNICATION SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>		1:1	Identifier of COMMUNICATION SERVICE.

**COMPLAINTS SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .COMPLAINTS SERVICE)

Specialisation of CUSTOMER SERVICE for COMPLAINTs

**COMPLAINTS SERVICE – Relations**

Source	Target
<b>COMPLAINTS SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>CUSTOMER SERVICE</b> Role: Cardinality:

**COMPLAINTS SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>CUSTOMER SERVICE</i>	::>	<b>COMPLAINTS SERVICE</b> inherits from <b>CUSTOMER SERVICE</b>
«UID»	<b>Id</b>	<i>ComplaintsService</i>	1:1	Identifier of COMPLAINTS SERVICE.

**COMPLEX FEATURE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Zone and Feature MODEL.COMPLEX FEATURE)

An aggregate of SIMPLE FEATURES and/or other COMPLEX FEATURES.

**COMPLEX FEATURE – Relations**

Source	Target
<b>COMPLEX FEATURE</b> Role: containing Cardinality: * Relation type: Association	<b>COMPLEX FEATURE</b> Role: contained in Cardinality: *
<b>COMPLEX FEATURE</b> Role: used as target in Cardinality: 1 Relation type: Association	<b>ZONE PROJECTION</b> Role: to Cardinality: *
<b>COMPLEX FEATURE</b> Role: used as target in Cardinality: 1 Relation type: Association	<b>LINK PROJECTION</b> Role: to Cardinality: *
<b>COMPLEX FEATURE</b> Role: made up of Cardinality: * Relation type: Association	<b>SIMPLE FEATURE</b> Role: contained in Cardinality: *
<b>COMPLEX FEATURE</b> Role: used as target in Cardinality: 1 Relation type: Association	<b>COMPLEX FEATURE PROJECTION</b> Role: to Cardinality: *
<b>COMPLEX FEATURE</b> Role: used as source in Cardinality: 1 Relation type: Association	<b>COMPLEX FEATURE PROJECTION</b> Role: calling as source Cardinality: *
<b>COMPLEX FEATURE</b> Role: used as target in Cardinality: 1 Relation type: Association	<b>POINT PROJECTION</b> Role: to Cardinality: *
<b>COMPLEX FEATURE</b> Role: represented by Cardinality: * Relation type: Association	<b>POINT</b> Role: representation for Cardinality: 0..1
<b>COMPLEX FEATURE</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:
<b>COMPLEX FEATURE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

**COMPLEX FEATURE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	ComplexFeatureIdType	1:1	Identifier of COMPLEX FEATURE.

**COMPLEX FEATURE PROJECTION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Projection MODEL.COMPLEX FEATURE PROJECTION)



An oriented correspondence: from one COMPLEX FEATURE in the source layer, onto an entity in a target layer: e.g. POINT, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.

#### COMPLEX FEATURE PROJECTION – Relations

Source	Target
<b>COMPLEX FEATURE PROJECTION</b> <i>Role: concerning</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TYPE OF PROJECTION</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>COMPLEX FEATURE</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>COMPLEX FEATURE PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>
<b>COMPLEX FEATURE</b> <i>Role: used as source in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>COMPLEX FEATURE PROJECTION</b> <i>Role: calling as source</i> <i>Cardinality: *</i>
<b>POINT</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>COMPLEX FEATURE PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>

#### COMPLEX FEATURE PROJECTION – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ComplexFeatureProjectionIdType</i>	1:1	Identifier of COMPLEX FEATURE PROJECTION.

#### COMPOSITE FRAME

(Transmodel v6.Part 1 - Common Concepts (CC).CC Explicit Frames MODEL .CC Composite Frame MODEL.COMPOSITE FRAME)

A set of VERSION FRAMEs to which the same VALIDITY CONDITIONs have been assigned.

## COMPOSITE FRAME – Relations

Source	Target
<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>FARE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>GENERAL FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE SCHEDULE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>DRIVER SCHEDULE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>COMPOSITE FRAME</b> <i>Role:</i> containing <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>COMPOSITE FRAME</b> <i>Role:</i> part of <i>Cardinality:</i> 0..*

## COMPOSITE FRAME – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	COMPOSITE FRAME inherits from VERSION FRAME
«UID»	Id		1:1	Identifier of a COMPOSITE FRAME.

**COMPOUND BLOCK**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.COMPOUND BLOCK)

The work of a vehicle during the time it is coupled to another vehicle.

**COMPOUND BLOCK – Relations**

Source	Target
<b>VEHICLE TYPE</b> Role: assigned to Cardinality: * Relation type: Association	<b>COMPOUND BLOCK</b> Role: using Cardinality: *
<b>COMPOUND BLOCK</b> Role: from Cardinality: * Relation type: Association	<b>TIMING POINT IN JOURNEY PATTERN</b> Role: start of Cardinality: 1
<b>COMPOUND BLOCK</b> Role: Cardinality: * Relation type: Aggregation	<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality:
<b>COMPOUND BLOCK</b> Role: to Cardinality: * Relation type: Association	<b>TIMING POINT IN JOURNEY PATTERN</b> Role: end of Cardinality: 1
<b>BLOCK PART</b> Role: included in Cardinality: * Relation type: Association	<b>COMPOUND BLOCK</b> Role: including Cardinality: 0..1

**COMPOUND BLOCK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	CompoundBlockIdType	1:1	Identifier of COMPOUND BLOCK.
	<b>Name</b>	MultilingualString	0:1	Name of COMPOUND BLOCK.

**COMPOUND TRAIN**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Train MODEL.COMPOUND TRAIN)

A VEHICLE TYPE composed of a sequence of more than one vehicles of the type TRAIN.

**COMPOUND TRAIN – Relations**

Source	Target
<b>TRAIN IN COMPOUND TRAIN</b> Role: used for Cardinality: * Relation type: Association	<b>COMPOUND TRAIN</b> Role: composed of Cardinality: 1
<b>COMPOUND TRAIN</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE TYPE</b> Role: Cardinality:

**COMPOUND TRAIN – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	VEHICLE TYPE	::>	<b>COMPOUND TRAIN</b> inherits from <b>VEHICLE TYPE</b>
«UID»	<b>Id</b>	CompoundTrainIdType	1:1	Identifier of COMPOUND TRAIN.

**CONNECTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.CONNECTION )

The physical (spatial) possibility for a passenger to change from one public transport vehicle to another to continue the trip, determined by two SCHEDULED STOP POINTs. Different times may be necessary to cover the link between these points, depending on the kind of passenger.

**CONNECTION – Relations**

Source	Target
<b>CONNECTION END</b> Role: start of Cardinality: 1 Relation type: Association	<b>CONNECTION</b> Role: from Cardinality: *
<b>CONNECTION</b> Role: to Cardinality: * Relation type: Association	<b>CONNECTION END</b> Role: end of Cardinality: 1
<b>NAVIGATION PATH ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>CONNECTION</b> Role: to Cardinality: 0..1
<b>CONNECTION</b> Role: Cardinality: Relation type: Generalization	<b>TRANSFER</b> Role: Cardinality:
<b>CONNECTION</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:
<b>INTERCHANGE</b> Role: for Cardinality: 0..* Relation type: Association	<b>CONNECTION</b> Role: at Cardinality: 0..1

**CONNECTION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	TRANSFER	::>	<b>CONNECTION</b> inherits from <b>TRANSFER</b>
«UID»	<b>Id</b>	ConnectionIdType	1:1	Identifier of a CONNECTION.
	<b>TransferOnly</b>	boolean	0:1	Whether connecting at this stop passengers may only transfer. If true, then they may not enter or exit at the station.

**CONNECTION END**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.CONNECTION END)

One end of a CONNECTION.

**CONNECTION END – Relations**

Source	Target
<b>CONNECTION END</b> Role: serviced by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: servicing Cardinality: 0..1
<b>CONNECTION END</b> Role: start of Cardinality: 1 Relation type: Association	<b>CONNECTION</b> Role: from Cardinality: *
<b>CONNECTION</b> Role: to Cardinality: * Relation type: Association	<b>CONNECTION END</b> Role: end of Cardinality: 1
<b>CONNECTION END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: viewed as Cardinality: 1
<b>SITE CONNECTION END</b> Role: Cardinality: Relation type: Generalization	<b>CONNECTION END</b> Role: Cardinality:

**CONNECTION END – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of CONNECTION END;

**CONTACT DETAILS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.CONTACT DETAILS)

Contact details for ORGANISATION for public use.

**CONTACT DETAILS – Relations**

Source	Target
<b>CONTACT DETAILS</b> Role: for Cardinality: 0..* Relation type: Association	<b>ORGANISATION</b> Role: characterised by Cardinality: 1
<b>CONTACT DETAILS</b> Role: for Cardinality: 0..1 Relation type: Association	<b>FLEXIBLE LINE</b> Role: admitting Cardinality: *

**CONTACT DETAILS – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of CONTACT DETAILS
	<b>ContactPerson</b>	<i>normalizedString</i>	0:1	Name of a Person.
	<b>Email</b>	<i>EmailAddressType</i>	0:1	Email address in ISO format.
	<b>Fax</b>	<i>PhoneNumberType</i>	0:1	Phone number of Fax.
	<b>FurtherDetails</b>	<i>xsd:string</i>	0:1	Further details of contact
	<b>Phone</b>	<i>PhoneNumberType</i>	0:1	Phone number.
	<b>Url</b>	<i>anyURI</i>	0:1	Contact URL

**CONTROL CENTRE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Organisations MODEL.CONTROL CENTRE)

An ORGANISATION PART for an operational team who are responsible for issuing commands to control the services.

**CONTROL CENTRE – Relations**

Source	Target
<b>CONTROL CENTRE</b> Role: Cardinality: Relation type: Generalization	<b>ORGANISATION PART</b> Role: Cardinality:
<b>CONTROL CENTRE</b> Role: controlling Cardinality: 0..1 Relation type: Association	<b>INTERCHANGE RULE</b> Role: controlled by Cardinality: 0..*

**CONTROL CENTRE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ORGANISATION PART	::>	<b>CONTROL CENTRE</b> inherits from <b>ORGANISATION PART</b>
«UID»	<b>Id</b>	<i>ControlCentreIdType</i>	1:1	Identifier of CONTROL CENTRE.

**COUNTRY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Topographic Place MODEL.COUNTRY)

A jurisdictional geographic boundary. A COUNTRY normally has a two character IANA identifier.

**COUNTRY – Relations**

Source	Target
<b>COUNTRY</b> Role: hosting Cardinality: 1 Relation type: Association	<b>ADDRESS</b> Role: hosted by Cardinality: 0..*
<b>POINT OF INTEREST</b> Role: Cardinality: 0..* Relation type: Association	<b>COUNTRY</b> Role: Cardinality: 1
<b>SITE ELEMENT</b> Role: located in Cardinality: * Relation type: Association	<b>COUNTRY</b> Role: locaion of Cardinality: 1
<b>TOPOGRAPHIC PLACE</b> Role: part of Cardinality: 0..* Relation type: Association	<b>COUNTRY</b> Role: primary for Cardinality: 1
<b>COUNTRY</b> Role: intersected by Cardinality: 1..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: intersecting Cardinality: 0..*
<b>COUNTRY</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

**COUNTRY – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>CountryEnum</i>	1:1	Identifier of COUNTRY.
	<b>Name</b>	<i>MultilingualString</i>	1:1	Name of COUNTRY.

**COUPLED JOURNEY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Coupled Journey MODEL.COUPLED JOURNEY)

A complete journey operated by a coupled train, composed of two or more VEHICLE JOURNEYs remaining coupled together all along a JOURNEY PATTERN. A COUPLED JOURNEY may be viewed as a single VEHICLE JOURNEY.

**COUPLED JOURNEY – Relations**

Source	Target
<b>COUPLED JOURNEY</b> Role: viewed as Cardinality: 1 Relation type: Association	<b>VEHICLE JOURNEY</b> Role: a view of Cardinality: 0..1
<b>VEHICLE JOURNEY</b> Role: part of Cardinality: 1..* Relation type: Association	<b>COUPLED JOURNEY</b> Role: composed of Cardinality: 0..1

**COUPLED JOURNEY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>CoupledJourneyIdType</i>	1:1	Identifier of COUPLED JOURNEY.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of COUPLED JOURNEY.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of a JOURNEY PART.

**COURSE OF JOURNEYS**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.COURSE OF JOURNEYS)

A part of a BLOCK composed of consecutive VEHICLE JOURNEYS defined for the same DAY TYPE, all operated on the same LINE.

**COURSE OF JOURNEYS – Relations**

Source	Target
<b>LINE</b> Role: served by Cardinality: 1 Relation type: Association	<b>COURSE OF JOURNEYS</b> Role: operated on Cardinality: *
<b>COURSE OF JOURNEYS</b> Role: Cardinality: * Relation type: Aggregation	<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality:
<b>BLOCK</b> Role: subdivided in Cardinality: 1 Relation type: Association	<b>COURSE OF JOURNEYS</b> Role: a part of Cardinality: *

**COURSE OF JOURNEYS – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>CourseOfJourneyIdType</i>	1:1	Identifier of COURSE OF JOURNEY.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Description of COURSE OF JOURNEYS.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of COURSE OF JOURNEYS.
	<b>StartTimeInBlock</b>	<i>time</i>	1:1	Start time of COURSE OF JOURNEY in BLOCK.
	<b>PreparationDuration</b>	<i>duration</i>	0:1	How long needed to prepare for COURSE OF JOURNEY in BLOCK.
	<b>FinishingDuration</b>	<i>duration</i>	0:1	How long COURSE OF JOURNEY in BLOCK.
	<b>StartTimeDayOffset</b>	<i>DayOffsetType</i>	0:1	Day offset of start time from OPERATING DAY.

**CREW BASE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Vehicle & Crew Point MODEL.CREW BASE)

A place where operating employees (e.g. drivers) report on and register their work.



**CREW BASE – Relations**

Source	Target
<b>CREW BASE</b> Role: manager of Cardinality: 1 Relation type: Association	<b>RELIEF POINT</b> Role: managed by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: manager of Cardinality: 0..1 Relation type: Association	<b>CREW BASE</b> Role: managed by Cardinality: *
<b>CREW BASE</b> Role: near Cardinality: * Relation type: Association	<b>GARAGE</b> Role: near Cardinality: *
<b>CREW BASE</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**CREW BASE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>CrewBaseIdType</i>	1:1	Identifier of CREW BASE.
	<b>Name</b>	<i>normalizedString</i>	0:1	Name of CREW BASE.

**CROSSING EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.CROSSING EQUIPMENT)

Specialisation of PLACE ACCESS EQUIPMENT for CROSSING EQUIPMENTs (zebra, pedestrian lights, acoustic device sensors, tactile guide strips, etc.).

**CROSSING EQUIPMENT – Relations**

Source	Target
<b>CROSSING EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:

**CROSSING EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE ACCESS EQUIPMENT	::>	<b>CROSSING EQUIPMENT</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>	<i>CrossingIdType</i>	1:1	Identifier of CROSSING.
	<b>CrossingType</b>	<i>CrossingTypeEnum</i>	0:1	Type of CROSSING.
	<b>ZebraCrossing</b>	<i>boolean</i>	0:1	Whether CROSSING is marked as Zebra.
	<b>PedestrianLights</b>	<i>boolean</i>	0:1	Whether there are lights for pedestrians to cross.
	<b>AcousticDeviceSensors</b>	<i>boolean</i>	0:1	Whether CROSSING has Acoustic Device sensors.
	<b>AcousticCrossingAid</b>	<i>boolean</i>	0:1	Whether CROSSING has Acoustic devices.
	<b>TactileGuideStrips</b>	<i>boolean</i>	0:1	Whether CROSSING has tactile guidance strips.
	<b>VisualGuidanceBands</b>	<i>boolean</i>	0:1	Whether CROSSING has visual guidance strips.
	<b>DroppedKerb</b>	<i>boolean</i>	0:1	Whether CROSSING has dropped Kerb (both sides).
	<b>SuitableForCycles</b>	<i>boolean</i>	0:1	Whether CROSSING is suitable for cycles.

**CUSTOMER SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .CUSTOMER SERVICE)

Generic specialisation of LOCAL SERVICE for CUSTOMER SERVICES (lost properties, meeting point, complaints, etc.).

**CUSTOMER SERVICE – Relations**

Source	Target
<b>COMPLAINTS SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>CUSTOMER SERVICE</b> Role: Cardinality:
<b>MEETING POINT SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>CUSTOMER SERVICE</b> Role: Cardinality:
<b>CUSTOMER SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>CUSTOMER SERVICE</b> Role: described by Cardinality: Relation type: Association	<b>POSTAL ADDRESS</b> Role: description of Cardinality: <b>0..1</b>
<b>LOST PROPERTY SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>CUSTOMER SERVICE</b> Role: Cardinality:

**CUSTOMER SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>CUSTOMER SERVICE</b> inherits from <b>LOCAL SERVICE</b>
	<b>Email</b>	EmailAddressType	0:1	Email for Customer service.
	<b>Phone</b>	PhoneNumberType	0:1	Phone for Customer complaints.
	<b>InfoLink</b>	InfoLink	0:1	URL for Customer Service.
«UID»	<b>Id</b>		1:1	Identifier of CUSTOMER SERVICE.

**CYCLE STORAGE EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Parking Equipment MODEL.CYCLE STORAGE EQUIPMENT)

A specialisation of PLACE EQUIPMENT describing cycle parking equipment.

**CYCLE STORAGE EQUIPMENT – Relations**

Source	Target
<b>CYCLE STORAGE EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE EQUIPMENT</b> Role: Cardinality:
<b>CYCLE STORAGE EQUIPMENT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF CYCLE STORAGE EQUIPMENT</b> Role: a classification for Cardinality: 0..1

**CYCLE STORAGE EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE EQUIPMENT	::>	<b>CYCLE STORAGE EQUIPMENT</b> inherits from <b>PLACE EQUIPMENT</b>
«UID»	<b>Id</b>	CycleParkingIdType	1:1	Identifier of CYCLE PARKING EQUIPMENT.
	<b>Cage</b>	boolean	0:1	Whether there is a cage .
	<b>NumberOfSpaces</b>	integer	0:1	Number of spaces available.
	<b>Covered</b>	boolean	0:1	Whether the parking is covered.

**DATA SOURCE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Responsibility MODEL.DATA SOURCE)

The DATA SOURCE identifies the system which has produced the data. References to a data source are useful in an interoperated computer system.

**DATA SOURCE – Relations**

Source	Target
<b>DATA SOURCE</b> Role: object of Cardinality: 0..1 Relation type: Association	<b>VERSION FRAME</b> Role: dealing with Cardinality: *
<b>DATA SOURCE</b> Role: comprising Cardinality: 1 Relation type: Association	<b>ENTITY</b> Role: belonging to Cardinality: *
<b>DATA SOURCE</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1

**DATA SOURCE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DataSourceIdType</i>	1:1	Identifier of DATA SOURCE.
	<b>Email</b>	<i>emailType</i>	0:1	Contact email for DATA SOURCE

**DATED BLOCK**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.DATED BLOCK)

The work of a vehicle on a particular OPERATING DAY from the time it leaves a PARKING POINT after parking until its next return to park at a PARKING POINT.

**DATED BLOCK – Relations**

Source	Target
<b>OPERATING DAY</b> Role: date of Cardinality: 1 Relation type: Association	<b>DATED BLOCK</b> Role: dated on Cardinality: *
<b>NORMAL DATED BLOCK</b> Role: Cardinality: Relation type: Generalization	<b>DATED BLOCK</b> Role: Cardinality:

**DATED BLOCK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DatedBlockIdType</i>	1:1	Identifier of DATED BLOCK.

**DATED PASSING TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Passing Times MODEL .DATED PASSING TIME)

A PASSING TIME on a particular OPERATING DAY.

**DATED PASSING TIME – Relations**

Source	Target
<b>TARGET PASSING TIME</b> Role: Cardinality: Relation type: Generalization	<b>DATED PASSING TIME</b> Role: Cardinality:
<b>DATED PASSING TIME</b> Role: Cardinality: Relation type: Generalization	<b>PASSING TIME</b> Role: Cardinality:
<b>DATED PASSING TIME</b> Role: for Cardinality: * Relation type: Association	<b>DATED VEHICLE JOURNEY</b> Role: at Cardinality: 1

**DATED PASSING TIME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PASSING TIME	::>	<b>DATED PASSING TIME</b> inherits from <b>PASSING TIME</b>
«UID»	<b>Id</b>	DatedPassingTimeIdType	1:1	Identifier of DATED PASSING TIME.

**DATED VEHICLE JOURNEY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Dated Journey MODEL .DATED VEHICLE JOURNEY)

A particular journey of a vehicle on a particular OPERATING DAY including all modifications possibly decided by the control staff.

**DATED VEHICLE JOURNEY – Relations**

Source	Target
<b>JOURNEY PATTERN</b> Role: used by Cardinality: 0..1 Relation type: Association	<b>DATED VEHICLE JOURNEY</b> Role: altered to use Cardinality: *
<b>NORMAL DATED VEHICLE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>DATED VEHICLE JOURNEY</b> Role: Cardinality:
<b>DATED PASSING TIME</b> Role: for Cardinality: * Relation type: Association	<b>DATED VEHICLE JOURNEY</b> Role: at Cardinality: 1
<b>DATED VEHICLE JOURNEY</b> Role: dated on Cardinality: * Relation type: Association	<b>OPERATING DAY</b> Role: date of Cardinality: 1
<b>DATED VEHICLE JOURNEY</b> Role: using Cardinality: * Relation type: Association	<b>JOURNEY PART</b> Role: used to compose Cardinality: *

**DATED VEHICLE JOURNEY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DatedVehicleJourneyIdType</i>	1:1	Identifier of DATED VEHICLE JOURNEY.

**DAY OF WEEK**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.DAY OF WEEK)

A particular week day (from Monday to Sunday).

**DAY OF WEEK – Relations**

Source	Target
<b>DAY OF WEEK</b> Role: used to define Cardinality: * Relation type: Association	<b>PROPERTY OF DAY</b> Role: defined as Cardinality: 0..1

**DAY OF WEEK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Day</b>	<i>DayOfWeekIdType</i>	1:1	Identifier of Day of Week
	<b>Name</b>	<i>MultilingualString</i>	1:1	Name of DAY of WEEK

**DAY TYPE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.DAY TYPE)

A type of day characterised by one or more properties which affect public transport operation. For example: weekday in school holidays.

## DAY TYPE – Relations

Source	Target
<b>AVAILABILITY CONDITION</b> <i>Role:</i> valid for <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>DAY TYPE</b> <i>Role:</i> characterized by <i>Cardinality:</i> 0..*
<b>ORGANISATION DAY TYPE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>DAY TYPE</b> <i>Role:</i> <i>Cardinality:</i>
<b>PROPERTY OF DAY</b> <i>Role:</i> used to describe <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DAY TYPE</b> <i>Role:</i> described by <i>Cardinality:</i> *
<b>DAY TYPE ASSIGNMENT</b> <i>Role:</i> specifying <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DAY TYPE</b> <i>Role:</i> specified by <i>Cardinality:</i> 1
<b>LINK</b> <i>Role:</i> not available on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DAY TYPE</b> <i>Role:</i> limiting the availability of <i>Cardinality:</i> *
<b>DAY TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>DAY TYPE</b> <i>Role:</i> for <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>BLOCK</b> <i>Role:</i> worked on <i>Cardinality:</i> *
<b>DAY TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE TYPE PREFERENCE</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>DAY TYPE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> worked on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DAY TYPE</b> <i>Role:</i> for <i>Cardinality:</i> 1..*

## DAY TYPE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DayTypeIdType</i>	1:1	Identifier of DAY TYPE.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of DAY TYPE.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of DAY TYPE.
	<b>EarliestTime</b>	<i>time</i>	0:1	Earliest start time of DAY TYPE.
	<b>DayLength</b>	<i>duration</i>	0:1	Length of DAY TYPE.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of DAY TYPE.

## DAY TYPE ASSIGNMENT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.DAY TYPE ASSIGNMENT)

The assignment of operational characteristics, expressed by DAY TYPEs, to particular OPERATING DAYs within a SERVICE CALENDAR.

DAY TYPE ASSIGNMENT – Relations

Source	Target
<b>TIME BAND</b> Role: used to define Cardinality: 0..* Relation type: Association	<b>DAY TYPE ASSIGNMENT</b> Role: for Cardinality: 0..*
<b>SERVICE CALENDAR</b> Role: defined by Cardinality: 1 Relation type: Association	<b>DAY TYPE ASSIGNMENT</b> Role: for the definition of Cardinality: 0..*
<b>OPERATING DAY</b> Role: used to define Cardinality: 1 Relation type: Association	<b>DAY TYPE ASSIGNMENT</b> Role: for Cardinality: *
<b>DAY TYPE ASSIGNMENT</b> Role: specifying Cardinality: * Relation type: Association	<b>DAY TYPE</b> Role: specified by Cardinality: 1

DAY TYPE ASSIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	ShortTermAssignmentIdType	1:1	Identifier of DAY TYPE ASSIGNMENT.
	<b>Description</b>	MultilingualString	0:1	Description of DAY TYPE ASSIGNMENT.
	<b>IsAvailable</b>	boolean	0:1	Whether the Condition makes the resource available or not available.
	<b>Description</b>	MultilingualString	0:1	Description of DAY TYPE ASSIGNMENT.
	<b>Date</b>	date	0:1	Date - may be sued instead of Operating Day

## DEAD RUN

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey MODEL.DEAD RUN)

A non-service VEHICLE JOURNEY.

DEAD RUN – Relations

Source	Target
<b>DEAD RUN</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE JOURNEY</b> Role: Cardinality:

DEAD RUN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	VEHICLE JOURNEY	::>	<b>DEAD RUN</b> inherits from <b>VEHICLE JOURNEY</b>
«UID»	<b>Id</b>	DeadRunIdType	1:1	Identifier of DEAD RUN.
	<b>DirectionType</b>	DirectionTypeEnum	0:1	Type of DIRECTION.
	<b>DeadRunType</b>	DeadRunTypeEnum	0:1	Type of Dead Run.



**DEAD RUN PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Journey Pattern MODEL.DEAD RUN PATTERN)

A JOURNEY PATTERN to be used for DEAD RUNs.

**DEAD RUN PATTERN – Relations**

Source	Target
<b>DEAD RUN PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY PATTERN</b> Role: Cardinality:

**DEAD RUN PATTERN – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	JOURNEY PATTERN	::>	<b>DEAD RUN PATTERN</b> inherits from <b>JOURNEY PATTERN</b>
«UID»	<b>Id</b>	DeadRunJourneyPattern/ dType	1:1	Identifier of DEAD RUN JOURNEY PATTERN.

**DEFAULT CONNECTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Connection MODEL.DEFAULT CONNECTION)

The physical (spatial) possibility for a passenger to change from one public transport vehicle to another to continue the trip.

It specifies default times to be used to change from one mode of transport to another at an area or national level as specified by a TOPOGRAPHIC PLACE, STOP AREA or SITE ELEMENT. It may be restricted to a specific MODE or OPERATOR or only apply in a particular direction of transfer, e.g. bus to rail may have a different time for rail to bus.

## DEFAULT CONNECTION – Relations

Source	Target
<b>DEFAULT CONNECTION</b> <i>Role:</i> determined within <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TOPOGRAPHIC PLACE</b> <i>Role:</i> determining <i>Cardinality:</i> 0..1
<b>DEFAULT CONNECTION</b> <i>Role:</i> determined within <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP AREA</b> <i>Role:</i> determining <i>Cardinality:</i> 0..1
<b>DEFAULT CONNECTION END</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT CONNECTION</b> <i>Role:</i> from <i>Cardinality:</i> 0..*
<b>DEFAULT CONNECTION END</b> <i>Role:</i> end of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT CONNECTION</b> <i>Role:</i> to <i>Cardinality:</i> 0..*
<b>SITE</b> <i>Role:</i> determining <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>DEFAULT CONNECTION</b> <i>Role:</i> determined within <i>Cardinality:</i> 0..*
<b>DEFAULT CONNECTION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>TRANSFER</b> <i>Role:</i> <i>Cardinality:</i>
<b>DEFAULT CONNECTION</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## DEFAULT CONNECTION – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	TRANSFER	::>	<b>DEFAULT CONNECTION</b> inherits from <b>TRANSFER</b>
«UID»	<b>Id</b>	ConnectionIdType	1:1	Identifier of DEFAULT TRANSFER.

**DEFAULT CONNECTION END**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Connection MODEL.DEFAULT CONNECTION END)

One end of a DEFAULT CONNECTION.

**DEFAULT CONNECTION END – Relations**

Source	Target
<b>DEFAULT CONNECTION END</b> <i>Role:</i> serviced by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE MODE</b> <i>Role:</i> servicing <i>Cardinality:</i> 0..1
<b>DEFAULT CONNECTION END</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT CONNECTION</b> <i>Role:</i> from <i>Cardinality:</i> 0..*
<b>DEFAULT CONNECTION END</b> <i>Role:</i> end of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT CONNECTION</b> <i>Role:</i> to <i>Cardinality:</i> 0..*
<b>DEFAULT CONNECTION END</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATOR</b> <i>Role:</i> servicing <i>Cardinality:</i> 0..1

**DEFAULT CONNECTION END – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of DEFAULT CONNECTION END.

**DEFAULT DEAD RUN RUN TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Time Demand Times MODEL.DEFAULT DEAD RUN RUN TIME)

The time taken to traverse a TIMING LINK during a DEAD RUN, for a specified TIME DEMAND TYPE. This time may be superseded by the JOURNEY PATTERN RUN TIME or VEHICLE JOURNEY RUN TIME if these exist.

**DEFAULT DEAD RUN RUN TIME – Relations**

Source	Target
<b>TIMING LINK</b> <i>Role:</i> covered in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT DEAD RUN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT DEAD RUN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>DEFAULT DEAD RUN RUN TIME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>

**DEFAULT DEAD RUN RUN TIME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY TIMING	::>	<b>DEFAULT DEAD RUN RUN TIME</b> inherits from <b>JOURNEY TIMING</b>
«UID»	<b>Id</b>	DefaultDeadRunTimeIdType	0:1	Identifier of DEFAULT DEAD RUN RUN TIME.
	<b>RunTime</b>	duration	1:1	Time to make a DEAD RUN.

**DEFAULT INTERCHANGE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange MODEL.DEFAULT INTERCHANGE)

A quality parameter fixing the acceptable duration (standard and maximum) for an INTERCHANGE to be planned between two SCHEDULED STOP POINTs. This parameter will be used to control whether any two VEHICLE JOURNEYs serving those points may be in connection.

**DEFAULT INTERCHANGE – Relations**

Source	Target
<b>SCHEDULED STOP POINT</b> Role: start of Cardinality: 1 Relation type: Association	<b>DEFAULT INTERCHANGE</b> Role: from Cardinality: *
<b>DEFAULT INTERCHANGE</b> Role: to Cardinality: * Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: end of Cardinality: 1

**DEFAULT INTERCHANGE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	DefaultInterchangeIdType	1:1	Identifier of DEFAULT INTERCHANGE.
	<b>Description</b>	MultilingualString	1:1	Description of JOURNEY MEETING.
	<b>MaximumDuration</b>	duration	0:1	Maximum wait time for DEFAULT INTERCHANGE.
	<b>StandardDuration</b>	duration	0:1	Standard wait time for DEFAULT INTERCHANGE.

**DEFAULT SERVICE JOURNEY RUN TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Time Demand Times MODEL.DEFAULT SERVICE JOURNEY RUN TIME)

The default time taken by a vehicle to traverse a TIMING LINK during a SERVICE JOURNEY, for a specified TIME DEMAND TYPE. This time may be superseded by the JOURNEY PATTERN RUN TIME or VEHICLE JOURNEY RUN TIME if these exist.

**DEFAULT SERVICE JOURNEY RUN TIME – Relations**

Source	Target
<b>TIME DEMAND TYPE</b> Role: used to define Cardinality: 1 Relation type: Association	<b>DEFAULT SERVICE JOURNEY RUN TIME</b> Role: associated with Cardinality: *
<b>TIMING LINK</b> Role: covered in Cardinality: 1 Relation type: Association	<b>DEFAULT SERVICE JOURNEY RUN TIME</b> Role: associated with Cardinality: *
<b>DEFAULT SERVICE JOURNEY RUN TIME</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY TIMING</b> Role: Cardinality:

**DEFAULT SERVICE JOURNEY RUN TIME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY TIMING	::>	<b>DEFAULT SERVICE JOURNEY RUN TIME</b> inherits from <b>JOURNEY TIMING</b>
«UID»	<b>Id</b>	DefaultServiceRunTimeIdType	0:1	Identifier of DEFAULT SERVICE JOURNEY RUN TIME.
	<b>RunTime</b>	duration	1:1	Run time as a duration.

**DELIVERY VARIANT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Notice MODEL.DELIVERY VARIANT)

A variant text of a NOTICE for use in a specific media or delivery channel (voice, printed material, etc).

**DELIVERY VARIANT – Relations**

Source	Target
<b>DELIVERY VARIANT</b> Role: providing Cardinality: 0..* Relation type: Association	<b>NOTICE</b> Role: provided as Cardinality: 1
<b>DELIVERY VARIANT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF DELIVERY VARIANT</b> Role: a classification for Cardinality: 0..1

**DELIVERY VARIANT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	DeliveryIdVariantType	1:1	Identifier for DELIVERY VARIANT.
	<b>VariantText</b>	MultilingualString	0:1	Text for DELIVERY VARIANT.

**DELTA**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Delta MODEL.DELTA)

A record of the detailed changes of a given ENTITY IN VERSION from one VERSION to the next one. A DELTA contains pairs of attributes' old values - new values.

**DELTA – Relations**

Source	Target
<b>ENTITY IN VERSION</b> Role: updated value Cardinality: 1 Relation type: Association	<b>DELTA</b> Role: to version Cardinality: *
<b>ENTITY IN VERSION</b> Role: previous value of Cardinality: 1 Relation type: Association	<b>DELTA</b> Role: from version Cardinality: *

**DELTA – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DeltaIdType</i>	1:1	Identifier of ENTITY Delta.
	<b>DeltaValue</b>	<i>TM_AnyType</i>	1:1	

**DEPARTMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.DEPARTMENT)

An ORGANIZATION PART specific to a purpose and/or organisational structure.

**DEPARTMENT – Relations**

Source	Target
<b>OPERATOR</b> Role: owner of Cardinality: 1 Relation type: Association	<b>DEPARTMENT</b> Role: owned by Cardinality: 1..*
<b>OPERATIONAL CONTEXT</b> Role: determined by Cardinality: 0..* Relation type: Aggregation	<b>DEPARTMENT</b> Role: determining Cardinality:
<b>OPERATING DEPARTMENT</b> Role: Cardinality: Relation type: Generalization	<b>DEPARTMENT</b> Role: Cardinality:
<b>DEPARTMENT</b> Role: Cardinality: Relation type: Generalization	<b>ORGANISATION PART</b> Role: Cardinality:
<b>TYPE OF OPERATION</b> Role: a classification for Cardinality: 0..1 Relation type: Association	<b>DEPARTMENT</b> Role: classified as Cardinality: 0..*
<b>ORGANISATIONAL UNIT</b> Role: part of Cardinality: 1..* Relation type: Association	<b>DEPARTMENT</b> Role: comprising Cardinality: 1

**DEPARTMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ORGANISATION PART	::>	<b>DEPARTMENT</b> inherits from <b>ORGANISATION PART</b>
«UID»	<b>Id</b>	<i>DepartmentIdType</i>	1:1	Identifier of OPERATING DEPARTMENT.
	<b>Name</b>	<i>MultilingualString</i>	1:1	Name of OPERATING DEPARTMENT.

**DESTINATION DISPLAY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.DESTINATION DISPLAY)

An advertised destination of a specific JOURNEY PATTERN, usually displayed on a headsign or at other on-board locations.

## DESTINATION DISPLAY – Relations

Source	Target
<b>JOURNEY PATTERN</b> <i>Role:</i> primarily advertised with <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DESTINATION DISPLAY</b> <i>Role:</i> primary for <i>Cardinality:</i> 0..1
<b>VIA</b> <i>Role:</i> displayed on <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DESTINATION DISPLAY</b> <i>Role:</i> displaying <i>Cardinality:</i> 0..1
<b>DESTINATION DISPLAY VARIANT</b> <i>Role:</i> equivalent information to <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>DESTINATION DISPLAY</b> <i>Role:</i> information content <i>Cardinality:</i> 1
<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> prescribing <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DESTINATION DISPLAY</b> <i>Role:</i> adapted for <i>Cardinality:</i> 0..1
<b>DESTINATION DISPLAY</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>HEADING SIGN</b> <i>Role:</i> shown on <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DESTINATION DISPLAY</b> <i>Role:</i> showing <i>Cardinality:</i> 0..1

## DESTINATION DISPLAY – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DestinationDisplayIdType</i>	1:1	Identifier of DESTINATION DISPLAY.
	<b>Name</b>	<i>MultilingualString</i>	1:1	Name of DESTINATION DISPLAY.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of DESTINATION DISPLAY.
	<b>SideText</b>	<i>MultilingualString</i>	0:1	Text to display on side of vehicle associated with DESTINATION DISPLAY.
	<b>FrontText</b>	<i>MultilingualString</i>	0:1	Front of vehicle text associated of DESTINATION DISPLAY.
	<b>DriverDisplayText</b>	<i>MultilingualString</i>	0:1	Text to display to DRIVER.
	<b>ShortCode</b>	<i>normalizedString</i>	0:1	Additional short CODE associated with DESTINATION DISPLAY.

## DESTINATION DISPLAY VARIANT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.DESTINATION DISPLAY VARIANT)

An advertised destination of a specific JOURNEY PATTERN, usually displayed on a headsign or at other on-board locations.

**DESTINATION DISPLAY VARIANT – Relations**

Source	Target
<b>DESTINATION DISPLAY VARIANT</b> <i>Role:</i> equivalent information to <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>DESTINATION DISPLAY</b> <i>Role:</i> information content <i>Cardinality:</i> 1

**DESTINATION DISPLAY VARIANT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DestinationDisplayVariantIdType</i>	1:1	Identifier of DESTINATION DISPLAY.
	<b>Name</b>	<i>MultilingualString</i>	1:1	Name of DESTINATION DISPLAY.
	<b>DeliveryType</b>	<i>DeliveryMediaEnum</i>	1:1	Way a NOTICE is delivered, characterized by the delivery medium (voice, printed material, etc).
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of DESTINATION DISPLAY.
	<b>SideText</b>	<i>MultilingualString</i>	0:1	Text to display on side of vehicle associated with DESTINATION DISPLAY.
	<b>FrontText</b>	<i>MultilingualString</i>	0:1	Front of vehicle text associated of DESTINATION DISPLAY.

**DIRECTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.DIRECTION)

A classification for the general orientation of ROUTEs.

**DIRECTION – Relations**

Source	Target
<b>DIRECTION</b> <i>Role:</i> the opposite of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>DIRECTION</b> <i>Role:</i> the opposite of <i>Cardinality:</i> 0..1
<b>ALLOWED LINE DIRECTION</b> <i>Role:</i> allowed for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DIRECTION</b> <i>Role:</i> allowing for <i>Cardinality:</i> 1
<b>ROUTE</b> <i>Role:</i> oriented by <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DIRECTION</b> <i>Role:</i> for <i>Cardinality:</i> 0..1
<b>DIRECTION</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>HEADING SIGN</b> <i>Role:</i> referring to <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DIRECTION</b> <i>Role:</i> a reference for <i>Cardinality:</i> 1
<b>INTERCHANGE RULE PARAMETER</b> <i>Role:</i> using <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DIRECTION</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1



**DIRECTION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DirectionIdType</i>	1:1	Identifier of DIRECTION.
	<b>Name</b>		0:1	Name of DIRECTION.

**DISPLAY ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Passenger Information Display Assignment MODEL.DISPLAY ASSIGNMENT)

The assignment of one SCHEDULED STOP POINT and one JOURNEY PATTERN to a PASSENGER INFORMATION EQUIPMENT specifying that information on the SCHEDULED STOP POINT and the JOURNEY PATTERN will be provided (e.g. displayed, printed).

**DISPLAY ASSIGNMENT – Relations**

Source	Target
<b>DISPLAY ASSIGNMENT</b> Role: specifying Cardinality: * Relation type: Aggregation	<b>LOGICAL DISPLAY</b> Role: specified by Cardinality: 1
<b>DISPLAY ASSIGNMENT</b> Role: specifying Cardinality: * Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: specified by Cardinality: 1
<b>SCHEDULED STOP POINT</b> Role: used to define Cardinality: 0..1 Relation type: Association	<b>DISPLAY ASSIGNMENT</b> Role: for Cardinality: *
<b>JOURNEY PATTERN</b> Role: used to define Cardinality: 0..1 Relation type: Association	<b>DISPLAY ASSIGNMENT</b> Role: for Cardinality: *
<b>DISPLAY ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>LINE</b> Role: used to define Cardinality: 0..1
<b>DISPLAY ASSIGNMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**DISPLAY ASSIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>DisplayAssignmentIdType</i>	1:1	Identifier of DISPLAY ASSIGNMENT.
	<b>NumberOfJourneysToShow</b>	<i>nonNegativeInteger</i>	0:1	The number of journeys of a given LINE to show.
	<b>DisplayPriority</b>	<i>nonNegativeInteger</i>	0:1	Relative priority of assignment
	<b>DisplayAssignmentType</b>	<i>DisplayAssignmentTypeEnum</i>	0:1	Type Of DISPLAY ASSIGNMENT.
	<b>VehicleMode</b>	<i>VehicleModeEnum</i>	0:1	MODE for which Data is to be shown on LOGICAL DISPLAY

**DYNAMIC STOP ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Stop Assignment MODEL.DYNAMIC STOP ASSIGNMENT)

The dynamic association of a SCHEDULED STOP POINT (i.e. a SCHEDULED STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) with the next available STOP PLACE, QUAY or BOARDING POSITION within a STOP PLACE.

**DYNAMIC STOP ASSIGNMENT – Relations**

Source	Target
<b>DYNAMIC STOP ASSIGNMENT</b> Role: Cardinality: Relation type: Generalization	<b>PASSENGER STOP ASSIGNMENT</b> Role: Cardinality:
<b>DYNAMIC STOP ASSIGNMENT</b> Role: overriding Cardinality: 0..* Relation type: Association	<b>PASSENGER STOP ASSIGNMENT</b> Role: overridden by Cardinality: 1

**DYNAMIC STOP ASSIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PASSENGER STOP ASSIGNMENT	::>	<b>DYNAMIC STOP ASSIGNMENT</b> inherits from <b>PASSENGER STOP ASSIGNMENT</b>
«UID»	<b>Id</b>	DynamicAssignmentIdType	1:1	Identifier of DYNAMIC STOP ASSIGNMENT

**ENCUMBRANCE NEED**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.ENCUMBRANCE NEED)

A specific USER NEED, i.e. a requirement of a passenger travelling with luggage, animal or any other object requiring special arrangements to access public transport.

**ENCUMBRANCE NEED – Relations**

Source	Target
<b>ENCUMBRANCE NEED</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF USER NEED</b> Role: Cardinality:

**ENCUMBRANCE NEED – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	TYPE OF USER NEED	::>	<b>ENCUMBRANCE NEED</b> inherits from <b>TYPE OF USER NEED</b>
	<b>Need</b>	EncumbranceNeedEnum	1:1	Type of Encumbrance need
«UID»	<b>Id</b>		1:1	Identifier of ENCUMBRANCE NEED.

**ENTITY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Entity MODEL.ENTITY)

Any data instance to be managed in an operational Version Management System. When several data sources coexist (multimodality and/or interoperability), an ENTITY has to be related to a given DATA SOURCE in which it is defined.

## ENTITY – Relations

Source	Target
<b>ENTITY</b> <i>Role:</i> under the responsibility of <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>ORGANISATION</b> <i>Role:</i> responsible for <i>Cardinality:</i> 0..*
<b>ENTITY IN VERSION</b> <i>Role:</i> valid instance of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ENTITY</b> <i>Role:</i> valid for <i>Cardinality:</i> 1
<b>DATA SOURCE</b> <i>Role:</i> comprising <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ENTITY</b> <i>Role:</i> belonging to <i>Cardinality:</i> *
<b>ENTITY</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>VALIDITY CONDITION</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>GROUP OF ENTITIES</b> <i>Role:</i> made up of <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ENTITY</b> <i>Role:</i> included in <i>Cardinality:</i> 1..*
<b>TYPE OF ENTITY</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>ENTITY</b> <i>Role:</i> classified as <i>Cardinality:</i> 1..*
<b>ENTITY</b> <i>Role:</i> instance of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>CLASS IN REPOSITORY</b> <i>Role:</i> filled by <i>Cardinality:</i> 1
<b>ENTITY</b> <i>Role:</i> defining <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VALIDITY CONDITION</b> <i>Role:</i> defined by <i>Cardinality:</i> *
<b>ALTERNATIVE NAME</b> <i>Role:</i> alias for <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>ENTITY</b> <i>Role:</i> provided with <i>Cardinality:</i> 1
<b>ENTITY</b> <i>Role:</i> providing value for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>VALIDITY RULE PARAMETER</b> <i>Role:</i> using value of <i>Cardinality:</i> 0..*

## ENTITY – Attributes

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ObjectIdType</i>	1:1	Identifier of ENTITY. Unique within a namespace.
	<b>Changed</b>	<i>dateTime</i>	1:1	Date & time of last change to ENTITY.
	<b>Created</b>	<i>dateTime</i>	1:1	Date and time of creation of ENTITY.

## ENTITY IN VERSION

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Version MODEL.ENTITY IN VERSION)

The ENTITY associated to a given VERSION.

## ENTITY IN VERSION – Relations

Source	Target
<b>ENTITY IN VERSION</b> <i>Role:</i> updated value <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DELTA</b> <i>Role:</i> to version <i>Cardinality:</i> *
<b>TRACE</b> <i>Role:</i> document within <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ENTITY IN VERSION</b> <i>Role:</i> changed by <i>Cardinality:</i> 1
<b>VERSION</b> <i>Role:</i> governing <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ENTITY IN VERSION</b> <i>Role:</i> governed by <i>Cardinality:</i> 1..*
<b>RESPONSIBILITY ROLE ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ENTITY IN VERSION</b> <i>Role:</i> concerned by <i>Cardinality:</i> *
<b>ENTITY IN VERSION</b> <i>Role:</i> managed by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>RESPONSIBILITY SET</b> <i>Role:</i> managing <i>Cardinality:</i> 1
<b>VERSION FRAME</b> <i>Role:</i> comprising <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ENTITY IN VERSION</b> <i>Role:</i> belonging to <i>Cardinality:</i> 0..*
<b>ENTITY IN VERSION</b> <i>Role:</i> previous value of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DELTA</b> <i>Role:</i> from version <i>Cardinality:</i> *
<b>ENTITY IN VERSION</b> <i>Role:</i> parent of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ENTITY IN VERSION</b> <i>Role:</i> deriving from <i>Cardinality:</i> *
<b>VERSION</b> <i>Role:</i> base version for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ENTITY IN VERSION</b> <i>Role:</i> compatible with <i>Cardinality:</i> 0..*
<b>CLASS IN FRAME</b> <i>Role:</i> restricting <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ENTITY IN VERSION</b> <i>Role:</i> restricted by <i>Cardinality:</i> *
<b>ENTITY IN VERSION</b> <i>Role:</i> valid instance of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ENTITY</b> <i>Role:</i> valid for <i>Cardinality:</i> 1
<b>ENTITY IN VERSION</b> <i>Role:</i> referring to <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ADMINISTRATIVE ZONE</b> <i>Role:</i> <i>Cardinality:</i> 1..

## ENTITY IN VERSION – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VersionedObjectIdType</i>	1:1	Identifier of ENTITY IN VERSION.
	<b>Modification</b>	<i>ModificationEnum</i>	0:1	Nature of modification. Enumerated value : new   update   delete.

**ENTRANCE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Site MODEL.ENTRANCE)

A physical entrance or exit to/from a SITE. May be a door, barrier, gate or other recognizable point of access.

**ENTRANCE – Relations**

<b>Source</b>	<b>Target</b>
<b>PARKING PASSENGER ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>ENTRANCE</b> Role: Cardinality:
<b>PATH LINK END</b> Role: represented by Cardinality: 0..* Relation type: Association	<b>ENTRANCE</b> Role: representing Cardinality: 0..1
<b>SITE CONNECTION END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>ENTRANCE</b> Role: viewed as Cardinality: 0..1
<b>STOP PLACE ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>ENTRANCE</b> Role: Cardinality:
<b>SITE COMPONENT</b> Role: entered through Cardinality: 0..* Relation type: Association	<b>ENTRANCE</b> Role: for Cardinality: 0..*
<b>ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>SITE COMPONENT</b> Role: Cardinality:
<b>VEHICLE ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>ENTRANCE</b> Role: Cardinality:
<b>SITE</b> Role: accessed by Cardinality: 1 Relation type: Association	<b>ENTRANCE</b> Role: for Cardinality: 0..*
<b>POINT OF INTEREST ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>ENTRANCE</b> Role: Cardinality:

**ENTRANCE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>SITE COMPONENT</i>	::>	<b>ENTRANCE</b> inherits from <b>SITE COMPONENT</b>
«UID»	<b>Id</b>	<i>EntranceIdType</i>	1:1	Identifier of ENTRANCE.
	<b>Label</b>	<i>normalizedString</i>	0:1	Label of ENTRANCE.
	<b>EntranceType</b>	<i>EntranceTypeEnum</i>	1:1	Type of ENTRANCE.
	<b>IsExternal</b>	<i>boolean</i>	0:1	Whether ENTRANCE opens externally.
	<b>IsEntry</b>	<i>boolean</i>	0:1	Whether ENTRANCE can be used for entry to SITE.
	<b>IsExit</b>	<i>boolean</i>	0:1	Whether ENTRANCE can be used for exit from SITE.
	<b>Width</b>	<i>LengthType</i>	0:1	Width of ENTRANCE.
	<b>Height</b>	<i>LengthType</i>	0:1	Height of ENTRANCE.
	<b>DroppedKerbOutside</b>	<i>boolean</i>	0:1	Whether there is a dropped curb outside ENTRANCE.
	<b>DropOffPointClose</b>	<i>boolean</i>	0:1	Whether ENTRANCE is near Drop off point.

**ENTRANCE EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.ENTRANCE EQUIPMENT)

Specialisation of PLACE ACCESS EQUIPMENT for ENTRANCES (door, barrier, revolving door, etc.).

**ENTRANCE EQUIPMENT – Relations**

Source	Target
<b>ENTRANCE EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:

## ENTRANCE EQUIPMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	PLACE ACCESS EQUIPMENT	::>	<b>ENTRANCE EQUIPMENT</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>	EntranceEquipmentIdType	1:1	Identifier of ENTRANCE EQUIPMENT.
	<b>Door</b>	boolean	0:1	Whether there is a door in the entrance. If false opening does not have door.
	<b>KeptOpen</b>	boolean	0:1	Whether the door is kept open.
	<b>RevolvingDoor</b>	boolean	0:1	Whether door is revolving. Only applies if door is spec.
	<b>Barrier</b>	boolean	0:1	Whether there is a physical barrier across the doorway.
	<b>NumberOfGates</b>	integer	0:1	Number of gates in barrier or entrance.
	<b>Staffing</b>	boolean	0:1	Staffing of entrance or barrier.
	<b>EntranceRequiresStaffing</b>	boolean	0:1	Whether passage requires that barrier be staffed.
	<b>EntranceRequiresTicket</b>	boolean	0:1	Whether passage requires ticket.
	<b>EntranceRequiresPassport</b>	boolean	0:1	Whether passage requires passport.
	<b>AcousticSensor</b>	boolean	0:1	Whether door has acoustic sensors.
	<b>AutomaticDoor</b>	boolean	0:1	Whether doors are automatic.
	<b>DropKerbOutside</b>	boolean	0:1	Whether there is a drop Kerb outside ENTRANCE.
	<b>GlassDoor</b>	boolean	0:1	Whether door is made of glass.
	<b>WheelchairPassable</b>	boolean	0:1	door can be passed in a wheel chair.
	<b>WheelchairUnaided</b>	boolean	0:1	Can be passed in a wheel chair unaided.
	<b>EntranceAttention</b>	EntranceAttentionEnum	0:1	Nature of doorbell Help Point etc.
	<b>SuitableForCycles</b>	boolean	0:1	Whether ENTRANCE is suitable for cycles.

## EQUIPMENT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Generic Equipment MODEL.EQUIPMENT)

An item of equipment installed either fixed (PLACE EQUIPMENT) or on-board vehicles (VEHICLE EQUIPMENT). A service (LOCAL SERVICE such as LEFT LUGGAGE, TICKETING SERVICE) is considered as immaterial equipment as well.

**EQUIPMENT – Relations**

Source	Target
<b>INSTALLED EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>EQUIPMENT</b> Role: Cardinality:
<b>TYPE OF EQUIPMENT</b> Role: a classification for Cardinality: 1 Relation type: Association	<b>EQUIPMENT</b> Role: classified as Cardinality: *
<b>LOCAL SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>EQUIPMENT</b> Role: Cardinality:
<b>EQUIPMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1

**EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>EquipmentIdType</i>	1:1	Identifier of EQUIPMENT.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of EQUIPMENT.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of EQUIPMENT.
	<b>Note</b>	<i>MultilingualString</i>	0:1	Note about EQUIPMENT.
	<b>Image</b>	<i>anyURI</i>	0:1	Image of EQUIPMENT.
	<b>InfoLink</b>	<i>InfoLink</i>	0:1	Link associated with of EQUIPMENT.
	<b>OutOfService</b>	<i>boolean</i>	0:1	Whether Equipment Is out of order

**EQUIPMENT PLACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Place Equipment Location MODEL.EQUIPMENT PLACE)

A SITE COMPONENT containing EQUIPMENT

**EQUIPMENT PLACE – Relations**

Source	Target
<b>EQUIPMENT POSITION</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>EQUIPMENT PLACE</b> Role: containing Cardinality: 1
<b>PLACE EQUIPMENT</b> Role: located at Cardinality: 0..* Relation type: Aggregation	<b>EQUIPMENT PLACE</b> Role: equipped with Cardinality: 0..1
<b>EQUIPMENT PLACE</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE COMPONENT</b> Role: containing Cardinality:
<b>EQUIPMENT PLACE</b> Role: Cardinality: Relation type: Generalization	<b>SITE COMPONENT</b> Role: Cardinality:



**EQUIPMENT PLACE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>SITE COMPONENT</i>	::>	<b>EQUIPMENT PLACE</b> inherits from <b>SITE COMPONENT</b>
«UID»	<b>Id</b>	<i>EquipmentPlaceId</i>	1:1	Identifier of EQUIPMENT PLACE.

**EQUIPMENT POSITION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Place Equipment Location MODEL.EQUIPMENT POSITION)

The precise position within an EQUIPMENT PLACE where particular equipment is placed.

**EQUIPMENT POSITION – Relations**

Source	Target
<b>PLACE EQUIPMENT</b> <i>Role:</i> located at <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>EQUIPMENT POSITION</b> <i>Role:</i> equipped with <i>Cardinality:</i> 1
<b>EQUIPMENT POSITION</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>EQUIPMENT PLACE</b> <i>Role:</i> containing <i>Cardinality:</i> 1
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> located at <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>EQUIPMENT POSITION</b> <i>Role:</i> equipped with <i>Cardinality:</i> 0..1

**EQUIPMENT POSITION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of EQUIPMENT POSITION.
	<b>Description</b>	<i>MultilingualString</i>	1:1	Description of EQUIPMENT POSITION

**ESCALATOR EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.NT Stair Equipment MODEL.ESCALATOR EQUIPMENT)

Specialisation of STAIR EQUIPMENT for ESCALATORS.

**ESCALATOR EQUIPMENT – Relations**

Source	Target
<b>ESCALATOR EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STAIR EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

**ESCALATOR EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	STAIR EQUIPMENT	::>	<b>ESCALATOR EQUIPMENT</b> inherits from <b>STAIR EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of ESCALATOR EQUIPMENT.
	<b>TactileActuators</b>	boolean	1:1	Whether there are tactile actuators for ESCALATOR.
	<b>EnergySaving</b>	boolean	1:1	Whether ESCALATOR is energy saving.

**FACILITY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Facility MODEL.FACILITY)

A named amenity available to the public at a SITE or on a SERVICE. A facility has no further properties other than a name. An EQUIPMENT or LOCAL SERVICE is used to describe the further properties provided as part of particular facility.

**FACILITY – Relations**

Source	Target
<b>FACILITY</b> Role: part of Cardinality: 1..* Relation type: Aggregation	<b>SERVICE FACILITY SET</b> Role: comprising Cardinality: 0..1
<b>FACILITY</b> Role: included in Cardinality: 1..* Relation type: Aggregation	<b>FACILITY SET</b> Role: comprising Cardinality: 0..1
<b>CHECK CONSTRAINT</b> Role: limited to Cardinality: 0..* Relation type: Association	<b>FACILITY</b> Role: for Cardinality: 0..1

**FACILITY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	FacilityIdType	1:1	Identifier for FACILITY.

**FACILITY REQUIREMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.FACILITY REQUIREMENT)

A classification of public transport vehicles according to the facilities available on the vehicle.

**FACILITY REQUIREMENT – Relations**

Source	Target
<b>FACILITY SET</b> Role: satisfying Cardinality: 0..* Relation type: Aggregation	<b>FACILITY REQUIREMENT</b> Role: for Cardinality: 0..*
<b>FACILITY REQUIREMENT</b> Role: requirement for Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE TYPE</b> Role: satisfying Cardinality:

**FACILITY REQUIREMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>FacilityRequirementIdType</i>	1:1	Identifier of a SERVICE FACILITY REQUIREMENT.
	<b>serviceFacilitySets</b>	<i>ServiceFacilitySet</i>	0:*	Facilities required on service

**FACILITY SET**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Facility MODEL.FACILITY SET)

Set of FACILITIES available for a SERVICE JOURNEY or a JOURNEY PART. The set may be available only for a specific VEHICLE TYPE within the SERVICE (e.g. carriage equipped with low floor).

**FACILITY SET – Relations**

Source	Target
<b>SITE FACILITY SET</b> Role: Cardinality: Relation type: Generalization	<b>FACILITY SET</b> Role: Cardinality:
<b>SERVICE FACILITY SET</b> Role: Cardinality: Relation type: Generalization	<b>FACILITY SET</b> Role: Cardinality:
<b>FACILITY</b> Role: included in Cardinality: 1..* Relation type: Aggregation	<b>FACILITY SET</b> Role: comprising Cardinality: 0..1
<b>FACILITY SET</b> Role: satisfying Cardinality: 0..* Relation type: Aggregation	<b>FACILITY REQUIREMENT</b> Role: for Cardinality: 0..*
<b>FACILITY SET</b> Role: available at Cardinality: 0..* Relation type: Association	<b>AVAILABILITY CONDITION</b> Role: determining the availability of Cardinality: 0..1
<b>FACILITY SET</b> Role: available if Cardinality: 0..1 Relation type: Association	<b>VALIDITY CONDITION</b> Role: determining availability of Cardinality: 0..*
<b>FACILITY SET</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF FACILITY</b> Role: a classification for Cardinality: 0..1

**FACILITY SET – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>FacilitySetIdType</i>	1:1	Identifier of FACILITY SET.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of FACILITY SET.

**FLEXIBLE AREA**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Flexible Stop Place MODEL.FLEXIBLE AREA)

Specialisation of a FLEXIBLE QUAY (which is abstract) to identify what is the catchment area for a flexible service (so that a stop finder can find the nearest available types of transport). It is a named zone visited by a particular mode of transport. It is part of the SITE data set rather than the service data set, since it can be defined and exists independently of an actual service.

#### FLEXIBLE AREA – Relations

Source	Target
<b>FLEXIBLE AREA</b> Role: Cardinality: Relation type: Generalization	<b>FLEXIBLE QUAY</b> Role: Cardinality:

#### FLEXIBLE AREA – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>FLEXIBLE QUAY</i>	::>	<b>FLEXIBLE AREA</b> inherits from <b>FLEXIBLE QUAY</b>
«UID»	<i>Id</i>	<i>FlexibleAreaIdType</i>	1:1	Identifier of a Flexible AREA.

#### FLEXIBLE LINE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Flexible Network MODEL.FLEXIBLE LINE)

Specialisation of LINE for flexible service. As all the service on a LINE may not all be flexible, flexibility itself is described at JOURNEY PATTERN level (meaning that a separate JOURNEY PATTERN is needed for each type of flexibility available for the line).

Types of flexible services are :

- Virtual line service
- Flexible service with main route
- Corridor service
- Fixed stop area-wide flexible service
- Free area-wide flexible service
- Mixed types of flexible service
- Mixed type of flexible and regular services

#### FLEXIBLE LINE – Relations

Source	Target
<b>CONTACT DETAILS</b> Role: for Cardinality: 0..1 Relation type: Association	<b>FLEXIBLE LINE</b> Role: admitting Cardinality: *
<b>BOOKING ARRANGEMENTS</b> Role: for Cardinality: 0..1 Relation type: Association	<b>FLEXIBLE LINE</b> Role: admitting Cardinality: *
<b>FLEXIBLE LINE</b> Role: Cardinality: Relation type: Generalization	<b>LINE</b> Role: Cardinality:
<b>FLEXIBLE LINE</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**FLEXIBLE LINE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>BookableLineIdType</i>	1:1	Identifier of FLEXIBLE LINE.
	<b>FlexibleLineType</b>	<i>FlexibleLineTypeEnum</i>	0:1	Type of FLEXIBLE LINE.

**FLEXIBLE LINK PROPERTIES**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Flexible Network MODEL.FLEXIBLE LINK PROPERTIES)

Set of properties describing the flexible characteristics of a LINK.

A composition is used with LINK in order to avoid multiple inheritance and a type explosion of link subtypes

**FLEXIBLE LINK PROPERTIES – Relations**

Source	Target
<b>FLEXIBLE LINK PROPERTIES</b> <i>Role:</i> characterising <i>Cardinality:</i> <b>0..1</b> <i>Relation type:</i> Aggregation	<b>LINK</b> <i>Role:</i> characterised by <i>Cardinality:</i> <b>1</b>

**FLEXIBLE LINK PROPERTIES – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>FlexibleLinkPropertiesIdType</i>	1:1	Identifier of a FLEXIBLE LINK PROPERTIES.
	<b>MayBeSkipped</b>	<i>boolean</i>	0:1	Whether the LINK may be skipped.
	<b>OnMainRoute</b>	<i>boolean</i>	0:1	Whether the LINK is on the main ROUTE of the LINE.
	<b>UnscheduledPath</b>	<i>boolean</i>	0:1	Whether the connection with the road infrastructure is not defined.
	<b>FlexibleLinkType</b>	<i>FlexibleLinkTypeEnum</i>	0:1	Type of FLEXIBLE ROUTE LINK.

**FLEXIBLE POINT PROPERTIES**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Flexible Network MODEL.FLEXIBLE POINT PROPERTIES)

Set of characteristics describing the possible flexibility of POINTs. A composition is used with POINT in order to avoid multiple inheritance.

**FLEXIBLE POINT PROPERTIES – Relations**

Source	Target
<b>FLEXIBLE POINT PROPERTIES</b> <i>Role:</i> characterising <i>Cardinality:</i> <b>0..1</b> <i>Relation type:</i> Aggregation	<b>POINT</b> <i>Role:</i> characterised by <i>Cardinality:</i> <b>1</b>
<b>POINT ON ROUTE</b> <i>Role:</i> characterised by <i>Cardinality:</i> <b>1</b> <i>Relation type:</i> Association	<b>FLEXIBLE POINT PROPERTIES</b> <i>Role:</i> characterising <i>Cardinality:</i> <b>0..1</b>

**FLEXIBLE POINT PROPERTIES – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>FlexiblePointPropertiesIdType</i>	1:1	Identifier of a FLEXIBLE POINT PROPERTIES.
	<b>MaybeSkipped</b>	<i>boolean</i>	0:1	Whether the POINT may be skipped.
	<b>OnMainRoute</b>	<i>boolean</i>	0:1	Whether the POINT is on the main ROUTE.
	<b>PointStandingForAZone</b>	<i>boolean</i>	0:1	Whether the POINT represents a FLEXIBLE ZONE.
	<b>ZoneContainingStops</b>	<i>boolean</i>	0:1	Whether the ZONE is defined by a GROUP of POINT (true) or a geographical zone defined by its boundary.

**FLEXIBLE QUAY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Flexible Stop Place MODEL.FLEXIBLE QUAY)

A physical ZONE such as a section of a road where a flexible service is available on demand. The existence of the zone makes the services visible to journey planners looking for available services for an area.

**FLEXIBLE QUAY – Relations**

Source	Target
<b>HAIL AND RIDE AREA</b> Role: Cardinality: Relation type: Generalization	<b>FLEXIBLE QUAY</b> Role: Cardinality:
<b>FLEXIBLE AREA</b> Role: Cardinality: Relation type: Generalization	<b>FLEXIBLE QUAY</b> Role: Cardinality:
<b>FLEXIBLE STOP ASSIGNMENT</b> Role: Cardinality: 0..* Relation type: Association	<b>FLEXIBLE QUAY</b> Role: Cardinality: 1
<b>FLEXIBLE QUAY</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>FLEXIBLE STOP PLACE</b> Role: containing Cardinality: 1

**FLEXIBLE QUAY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>FlexibleQuayIdType</i>	1:1	Identifier of a FLEXIBLE QUAY.
	<b>NameSuffix</b>	<i>MultilingualString</i>	0:1	Suffix to use on Name.
	<b>BoardingUse</b>	<i>boolean</i>	0:1	Whether Passengers may use the FLEXIBLE QUAY for Boarding vehicle transport.
	<b>AlightingUse</b>	<i>boolean</i>	0:1	Whether Passengers may use the FLEXIBLE QUAY for Alighting from vehicle transport.

**FLEXIBLE ROUTE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Flexible Network MODEL.FLEXIBLE ROUTE)

Specialisation of ROUTE for flexible service. May include both point and zonal areas and ordered and unordered sections.

## FLEXIBLE ROUTE – Relations

Source	Target
<b>FLEXIBLE ROUTE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ROUTE</b> <i>Role:</i> <i>Cardinality:</i>
<b>FLEXIBLE ROUTE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## FLEXIBLE ROUTE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>ROUTE</i>	::>	<b>FLEXIBLE ROUTE</b> inherits from <b>ROUTE</b>
«UID»	<b>Id</b>	<i>FlexibleRouteIdType</i>	1:1	Identifier of FLEXIBLE ROUTE.
	<b>FlexibleRouteType</b>	<i>FlexibleRouteTypeEnum</i>	0:1	Type of FLEXIBLE ROUTE.

## FLEXIBLE SERVICE PROPERTIES

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Flexible Service MODEL.FLEXIBLE SERVICE PROPERTIES)

Additional characteristics of flexible service. A service may be partly fixed, partly flexible.

## FLEXIBLE SERVICE PROPERTIES – Relations

Source	Target
<b>FLEXIBLE SERVICE PROPERTIES</b> <i>Role:</i> classified as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TYPE OF FLEXIBLE SERVICE</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1
<b>FLEXIBLE SERVICE PROPERTIES</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE JOURNEY</b> <i>Role:</i> determined as flexible by <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>FLEXIBLE SERVICE PROPERTIES</b> <i>Role:</i> determining the flexibility for <i>Cardinality:</i> 0..1

## FLEXIBLE SERVICE PROPERTIES – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of FLEXIBLE SERVICE PROPERTIES.
	<b>CancellationPossible</b>	<i>boolean</i>	0:1	Whether cancellation is always possible (meaning the Operator can decide to cancel a journey, usually because there are not enough passenger, or they are too busy to run the service.)
	<b>ChangeOfTimePossible</b>	<i>boolean</i>	0:1	Whether time of service may be moved (usually a passing time update to optimise the service if there are not enough passenger, or they are too busy to run the service.)

**FLEXIBLE STOP ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Flexible Stop Place MODEL.FLEXIBLE STOP ASSIGNMENT)

The allocation of a SCHEDULED STOP POINT (i.e. a STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific FLEXIBLE STOP PLACE, and also possibly a FLEXIBLE AREA or HAIL AND RIDE AREA. May be subject to a VALIDITY CONDITION.

**FLEXIBLE STOP ASSIGNMENT – Relations**

Source	Target
<b>FLEXIBLE STOP ASSIGNMENT</b> Role: Cardinality: Relation type: Generalization	<b>STOP ASSIGNMENT</b> Role: Cardinality:
<b>FLEXIBLE STOP PLACE</b> Role: Cardinality: 1.. Relation type: Association	<b>FLEXIBLE STOP ASSIGNMENT</b> Role: Cardinality: 0..*
<b>FLEXIBLE STOP ASSIGNMENT</b> Role: Cardinality: 0..* Relation type: Association	<b>FLEXIBLE QUAY</b> Role: Cardinality: 1

**FLEXIBLE STOP ASSIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	STOP ASSIGNMENT	::>	<b>FLEXIBLE STOP ASSIGNMENT</b> inherits from <b>STOP ASSIGNMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of FLEXIBLE STOP ASSIGNMENT.

**FLEXIBLE STOP PLACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Flexible Stop Place MODEL.FLEXIBLE STOP PLACE)

A specialisation of the STOP PLACE describing a stop of a FLEXIBLE SERVICE. It may be composed of FLEXIBLE AREAs or HAIL AND RIDE AREAs identifying the catchment areas for flexible services (when they use areas or flexible quays). Some FLEXIBLE SERVICE also use regular STOP PLACES for their stops. When assigned to a SCHEDULED STOP POINT the corresponding SCHEDULED STOP POINT is supposed to be a ZONE (the centroid point of the ZONE being the SCHEDULED STOP POINT).

**FLEXIBLE STOP PLACE – Relations**

Source	Target
<b>FLEXIBLE STOP PLACE</b> Role: Cardinality: 1.. Relation type: Association	<b>FLEXIBLE STOP ASSIGNMENT</b> Role: Cardinality: 0..*
<b>FLEXIBLE QUAY</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>FLEXIBLE STOP PLACE</b> Role: containing Cardinality: 1
<b>FLEXIBLE STOP PLACE</b> Role: Cardinality: Relation type: Generalization	<b>STOP PLACE</b> Role: Cardinality:
<b>FLEXIBLE STOP PLACE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:



**FLEXIBLE STOP PLACE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	STOP PLACE	::>	<b>FLEXIBLE STOP PLACE</b> inherits from <b>STOP PLACE</b>
«UID»	<b>Id</b>	<i>FlexibleStopPlaceIdType</i>	1:1	Identifier of a FLEXIBLE STOP PLACE.
	<b>NameSuffix</b>	<i>MultilingualString</i>	0:1	Suffix to use on Name.
	<b>Locale</b>	<i>Locale</i>	0:1	Locale setting time zone, default language etc, for the FLEXIBLE STOP PLACE.

**GARAGE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Vehicle & Crew Point MODEL.GARAGE)

A facility used for parking and maintaining vehicles. PARKING POINTs in a GARAGE are called GARAGE POINTs.

**GARAGE – Relations**

Source	Target
<b>CREW BASE</b> Role: near Cardinality: * Relation type: Association	<b>GARAGE</b> Role: near Cardinality: *
<b>VEHICLE</b> Role: by default parked at Cardinality: * Relation type: Association	<b>GARAGE</b> Role: a default parking place for Cardinality: 0..1
<b>ORGANISATIONAL UNIT</b> Role: manager of Cardinality: 0..1 Relation type: Association	<b>GARAGE</b> Role: managed by Cardinality: *
<b>GARAGE</b> Role: comprising Cardinality: 1 Relation type: Association	<b>GARAGE POINT</b> Role: belonging to Cardinality: 1..*
<b>GARAGE</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**GARAGE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>GarageIdType</i>	1:1	Identifier of GARAGE.
	<b>Name</b>		0:1	Name of GARAGE.

**GARAGE POINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Vehicle & Crew Point MODEL.GARAGE POINT)

A subtype of PARKING POINT located in a GARAGE.

**GARAGE POINT – Relations**

Source	Target
<b>GARAGE POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PARKING POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>GARAGE</b> <i>Role:</i> comprising <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>GARAGE POINT</b> <i>Role:</i> belonging to <i>Cardinality:</i> 1..*
<b>GARAGE POINT</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE SERVICE PART</b> <i>Role:</i> ending at <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>GARAGE POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>VEHICLE SERVICE PART</b> <i>Role:</i> starting at <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>GARAGE POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1

**GARAGE POINT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>PARKING POINT</i>	::>	<b>GARAGE POINT</b> inherits from <b>PARKING POINT</b>
«UID»	<i>Id</i>	<i>GaragePointIdType</i>	1:1	Identifier of GARAGE POINT.

**GENERAL FRAME**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Explicit Frames MODEL .CC General Frame MODEL.GENERAL FRAME)

Set of data containing information, to which the same VALIDITY CONDITIONS have been assigned.

**GENERAL FRAME – Relations**

Source	Target
<b>GENERAL FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>GENERAL FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**GENERAL FRAME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>VERSION FRAME</i>	::>	<b>GENERAL FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<i>Id</i>		1:1	Identifier of a GENERAL FRAME.

**GENERAL SIGN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Sign Equipment MODEL.GENERAL SIGN)

Specialisation of SIGN EQUIPMENT which are not HEADING SIGNs nor PLACE SIGNs.

**GENERAL SIGN – Relations**

Source	Target
<b>GENERAL SIGN</b> Role: Cardinality: Relation type: Generalization	<b>SIGN EQUIPMENT</b> Role: Cardinality:

**GENERAL SIGN – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	SIGN EQUIPMENT	::>	<b>GENERAL SIGN</b> inherits from <b>SIGN EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of OTHER SIGN.
	<b>Content</b>	MultilingualString	1:1	Content of Other Sign

**GROUP OF ENTITIES**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Grouping MODEL.GROUP OF ENTITIES)

A set of ENTITIES grouped together according to a PURPOSE OF GROUPING, e.g. grouping of stops known to the public by a common name.

**GROUP OF ENTITIES – Relations**

Source	Target
<b>GROUP OF ENTITIES</b> Role: classified as Cardinality: 0..* Relation type: Aggregation	<b>PURPOSE OF GROUPING</b> Role: a classification for Cardinality: 1
<b>GROUP OF ENTITIES</b> Role: made up of Cardinality: 0..* Relation type: Association	<b>ENTITY</b> Role: included in Cardinality: 1..*
<b>GROUP OF ENTITIES</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>LAYER</b> Role: Cardinality: Relation type: Generalization	<b>GROUP OF ENTITIES</b> Role: Cardinality:

**GROUP OF ENTITIES – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	GroupOfEntitiesIdType	1:1	Identifier of GROUP OF ENTITIES.
	<b>Name</b>	MultilingualString	0:1	Name of GROUP OF ENTITIES.
	<b>Description</b>	MultilingualString	0:1	Description of GROUP OF ENTITIES.
	<b>ShortName</b>	MultilingualString	0:1	Short Name of GROUP OF ENTITIES.

**GROUP OF LINES**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.GROUP OF LINES)

A grouping of lines which will be commonly referenced for a specific purpose.

**GROUP OF LINES – Relations**

Source	Target
<b>GROUP OF LINES</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>NETWORK</b> Role: made up of Cardinality: 1
<b>SCHEMATIC MAP</b> Role: depicting Cardinality: 0..* Relation type: Association	<b>GROUP OF LINES</b> Role: depicted by Cardinality: 0..*
<b>PURPOSE OF GROUPING</b> Role: the classification for Cardinality: 1 Relation type: Association	<b>GROUP OF LINES</b> Role: classified by Cardinality: *
<b>NETWORK</b> Role: Cardinality: Relation type: Generalization	<b>GROUP OF LINES</b> Role: Cardinality:
<b>LINE</b> Role: included in Cardinality: 1..* Relation type: Association	<b>GROUP OF LINES</b> Role: composed of Cardinality: *
<b>GROUP OF LINES</b> Role: represented by Cardinality: 0..* Relation type: Association	<b>LINE</b> Role: main line for Cardinality: 0..1
<b>LINE NETWORK</b> Role: a representation of Cardinality: 0..* Relation type: Association	<b>GROUP OF LINES</b> Role: represented by Cardinality: 0..1
<b>GROUP OF LINES</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**GROUP OF LINES – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>id</i>	<i>GroupOfLinesIdType</i>	1:1	Identifier of a GROUP of LINES.

**GROUP OF LINK SEQUENCES**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link Sequence MODEL.GROUP OF LINK SEQUENCES)

A grouping of LINK SEQUENCES.

**GROUP OF LINK SEQUENCES – Relations**

Source	Target
<b>LINK SEQUENCE</b> <i>Role:</i> included in <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>GROUP OF LINK SEQUENCES</b> <i>Role:</i> composed of <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>GROUP OF LINK SEQUENCES</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>GROUP OF LINK SEQUENCES</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>LAYER</b> <i>Role:</i> <i>Cardinality:</i>

**GROUP OF LINK SEQUENCES – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>GroupOfLinkSequences/</i> <i>dType</i>	1:1	Identifier of GROUP OF LINK SEQUENCE.

**GROUP OF LINKS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link MODEL.GROUP OF LINKS)

A grouping of LINKs. E.g. one GROUP OF LINKs may be managed by a same AUTHORITY.

**GROUP OF LINKS – Relations**

Source	Target
<b>GROUP OF LINKS</b> <i>Role:</i> made up of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>LINK</b> <i>Role:</i> included in <i>Cardinality:</i> 1..*
<b>PURPOSE OF GROUPING</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>GROUP OF LINKS</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>GROUP OF TIMING LINKS</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>GROUP OF LINKS</b> <i>Role:</i> <i>Cardinality:</i>
<b>GROUP OF LINKS</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>LAYER</b> <i>Role:</i> <i>Cardinality:</i>
<b>GROUP OF LINKS</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**GROUP OF LINKS – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>GroupOfLinksIdType</i>	1:1	Identifier of GROUP OF LINKs.

**GROUP OF OPERATORS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Organisations MODEL.GROUP OF OPERATORS)

A group of OPERATORS having for instance common schemes for fare collection or passenger information.

**GROUP OF OPERATORS – Relations**

Source	Target
<b>GROUP OF OPERATORS</b> Role: serving PT for Cardinality: 0..* Relation type: Association	<b>AUTHORITY</b> Role: ordering PT service from Cardinality: *
<b>GROUP OF OPERATORS</b> Role: grouping Cardinality: * Relation type: Association	<b>OPERATOR</b> Role: grouped in Cardinality: 1..*
<b>GROUP OF OPERATORS</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1

**GROUP OF OPERATORS – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	GroupOfOperatorsIdType	1:1	Identifier of GROUP OF OPERATORS.
	<b>Category</b>	normalizedString	0:1	Category of GROUP OF OPERATORS.

**GROUP OF POINTS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link MODEL.GROUP OF POINTS)

A grouping of POINTs of a certain TYPE OF POINT and dedicated to a FUNCTIONAL PURPOSE.

**GROUP OF POINTS – Relations**

Source	Target
<b>GROUP OF POINTS</b> Role: determining Cardinality: 0..1 Relation type: Association	<b>ZONE</b> Role: determined by Cardinality: 0..1
<b>POINT</b> Role: included in Cardinality: 1..* Relation type: Association	<b>GROUP OF POINTS</b> Role: composed of Cardinality: *
<b>PURPOSE OF GROUPING</b> Role: classification for Cardinality: 1 Relation type: Association	<b>GROUP OF POINTS</b> Role: classified as Cardinality: *
<b>GROUP OF POINTS</b> Role: used as Cardinality: 1 Relation type: Association	<b>STOP AREA</b> Role: a use of Cardinality: 0..1
<b>GROUP OF POINTS</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

**GROUP OF POINTS – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>GroupOfPointsIdType</i>	1:1	Identifier of GROUP of POINTs.

**GROUP OF SERVICES**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Service Journey MODEL.GROUP OF SERVICES)

A group of SERVICES, often known to its users by a name or a number.

**GROUP OF SERVICES – Relations**

Source	Target
<b>GROUP OF SERVICES</b> Role: marked by Cardinality: <b>0..1</b> Relation type: Association	<b>NOTICE ASSIGNMENT</b> Role: assigned to Cardinality: <b>0..*</b>
<b>GROUP OF SERVICES</b> Role: Cardinality: <b>*</b> Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>GROUP OF SERVICES</b> Role: made up of Cardinality: <b>0..1</b> Relation type: Association	<b>JOURNEY</b> Role: in Cardinality: <b>1..*</b>

**GROUP OF SERVICES – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>GroupOfServicesIdType</i>	1:1	Identifier of GROUP OF SERVICES.
	<b>DirectionType</b>	<i>DirectionTypeEnum</i>	0:1	Type of DIRECTION.

**GROUP OF TIMEBANDS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.GROUP OF TIMEBANDS)

A grouping of TIME BANDs.

**GROUP OF TIMEBANDS – Relations**

Source	Target
<b>GROUP OF TIMEBANDS</b> Role: for the definition of Cardinality: <b>0..*</b> Relation type: Aggregation	<b>SERVICE CALENDAR</b> Role: defined by Cardinality: <b>1</b>
<b>GROUP OF TIMEBANDS</b> Role: made up of Cardinality: <b>0..1</b> Relation type: Association	<b>TIME BAND</b> Role: in Cardinality: <b>0..*</b>

**GROUP OF TIMEBANDS – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>GroupOfTimebandsIdType</i>	1:1	Identifier of a GROUP OF TIME BANDS
	<b>Name</b>		1:1	

**GROUP OF TIMING LINKS**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Timing Pattern MODEL.GROUP OF TIMING LINKS)

A set of TIMING LINKs grouped together according to the similarity of TIME BANDs which are relevant to them. There may be a GROUP OF TIMING LINKS which covers all TIMING LINKs, for use when different GROUPs OF TIMING LINKS are not needed.

**GROUP OF TIMING LINKS – Relations**

Source	Target
<b>GROUP OF TIMING LINKS</b> Role: Cardinality: Relation type: Generalization	<b>GROUP OF LINKS</b> Role: Cardinality:
<b>GROUP OF TIMING LINKS</b> Role: used to define Cardinality: 1 Relation type: Association	<b>TIME DEMAND TYPE ASSIGNMENT</b> Role: for Cardinality: *
<b>GROUP OF TIMING LINKS</b> Role: made up of Cardinality: 0..1 Relation type: Association	<b>TIMING LINK</b> Role: in Cardinality: 1..*
<b>GROUP OF TIMING LINKS</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**GROUP OF TIMING LINKS – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>GROUP OF LINKS</i>	::>	<b>GROUP OF TIMING LINKS</b> inherits from <b>GROUP OF LINKS</b>
«UID»	<b>Id</b>	<i>GroupOfTimingLinksIdType</i>	1:1	Identifier of GROUP OF TIMING LINKs.
	<b>Description</b>		1:1	Description of GROUP OF TIMING LINKS.

**HAIL AND RIDE AREA**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Flexible Stop Place MODEL.HAIL AND RIDE AREA)

Specialisation of a FLEXIBLE QUAY to identify what is the catchment zone for a hail and ride service (so that a stop finder can find the nearest available types of transport). It is a named zone visited by a particular mode of transport and may be designated by a start point and end point on the road

It is part of the Site data set rather than the service data set, since it can be defined and exists independently of an actual service.



## HAIL AND RIDE AREA – Relations

Source	Target
<b>HAIL AND RIDE AREA</b> Role: Cardinality: Relation type: Generalization	<b>FLEXIBLE QUAY</b> Role: Cardinality:

## HAIL AND RIDE AREA – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>FLEXIBLE QUAY</i>	::>	<b>HAIL AND RIDE AREA</b> inherits from <b>FLEXIBLE QUAY</b>
«UID»	<b>Id</b>	<i>HailAndRideAreaIdType</i>	1:1	Identifier of a HAIL AND RIDE AREA.
	<b>CompassBearing</b>	<i>CompassBearingType</i>	0:1	Compass Bearing associated with a HAIL AND RIDE AREA.
	<b>CompassOctant</b>	<i>CompassOctantEnum</i>	0:1	Compass Octant associated with a HAIL AND RIDE AREA.

## HEADING SIGN

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Sign Equipment MODEL.HEADING SIGN)

Specialisation of SIGN EQUIPMENT for headings providing information like direction name, line name, etc.

## HEADING SIGN – Relations

Source	Target
<b>HEADING SIGN</b> Role: Cardinality: Relation type: Generalization	<b>SIGN EQUIPMENT</b> Role: Cardinality:
<b>HEADING SIGN</b> Role: referring to Cardinality: 0..* Relation type: Association	<b>LINE</b> Role: a reference for Cardinality: 0..1
<b>HEADING SIGN</b> Role: referring to Cardinality: 0..* Relation type: Association	<b>DIRECTION</b> Role: a reference for Cardinality: 1
<b>HEADING SIGN</b> Role: shown on Cardinality: 0..* Relation type: Association	<b>DESTINATION DISPLAY</b> Role: showing Cardinality: 0..1

## HEADING SIGN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>SIGN EQUIPMENT</i>	::>	<b>HEADING SIGN</b> inherits from <b>SIGN EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of HEADING SIGN.
	<b>DirectionName</b>	<i>MultilingualString</i>	1:1	Direction Name that Sign shows
	<b>LineName</b>	<i>MultilingualString</i>	0:1	LINE NAME on HEADING SIGN
	<b>LineMap</b>	<i>anyURI</i>	1:1	URL of Map associated with HEADING SIGN.
	<b>LineMode</b>	<i>VehicleModeEnum</i>	0:1	MODE of LINE referenced by Sign
	<b>LinePublicCode</b>	<i>normalizedString</i>	1:1	Public Code for LINE

**HEADWAY INTERVAL**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey Times MODEL.HEADWAY INTERVAL)

A time interval or a duration defining a headway period and characterizing HEADWAY JOURNEY GROUP (e.g. every 10 min, every 4-6 min).

**HEADWAY INTERVAL – Relations**

Source	Target
<b>HEADWAY JOURNEY GROUP</b> Role: determined by Cardinality: 0..* Relation type: Association	<b>HEADWAY INTERVAL</b> Role: determining Cardinality: 1

**HEADWAY INTERVAL – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of HEADWAY INTERVAL.
	<i>ScheduledHeadwayInterval</i>	duration	0:1	Scheduled Headway interval.
	<i>MinimumHeadwayInterval</i>	duration	0:1	Minimum Headway interval.
	<i>MaximumHeadwayInterval</i>	duration	0:1	Maximum Headway interval.

**HEADWAY JOURNEY GROUP**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey Times MODEL.HEADWAY JOURNEY GROUP)

A group of VEHICLE JOURNEYS following the same JOURNEY PATTERN having the same HEADWAY INTERVAL between a specified start and end time (for example, every 10 min). This is especially useful for passenger information.

**HEADWAY JOURNEY GROUP – Relations**

Source	Target
<b>TIME BAND</b> Role: for Cardinality: 0..* Relation type: Association	<b>HEADWAY JOURNEY GROUP</b> Role: active on Cardinality: 0..*
<b>HEADWAY JOURNEY GROUP</b> Role: made using Cardinality: * Relation type: Association	<b>TIME DEMAND TYPE</b> Role: used by default by Cardinality: 0..*
<b>HEADWAY JOURNEY GROUP</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY FREQUENCY GROUP</b> Role: Cardinality:
<b>HEADWAY JOURNEY GROUP</b> Role: determined by Cardinality: 0..* Relation type: Association	<b>HEADWAY INTERVAL</b> Role: determining Cardinality: 1

**HEADWAY JOURNEY GROUP – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY FREQUENCY GROUP	::>	<b>HEADWAY JOURNEY GROUP</b> inherits from <b>JOURNEY FREQUENCY GROUP</b>
«UID»	<b>Id</b>	HeadwayJourneyGroup/ dType	1:1	Identifier of HEADWAY JOURNEY GROUP.
	<b>HeadwayDisplay</b>	HeadwayUseEnum	0:1	How Headway is to displayed to passengers.

**HIRE SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Local Commercial Service MODEL.HIRE SERVICE)

Specialisation of LOCAL SERVICE dedicated to hire services (e.g. cycle hire, car hire).

**HIRE SERVICE – Relations**

Source	Target
<b>TYPE OF HIRE SERVICE</b> Role: classification for Cardinality: 1 Relation type: Association	<b>HIRE SERVICE</b> Role: classified as Cardinality: 0..*
<b>HIRE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:

**HIRE SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>HIRE SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>		1:1	Identifier of HIRE SERVICE.

**IMPOSSIBLE MANOEUVRE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Network Restriction MODEL.IMPOSSIBLE MANOEUVRE)

A specification of impossible move for a certain type of vehicle. It specifies from which INFRASTRUCTURE LINK to which other (adjacent) INFRASTRUCTURE LINK a certain VEHICLE TYPE cannot proceed, due to physical restrictions.

**IMPOSSIBLE MANOEUVRE – Relations**

Source	Target
<b>VEHICLE TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>IMPOSSIBLE MANOEUVRE</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>IMPOSSIBLE MANOEUVRE</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INFRASTRUCTURE LINK</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>INFRASTRUCTURE LINK</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>IMPOSSIBLE MANOEUVRE</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>IMPOSSIBLE MANOEUVRE</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**IMPOSSIBLE MANOEUVRE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ManoeuvredType</i>	1:1	Identifier of IMPOSSIBLE MANOEUVRE.

**INFRASTRUCTURE FRAME**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).NT Explicit Frames MODEL.Infrastructure Frame MODEL.INFRASTRUCTURE FRAME)

A set of infrastructure network data (and other data logically related to these) to which the same VALIDITY CONDITIONS have been assigned.

**INFRASTRUCTURE FRAME – Relations**

Source	Target
<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROAD JUNCTION</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROAD ELEMENT</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>WIRE JUNCTION</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>WIRE ELEMENT</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

<b>RAILWAY JUNCTION</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>RAILWAY ELEMENT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE TYPE AT POINT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>OVERTAKING POSSIBILITY</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>IMPOSSIBLE MANOEUVRE</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>MEETING RESTRICTION</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>RELIEF POINT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>PARKING POINT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>GARAGE POINT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>CREW BASE</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>GARAGE</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TRAFFIC CONTROL POINT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>ACTIVATION POINT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>ACTIVATION LINK</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

<b>BEACON POINT</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:
<b>COMPLEX FEATURE</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:
<b>SIMPLE FEATURE</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:
<b>INFRASTRUCTURE FRAME</b> Role: Cardinality: Relation type: Aggregation	<b>COMPOSITE FRAME</b> Role: Cardinality:

**INFRASTRUCTURE FRAME – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	<b>INFRASTRUCTURE FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<b>Id</b>		1:1	Identifier of INFRASTRUCTURE FRAME.

**INFRASTRUCTURE LINK**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.INFRASTRUCTURE LINK)

A super-type including all LINKs of the physical network (e.g. RAILWAY ELEMENT).

**INFRASTRUCTURE LINK – Relations**

Source	Target
<b>INFRASTRUCTURE LINK</b> Role: Cardinality: Relation type: Generalization	<b>LINK</b> Role: Cardinality:
<b>INFRASTRUCTURE LINK</b> Role: overtaking at Cardinality: 1 Relation type: Association	<b>OVERTAKING POSSIBILITY</b> Role: at Cardinality: *
<b>WIRE ELEMENT</b> Role: Cardinality: Relation type: Generalization	<b>INFRASTRUCTURE LINK</b> Role: Cardinality:
<b>IMPOSSIBLE MANOEUVRE</b> Role: to Cardinality: * Relation type: Association	<b>INFRASTRUCTURE LINK</b> Role: end of Cardinality: 1
<b>INFRASTRUCTURE LINK</b> Role: to Cardinality: * Relation type: Association	<b>INFRASTRUCTURE POINT</b> Role: end of Cardinality: 1

<b>MEETING RESTRICTION</b> <i>Role:</i> with regard to the opposite <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INFRASTRUCTURE LINK</b> <i>Role:</i> referred to in <i>Cardinality:</i> 1
<b>ROAD ELEMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INFRASTRUCTURE LINK</b> <i>Role:</i> <i>Cardinality:</i>
<b>INFRASTRUCTURE LINK</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>IMPOSSIBLE MANOEUVRE</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>INFRASTRUCTURE POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>INFRASTRUCTURE LINK</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>INFRASTRUCTURE LINK</b> <i>Role:</i> safely traversed by <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> safe to traverse <i>Cardinality:</i> *
<b>INFRASTRUCTURE LINK</b> <i>Role:</i> referred to in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>MEETING RESTRICTION</b> <i>Role:</i> on <i>Cardinality:</i> *
<b>RAILWAY ELEMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INFRASTRUCTURE LINK</b> <i>Role:</i> <i>Cardinality:</i>

**INFRASTRUCTURE LINK – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	LINK	::>	<b>INFRASTRUCTURE LINK</b> inherits from <b>LINK</b>
«UID»	<b>Id</b>	InfrastructureLinkIdType	1:1	Identifier of INFRASTRUCTURE LINK.

**INFRASTRUCTURE POINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.INFRASTRUCTURE POINT)

A super-type including all POINTs of the physical network (e.g. RAILWAY JUNCTION).

**INFRASTRUCTURE POINT – Relations**

Source	Target
<b>INFRASTRUCTURE POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE TYPE AT POINT</b> <i>Role:</i> specifying the capacity of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INFRASTRUCTURE POINT</b> <i>Role:</i> location of <i>Cardinality:</i> 1
<b>INFRASTRUCTURE POINT</b> <i>Role:</i> overtaking at <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>OVERTAKING POSSIBILITY</b> <i>Role:</i> at <i>Cardinality:</i> *
<b>RAILWAY JUNCTION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INFRASTRUCTURE POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROAD JUNCTION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INFRASTRUCTURE POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>INFRASTRUCTURE LINK</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INFRASTRUCTURE POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>INFRASTRUCTURE POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>INFRASTRUCTURE LINK</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>WIRE JUNCTION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INFRASTRUCTURE POINT</b> <i>Role:</i> <i>Cardinality:</i>

**INFRASTRUCTURE POINT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>POINT</i>	::>	<b>INFRASTRUCTURE POINT</b> inherits from <b>POINT</b>
«UID»	<b>Id</b>	<i>InfrastructurePointIdType</i>	1:1	Identifier of INFRASTRUCTURE POINT.

**INSTALLED EQUIPMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Generic Equipment MODEL.INSTALLED EQUIPMENT)

An item of equipment either fixed (PLACE EQUIPMENT) or on board i.e. associated with vehicles. This equipment is materialised as opposed to a service (LOCAL SERVICE) considered as an immaterial equipment.



**INSTALLED EQUIPMENT – Relations**

Source	Target
<b>ACTUAL VEHICLE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INSTALLED EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INSTALLED EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>INSTALLED EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INSTALLED EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

**INSTALLED EQUIPMENT – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	EQUIPMENT	::>	<b>INSTALLED EQUIPMENT</b> inherits from <b>EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of INSTALLED EQUIPMENT.

**INTERCHANGE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange MODEL.INTERCHANGE)

The scheduled possibility for transfer of passengers at the same or different SCHEDULED STOP POINTs.

## INTERCHANGE – Relations

Source	Target
<b>VALIDITY CONDITION</b> <i>Role:</i> applicable for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INTERCHANGE</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>TIME BAND</b> <i>Role:</i> defining <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INTERCHANGE</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>INTERCHANGE RULE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE JOURNEY INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i>
<b>NOTICE ASSIGNMENT</b> <i>Role:</i> assigned by <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INTERCHANGE</b> <i>Role:</i> marked by <i>Cardinality:</i> 0..1
<b>INTERCHANGE</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>CONNECTION</b> <i>Role:</i> at <i>Cardinality:</i> 0..1

## INTERCHANGE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>InterchangeIdType</i>	1:1	Identifier of INTERCHANGE.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of INTERCHANGE.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of INTERCHANGE.
	<b>Priority</b>	<i>InterchangePriorityType</i>	0:1	Priority assigned to INTERCHANGE.
	<b>StaySeated</b>	<i>boolean</i>	0:1	Whether passengers can stay seated to make INTERCHANGE.
	<b>CrossBorder</b>	<i>boolean</i>	0:1	Whether INTERCHANGE involves crossing a national border.
	<b>Planned</b>	<i>boolean</i>	0:1	Whether INTERCHANGE is planned.
	<b>Guaranteed</b>	<i>ConnectionCertaintyEnum</i>	0:1	Whether INTERCHANGE is guaranteed, that is distributor services may be held in order to ensure the connection.
	<b>Advertised</b>	<i>boolean</i>	0:1	Whether INTERCHANGE is controlled.
	<b>Controlled</b>	<i>boolean</i>	0:1	Whether INTERCHANGE is advertised as guaranteed.
	<b>TransferModes</b>	<i>AccessModeEnum</i>	0:1	Modes by which transfer at the interchange can be made.
	<b>DistributorMaxWaitDuration</b>	<i>duration</i>	0:1	Maximum wait time a vehicle may wait for a connecting vehicle beyond the planned departure time.

**INTERCHANGE RULE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange Rule MODEL.INTERCHANGE RULE)

Conditions for considering JOURNEYS to meet or not to meet, specified indirectly: by a particular MODE, DIRECTION or LINE. Such conditions may alternatively be specified directly, indicating the corresponding services. In this case they are either a SERVICE JOURNEY PATTERN INTERCHANGE or a SERVICE JOURNEY INTERCHANGE.

**INTERCHANGE RULE – Relations**

Source	Target
<b>CONTROL CENTRE</b> Role: controlling Cardinality: 0..1 Relation type: Association	<b>INTERCHANGE RULE</b> Role: controlled by Cardinality: 0..*
<b>INTERCHANGE RULE</b> Role: using Cardinality: 0..* Relation type: Association	<b>INTERCHANGE RULE TIMING</b> Role: used as Cardinality: 0..1
<b>INTERCHANGE RULE</b> Role: feeding Cardinality: 1 Relation type: Aggregation	<b>INTERCHANGE RULE PARAMETER</b> Role: defining feeder for Cardinality: *
<b>INTERCHANGE RULE</b> Role: distributing Cardinality: 1 Relation type: Aggregation	<b>INTERCHANGE RULE PARAMETER</b> Role: defining distributor for Cardinality: *
<b>INTERCHANGE RULE</b> Role: Cardinality: Relation type: Generalization	<b>INTERCHANGE</b> Role: Cardinality:

**INTERCHANGE RULE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INTERCHANGE	::>	<b>INTERCHANGE RULE</b> inherits from <b>INTERCHANGE</b>
«UID»	<b>Id</b>	InterchangeRuleIdType	1:1	Identifier of INTERCHANGE RULE.
	<b>MaximumWindow</b>	duration	0:1	Maximum window for holding DISTRIBUTOR will wait.
	<b>Exclude</b>	boolean	0:1	Whether rule is to exclude interchanges of journeys that match the filter criteria.
	<b>Priority</b>	integer	0:1	Relative priority of rule compared to other rules.

**INTERCHANGE RULE PARAMETER**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange Rule MODEL.INTERCHANGE RULE PARAMETER)

Assignment of parameters characterising an INTERCHANGE RULE.

**INTERCHANGE RULE PARAMETER – Relations**

Source	Target
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE MODE</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>LINE</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>STOP AREA</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SCHEDULED STOP POINT</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>OPERATOR</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>DIRECTION</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>
<b>INTERCHANGE RULE</b> <i>Role: feeding</i> <i>Cardinality: 1</i> <i>Relation type: Aggregation</i>	<b>INTERCHANGE RULE PARAMETER</b> <i>Role: defining feeder for</i> <i>Cardinality: *</i>
<b>INTERCHANGE RULE</b> <i>Role: distributing</i> <i>Cardinality: 1</i> <i>Relation type: Aggregation</i>	<b>INTERCHANGE RULE PARAMETER</b> <i>Role: defining distributor for</i> <i>Cardinality: *</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE JOURNEY</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>

**INTERCHANGE RULE PARAMETER – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of INTERCHANGE RULE PARAMETER.
	<b>MaximumInterchangeWindow</b>	<i>duration</i>	0:1	Maximum interval for making interchange.

**INTERCHANGE RULE TIMING**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange Rule MODEL.INTERCHANGE RULE TIMING)

Timings for an INTERCHANGE RULE for a given TIME DEMAND TYPE or TIME BAND.

**INTERCHANGE RULE TIMING – Relations**

Source	Target
<b>INTERCHANGE RULE TIMING</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>INTERCHANGE RULE</b> <i>Role:</i> using <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>INTERCHANGE RULE TIMING</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1

**INTERCHANGE RULE TIMING – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	JOURNEY TIMING	::>	<b>INTERCHANGE RULE TIMING</b> inherits from <b>JOURNEY TIMING</b>
«UID»	<b>Id</b>	InterchangeRuleTimingId Type	1:1	Identifier of INTERCHANGE RULE TIMING.

**JOURNEY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey MODEL.JOURNEY)

Common properties of VEHICLE JOURNEYS and SPECIAL SERVICES, e.g. their link to accounting characteristics.

**JOURNEY – Relations**

Source	Target
<b>VALIDITY CONDITION</b> <i>Role:</i> applicable for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>JOURNEY</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..1
<b>SPECIAL SERVICE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE JOURNEY</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY</b> <i>Role:</i> <i>Cardinality:</i>
<b>GROUP OF SERVICES</b> <i>Role:</i> made up of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY</b> <i>Role:</i> in <i>Cardinality:</i> 1..*
<b>TYPE OF SERVICE</b> <i>Role:</i> the classification for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>JOURNEY</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ACCESSIBILITY ASSESSMENT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..1
<b>JOURNEY</b> <i>Role:</i> accounted by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY ACCOUNTING</b> <i>Role:</i> accounting <i>Cardinality:</i> 0..*
<b>JOURNEY</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF PRODUCT CATEGORY</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1

**JOURNEY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>JourneyIdType</i>	1:1	Identifier of JOURNEY.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Vehicle Mode of JOURNEY.
	<b>TransportMode</b>	<i>VehicleModeEnum</i>	0:1	Normal Primary Transport mode of JOURNEY
	<b>TransportSubmode</b>	<i>TransportSubMode</i>	0:1	Normal Primary Transport submode of JOURNEY
	<b>Monitored</b>	<i>boolean</i>	0:1	Whether the journey is monitored with real-time tracking & predictions.

**JOURNEY ACCOUNTING**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Journey Accounting MODEL.JOURNEY ACCOUNTING)

Parameters characterizing VEHICLE JOURNEYS or SPECIAL SERVICES used for accounting purposes in particular in contracts between ORGANISATIONS.

**JOURNEY ACCOUNTING – Relations**

Source	Target
<b>JOURNEY ACCOUNTING</b> <i>Role:</i> defined by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ORGANISATION</b> <i>Role:</i> defining <i>Cardinality:</i> 0..1
<b>JOURNEY ACCOUNTING</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY</b> <i>Role:</i> accounted by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY ACCOUNTING</b> <i>Role:</i> accounting <i>Cardinality:</i> 0..*

**JOURNEY ACCOUNTING – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>JourneyAccountingIdType</i>	1:1	Identifier of JOURNEY ACCOUNTING.
	<b>Distance</b>	<i>DistanceType</i>	0:1	Distance to us in for JOURNEY ACCOUNTING.
	<b>Duration</b>	<i>duration</i>	0:1	Duration to use for JOURNEY ACCOUNTING.
	<b>Partial</b>	<i>boolean</i>	0:1	Whether all or some of journey is subject to ACCOUNTING.
	<b>AccountingType</b>	<i>JourneyAccountingEnum</i>	0:1	Nature of JOURNEY ACCOUNTING.

**JOURNEY FREQUENCY GROUP**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey Times MODEL.JOURNEY FREQUENCY GROUP)

A group of JOURNEYS defined in order to describe special behaviour like frequency based services or rhythmical services (runs all xxh10, xxh25 and xxh45... for example; this is especially useful for passenger information).

**JOURNEY FREQUENCY GROUP – Relations**

Source	Target
<b>RHYTHMICAL JOURNEY GROUP</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY FREQUENCY GROUP</b> <i>Role:</i> <i>Cardinality:</i>
<b>HEADWAY JOURNEY GROUP</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY FREQUENCY GROUP</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY FREQUENCY GROUP</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY FREQUENCY GROUP</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE JOURNEY</b> <i>Role:</i> composed of <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>JOURNEY FREQUENCY GROUP</b> <i>Role:</i> runs on <i>Cardinality:</i> 0..1

**JOURNEY FREQUENCY GROUP – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>FrequencyGroupIdType</i>	1:1	Identifier of FREQUENCY GROUP.
	<b>FirstDepartureTime</b>	<i>time</i>	1:1	Time of first departure in Group.
	<b>LastDepartureTime</b>	<i>time</i>	0:1	Time of last departure in Group.
	<b>DayOffset</b>	<i>integer</i>	0:1	Offset of end time day from start time.

**JOURNEY HEADWAY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Timing MODEL.JOURNEY HEADWAY)

Headway interval information that is available for all the VEHICLE JOURNEYS running on the JOURNEY PATTERN for a given TIME DEMAND TYPE, at a given TIMING POINT. This is a default value that can be superseded by VEHICLE JOURNEY HEADWAY. This information must be consistent with HEADWAY JOURNEY GROUP if available (HEADWAY JOURNEY GROUP being a more detailed way of describing headway services).

**JOURNEY HEADWAY – Relations**

Source	Target
<b>JOURNEY HEADWAY</b> Role: for Cardinality: 0..* Relation type: Association	<b>TIMING POINT</b> Role: passed every Cardinality: 1
<b>JOURNEY HEADWAY</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY TIMING</b> Role: Cardinality:
<b>VEHICLE JOURNEY HEADWAY</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY HEADWAY</b> Role: Cardinality:

**JOURNEY HEADWAY – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>JOURNEY TIMING</i>	::>	<b>JOURNEY HEADWAY</b> inherits from <b>JOURNEY TIMING</b>
«UID»	<b>Id</b>	<i>HeadwayIdType</i>	1:1	Identifier of JOURNEY HEADWAY.
	<b>Frequency</b>	<i>HeadwayInterval</i>	0:1	Set of HEADWAY INTERVALs describing frequency of JOURNEY.

**JOURNEY LAYOVER**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Timing MODEL.JOURNEY LAYOVER)

Time allowance at the end of each journey to allow for delays and for other purposes.



**JOURNEY LAYOVER – Relations**

Source	Target
<b>JOURNEY LAYOVER</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE JOURNEY LAYOVER</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY LAYOVER</b> <i>Role:</i> <i>Cardinality:</i>

**JOURNEY LAYOVER – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	JOURNEY TIMING	::>	<b>JOURNEY LAYOVER</b> inherits from <b>JOURNEY TIMING</b>
«UID»	<b>Id</b>	LayoverIdType	1:1	Identifier of JOURNEY LAYOVER.
	<b>Layover</b>	Duration	0:1	Time spent at JOURNEY LAYOVER.

**JOURNEY MEETING**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange MODEL.JOURNEY MEETING)

A time constraint for one or several SERVICE JOURNEYS fixing interchanges between them and/or an external event (e.g. arrival or departure of a feeder line, opening time of the theatre, etc.).

**JOURNEY MEETING – Relations**

Source	Target
<b>JOURNEY MEETING</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY MEETING</b> <i>Role:</i> concerning <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> concerned by <i>Cardinality:</i> 1..*
<b>JOURNEY MEETING</b> <i>Role:</i> combining <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> combined in <i>Cardinality:</i> *

**JOURNEY MEETING – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	JourneyMeetingIdType	1:1	Identifier of JOURNEY MEETING.
	<b>Description</b>	MultilingualString	0:1	Description of JOURNEY MEETING.
	<b>LatestTime</b>	time	1:1	Earliest time at which MEETING can take place.
	<b>EarliestTime</b>	time	0:1	Latest time at which MEETING can take place.
	<b>Reason</b>	ReasonForMeetingEnum	0:1	Reason for JOURNEY MEETING.

**JOURNEY PART**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Coupled Journey MODEL.JOURNEY PART)

A part of a *VEHICLE JOURNEY* created according to a specific functional purpose, for instance in situations when vehicle coupling or separating occurs.

#### JOURNEY PART – Relations

Source	Target
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>JOURNEY PART</b> Role: managed by Cardinality: *
<b>VEHICLE TYPE</b> Role: proposed for Cardinality: 0..* Relation type: Association	<b>JOURNEY PART</b> Role: made using Cardinality: 0..*
<b>POINT</b> Role: start of Cardinality: 1 Relation type: Association	<b>JOURNEY PART</b> Role: from Cardinality: *
<b>SERVICE FACILITY SET</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>JOURNEY PART</b> Role: made using Cardinality: 0..1
<b>PURPOSE OF JOURNEY PARTITION</b> Role: causing Cardinality: 1 Relation type: Association	<b>JOURNEY PART</b> Role: caused by Cardinality: 1..*
<b>DATED VEHICLE JOURNEY</b> Role: using Cardinality: * Relation type: Association	<b>JOURNEY PART</b> Role: used to compose Cardinality: *
<b>JOURNEY PART</b> Role: used as main part in Cardinality: 1 Relation type: Association	<b>JOURNEY PART COUPLE</b> Role: including as main part Cardinality: 0..1
<b>JOURNEY PART</b> Role: joining Cardinality: 0..* Relation type: Association	<b>JOURNEY PART COUPLE</b> Role: including as joining part Cardinality: 0..1
<b>JOURNEY PART</b> Role: to Cardinality: * Relation type: Association	<b>POINT</b> Role: end of Cardinality: 1
<b>JOURNEY PART</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY PART</b> Role: in Cardinality: * Relation type: Association	<b>BLOCK PART</b> Role: including Cardinality: 0..1
<b>TRAIN NUMBER</b> Role: identifying Cardinality: 0..1 Relation type: Association	<b>JOURNEY PART</b> Role: identified by Cardinality: 0..*
<b>VEHICLE JOURNEY</b> Role: subdivided in Cardinality: 1 Relation type: Association	<b>JOURNEY PART</b> Role: part of Cardinality: *

**JOURNEY PART – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>JourneyPartIdType</i>	1:1	Identifier of JOURNEY PART.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of a JOURNEY PART.
	<b>OperationalOrientation</b>	<i>VehicleOrientationEnum</i>	0:1	Whether VEHICLE or TRAIN is operating forwards or backwards for the JOURNEY PART.
	<b>StartTime</b>	<i>Time</i>	0:1	Start time of a JOURNEY PART.
	<b>EndTime</b>	<i>Time</i>	0:1	End time of a JOURNEY PART.
	<b>VehicleOrientation</b>	<i>boolean</i>	0:1	End time of a JOURNEY PART.

**JOURNEY PART COUPLE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Coupled Journey MODEL.JOURNEY PART COUPLE)

Two JOURNEY PARTs of different VEHICLE JOURNEYs served simultaneously by a train set up by coupling their single vehicles.

**JOURNEY PART COUPLE – Relations**

Source	Target
<b>JOURNEY PART COUPLE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY PART</b> Role: used as main part in Cardinality: 1 Relation type: Association	<b>JOURNEY PART COUPLE</b> Role: including as main part Cardinality: 0..1
<b>JOURNEY PART</b> Role: joining Cardinality: 0..* Relation type: Association	<b>JOURNEY PART COUPLE</b> Role: including as joining part Cardinality: 0..1
<b>TRAIN NUMBER</b> Role: identifying Cardinality: 0..1 Relation type: Association	<b>JOURNEY PART COUPLE</b> Role: identified by Cardinality: 0..*

**JOURNEY PART COUPLE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>JourneyPartCoupleIdType</i>	1:1	Identifier of JOURNEY PART COUPLE.
	<b>Order</b>	<i>positiveInteger</i>	1:1	Order of JOURNEY PART COUPLE within JOURNEY.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of JOURNEY PART COUPLE.

**JOURNEY PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Journey Pattern MODEL.JOURNEY PATTERN)

An ordered list of SCHEDULED STOP POINTs and TIMING POINTs on a single ROUTE, describing the pattern of working for public transport vehicles.A JOURNEY PATTERN may pass through the same POINT more than once. The first point of a JOURNEY PATTERN is the origin. The last point is the destination.

## JOURNEY PATTERN – Relations

Source	Target
<b>JOURNEY PATTERN</b> Role: marked by Cardinality: 0..1 Relation type: Association	<b>NOTICE ASSIGNMENT</b> Role: assigned to Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: using Cardinality: * Relation type: Association	<b>JOURNEY PATTERN</b> Role: used by Cardinality: *
<b>JOURNEY PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>LINK SEQUENCE</b> Role: Cardinality:
<b>AUTHORITY</b> Role: managing Cardinality: 0..1 Relation type: Association	<b>JOURNEY PATTERN</b> Role: managed by Cardinality: *
<b>SERVICE EXCLUSION</b> Role: protection for Cardinality: 0..* Relation type: Association	<b>JOURNEY PATTERN</b> Role: protected by Cardinality: 0..*
<b>JOURNEY PATTERN</b> Role: used to define Cardinality: 0..1 Relation type: Association	<b>DISPLAY ASSIGNMENT</b> Role: for Cardinality: *
<b>JOURNEY PATTERN</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: characterising Cardinality: 0..*
<b>SERVICE EXCLUSION</b> Role: constraint for Cardinality: 0..* Relation type: Association	<b>JOURNEY PATTERN</b> Role: constrained by Cardinality: 0..*
<b>JOURNEY PATTERN</b> Role: made up of Cardinality: * Relation type: Association	<b>SERVICE PATTERN</b> Role: contributing to Cardinality: 1
<b>SERVICE JOURNEY PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY PATTERN</b> Role: Cardinality:
<b>JOURNEY PATTERN</b> Role: operated by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: operating Cardinality: 0..*
<b>JOURNEY PATTERN</b> Role: made up of Cardinality: 1 Relation type: Association	<b>TIMING LINK IN JOURNEY PATTERN</b> Role: in Cardinality: *
<b>TIMING POINT IN JOURNEY PATTERN</b> Role: the timing reference for Cardinality: 1 Relation type: Association	<b>JOURNEY PATTERN</b> Role: by default timed from Cardinality: 0..1
<b>DEAD RUN PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY PATTERN</b> Role: Cardinality:

<b>TYPE OF JOURNEY PATTERN</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> on <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>JOURNEY PATTERN</b> <i>Role:</i> made up of <i>Cardinality:</i> 1
<b>JOURNEY PATTERN</b> <i>Role:</i> made up of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TIMING PATTERN</b> <i>Role:</i> contributing to <i>Cardinality:</i> 1
<b>JOURNEY PATTERN</b> <i>Role:</i> primarily advertised with <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DESTINATION DISPLAY</b> <i>Role:</i> primary for <i>Cardinality:</i> 0..1
<b>JOURNEY PATTERN</b> <i>Role:</i> on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ROUTE</b> <i>Role:</i> covered by <i>Cardinality:</i> 1
<b>JOURNEY PATTERN</b> <i>Role:</i> used by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>DATED VEHICLE JOURNEY</b> <i>Role:</i> altered to use <i>Cardinality:</i> *
<b>JOURNEY PATTERN</b> <i>Role:</i> worked using <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN HEADWAY</b> <i>Role:</i> for <i>Cardinality:</i> 0..*
<b>JOURNEY PATTERN</b> <i>Role:</i> worked using <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> assigned to <i>Cardinality:</i> *
<b>JOURNEY PATTERN</b> <i>Role:</i> allowing <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN LAYOVER</b> <i>Role:</i> allowed on <i>Cardinality:</i> *
<b>JOURNEY PATTERN</b> <i>Role:</i> for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>SPECIAL SERVICE</b> <i>Role:</i> described by <i>Cardinality:</i> *
<b>COMMON SECTION</b> <i>Role:</i> defined for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>JOURNEY PATTERN</b> <i>Role:</i> used to define <i>Cardinality:</i> 1..*
<b>JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE JOURNEY</b> <i>Role:</i> made using <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>JOURNEY PATTERN</b> <i>Role:</i> for <i>Cardinality:</i> 1

**JOURNEY PATTERN – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LINK SEQUENCE	::>	<b>JOURNEY PATTERN</b> inherits from <b>LINK SEQUENCE</b>
«UID»	<b>Id</b>	<i>JourneyPatternIdType</i>	1:1	Identifier of JOURNEY PATTERN.

**JOURNEY PATTERN HEADWAY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Pattern Times MODEL.JOURNEY PATTERN HEADWAY)

Headway interval information that is available for all the VEHICLE JOURNEYS running on the JOURNEY PATTERN. This is a default value that can be superseded by the VEHICLE JOURNEY HEADWAY on a specific journey. This information must be consistent with HEADWAY JOURNEY GROUP if available (HEADWAY JOURNEY GROUP being a more detailed way of describing headway services).

**JOURNEY PATTERN HEADWAY – Relations**

Source	Target
<b>SUBMODE</b> Role: characterizing Cardinality: 0..1 Relation type: Association	<b>JOURNEY PATTERN HEADWAY</b> Role: characterized by Cardinality: 0..*
<b>TIMING POINT IN JOURNEY PATTERN</b> Role: timing reference for Cardinality: 1 Relation type: Association	<b>JOURNEY PATTERN HEADWAY</b> Role: referenced by Cardinality: 0..*
<b>JOURNEY PATTERN</b> Role: worked using Cardinality: 1 Relation type: Association	<b>JOURNEY PATTERN HEADWAY</b> Role: for Cardinality: 0..*
<b>JOURNEY PATTERN HEADWAY</b> Role: associated with Cardinality: * Relation type: Association	<b>TIME DEMAND TYPE</b> Role: used to define Cardinality: 1

**JOURNEY PATTERN HEADWAY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>JourneyPatternHeadwayIdType</i>	1:1	Identifier of JOURNEY PATTERN HEADWAY.

**JOURNEY PATTERN LAYOVER**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Pattern Times MODEL.JOURNEY PATTERN LAYOVER)

Time allowance at the end of each journey on a specified JOURNEY PATTERN, to allow for delays and for other purposes. This layover supersedes any global layover and may be superseded by a specific VEHICLE JOURNEY LAYOVER.

**JOURNEY PATTERN LAYOVER – Relations**

Source	Target
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN LAYOVER</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>SUBMODE</b> <i>Role:</i> characterizing <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN LAYOVER</b> <i>Role:</i> characterized by <i>Cardinality:</i> 0..*
<b>JOURNEY PATTERN</b> <i>Role:</i> allowing <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN LAYOVER</b> <i>Role:</i> allowed on <i>Cardinality:</i> *

**JOURNEY PATTERN LAYOVER – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>JourneyPatternLayoverId</i> <i>Type</i>	1:1	Identifier of JOURNEY PATTERN LAYOVER.

**JOURNEY PATTERN RUN TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Pattern Times MODEL.JOURNEY PATTERN RUN TIME)

The time taken to traverse a TIMING LINK in a particular JOURNEY PATTERN, for a specified TIME DEMAND TYPE. If it exists, it will override the DEFAULT SERVICE JOURNEY RUN TIME and DEFAULT DEAD RUN RUN TIME.

**JOURNEY PATTERN RUN TIME – Relations**

Source	Target
<b>TIMING LINK</b> <i>Role:</i> covered in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>JOURNEY PATTERN</b> <i>Role:</i> worked using <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> assigned to <i>Cardinality:</i> *
<b>SUBMODE</b> <i>Role:</i> characterizing <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> characterized by <i>Cardinality:</i> 0..*
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**JOURNEY PATTERN RUN TIME – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	<i>JourneyPatternRunTimeIdType</i>	1:1	Identifier of JOURNEY PATTERN RUN TIME.

**JOURNEY PATTERN WAIT TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Pattern Times MODEL.JOURNEY PATTERN WAIT TIME)

The time a vehicle has to wait at a specific TIMING POINT IN JOURNEY PATTERN, for a specified TIME DEMAND TYPE. This wait time can be superseded by a VEHICLE JOURNEY WAIT TIME.

**JOURNEY PATTERN WAIT TIME – Relations**

Source	Target
<b>TIME DEMAND TYPE</b> Role: used to define Cardinality: 1 Relation type: Association	<b>JOURNEY PATTERN WAIT TIME</b> Role: associated with Cardinality: *
<b>TIMING POINT IN JOURNEY PATTERN</b> Role: associated with Cardinality: 1 Relation type: Association	<b>JOURNEY PATTERN WAIT TIME</b> Role: applied at Cardinality: *
<b>SUBMODE</b> Role: characterizing Cardinality: 0..1 Relation type: Association	<b>JOURNEY PATTERN WAIT TIME</b> Role: characterized by Cardinality: 0..*
<b>JOURNEY PATTERN WAIT TIME</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:

**JOURNEY PATTERN WAIT TIME – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	<i>JourneyPatternWaitTimeIdType</i>	1:1	Identifier of JOURNEY PATTERN WAIT TIME.

**JOURNEY RUN TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Timing MODEL.JOURNEY RUN TIME)

The time taken to traverse a TIMING LINK in a particular JOURNEY PATTERN, for a specified TIME DEMAND TYPE. If it exists, it will override the DEFAULT SERVICE JOURNEY RUN TIME and DEFAULT DEAD RUN RUN TIME.



## JOURNEY RUN TIME – Relations

Source	Target
<b>JOURNEY RUN TIME</b> Role: associated with Cardinality: 0..* Relation type: Association	<b>TIMING LINK</b> Role: covered in Cardinality: 1
<b>JOURNEY RUN TIME</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY TIMING</b> Role: Cardinality:
<b>VEHICLE JOURNEY RUN TIME</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY RUN TIME</b> Role: Cardinality:

## JOURNEY RUN TIME – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY TIMING	::>	JOURNEY RUN TIME inherits from JOURNEY TIMING
«UID»	Id	RunTimeIdType	1:1	Identifier of JOURNEY RUN TIME.
	RunTime	duration	0:1	Run time of JOURNEY RUN TIME.

## JOURNEY TIMING

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Timing MODEL.JOURNEY TIMING)

A time-related information referring to journey timing whose value depends on the time of use and so can be associated with a TIME DEMAND TYPE, TIME BAND or OPERATIONAL CONTEXT.

## JOURNEY TIMING – Relations

Source	Target
<b>TIME BAND</b> Role: used to define Cardinality: 0..1 Relation type: Association	<b>JOURNEY TIMING</b> Role: associated with Cardinality: *
<b>JOURNEY TIMING</b> Role: associated with Cardinality: * Relation type: Aggregation	<b>TIME DEMAND TYPE</b> Role: used to define Cardinality: 0..1
<b>OPERATIONAL CONTEXT</b> Role: determining Cardinality: 0..1 Relation type: Association	<b>JOURNEY TIMING</b> Role: determined by Cardinality: 0..*
<b>JOURNEY TIMING</b> Role: determined by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: determining Cardinality: 0..1
<b>JOURNEY WAIT TIME</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY TIMING</b> Role: Cardinality:
<b>JOURNEY RUN TIME</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY TIMING</b> Role: Cardinality:

<b>JOURNEY LAYOVER</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY HEADWAY</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>INTERCHANGE RULE TIMING</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>TURNAROUND TIME LIMIT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>DEFAULT DEAD RUN RUN TIME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>DEFAULT SERVICE JOURNEY RUN TIME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>

#### JOURNEY TIMING – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>JourneyTimingIdType</i>	1:1	Identifier of JOURNEY DEMAND.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Description of JOURNEY TIMING.
	<b>VehicleMode</b>	<i>VehicleModeEnum</i>	0:1	TRANSPORT MODE of JOURNEY TIMING.

#### JOURNEY WAIT TIME

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Timing MODEL.JOURNEY WAIT TIME)

The time a vehicle has to wait at a specific TIMING POINT IN JOURNEY PATTERN, for a specified TIME DEMAND TYPE.This wait time can be superseded by a VEHICLE JOURNEY WAIT TIME.

#### JOURNEY WAIT TIME – Relations

Source	Target
<b>JOURNEY WAIT TIME</b> <i>Role:</i> timed at <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TIMING POINT</b> <i>Role:</i> for <i>Cardinality:</i> 1
<b>JOURNEY WAIT TIME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE JOURNEY WAIT TIME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY WAIT TIME</b> <i>Role:</i> <i>Cardinality:</i>

**JOURNEY WAIT TIME – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	JOURNEY TIMING	::>	<b>JOURNEY WAIT TIME</b> inherits from <b>JOURNEY TIMING</b>
«UID»	<b>Id</b>	WaitTimeIdType	1:1	Identifier of JOURNEY WAIT TIME.
	<b>WaitTime</b>	duration	0:1	Wait time of JOURNEY WAIT TIME.

**LAYER**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Layer MODEL.LAYER)

A user-defined GROUP OF ENTITIES, specified for a particular functional purpose, associating data referring to a particular LOCATING SYSTEM.

**LAYER – Relations**

Source	Target
<b>LINK</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>POINT IN LINK SEQUENCE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>POINT</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>VERSION FRAME</b> Role: corresponding to Cardinality: 0..* Relation type: Association	<b>LAYER</b> Role: implemented as Cardinality: 0..*
<b>GROUP OF POINTS</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>LINK IN LINK SEQUENCE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>TYPE OF POINT</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>TYPE OF LINK</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>GROUP OF LINKS</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>TYPE OF LINK SEQUENCE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

<b>SIMPLE FEATURE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>GROUP OF LINK SEQUENCES</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>COMPLEX FEATURE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>POINT ON LINK</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>LINK SEQUENCE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:
<b>LAYER</b> Role: referenced by Cardinality: 0..* Relation type: Association	<b>LOCATING SYSTEM</b> Role: referencing Cardinality: 1
<b>LAYER</b> Role: Cardinality: Relation type: Generalization	<b>GROUP OF ENTITIES</b> Role: Cardinality:

**LAYER – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	GROUP OF ENTITIES	::>	<b>LAYER</b> inherits from <b>GROUP OF ENTITIES</b>
«UID»	<b>Id</b>		1:1	Identifier of LAYER.

**LEFT LUGGAGE SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .LEFT LUGGAGE SERVICE)

Specialisation of CUSTOMER SERVICE for left luggage (provides left luggage information like self service locker, locker free, etc.).

**LEFT LUGGAGE SERVICE – Relations**

Source	Target
<b>LEFT LUGGAGE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:

**LEFT LUGGAGE SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>LEFT LUGGAGE SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>	<i>LeftLuggageIdType</i>	1:1	Identifier of LEFT LUGGAGE SERVICE.
	<b>CounterService</b>	<i>boolean</i>	0:1	Whether left luggage is a counter service.
	<b>SelfServiceLockers</b>	<i>boolean</i>	0:1	Whether there are self service lockers for left luggage.
	<b>FeePerBag</b>	<i>boolean</i>	0:1	Whether there is a fee per bag.
	<b>LockerFee</b>	<i>boolean</i>	0:1	Whether there is a locker fee.
	<b>MaximumBagWidth</b>	<i>LengthType</i>	0:1	Maximum width of luggage allowed.
	<b>MaximumBagHeight</b>	<i>LengthType</i>	0:1	Maximum width of luggage allowed.
	<b>MaximumBagDepth</b>	<i>LengthType</i>	0:1	Maximum depth of luggage allowed.

**LEVEL**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Site MODEL.LEVEL)

An identified storey (ground, first, basement, mezzanine, etc) within an interchange building or SITE on which SITE COMPONENTs reside. A PATH LINK may connect components on different levels.

**LEVEL – Relations**

Source	Target
<b>PATH LINK END</b> Role: on Cardinality: 0..* Relation type: Association	<b>LEVEL</b> Role: the location of Cardinality: 1
<b>STOP PLACE COMPONENT</b> Role: on Cardinality: 0..* Relation type: Association	<b>LEVEL</b> Role: assigned to Cardinality: 0..1
<b>LEVEL</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>SITE</b> Role: composed of Cardinality: 1
<b>SITE COMPONENT</b> Role: located at Cardinality: 0..* Relation type: Association	<b>LEVEL</b> Role: locating Cardinality: 0..1

**LEVEL – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LevelIdType</i>	1:1	Identifier of LEVEL.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of LEVEL.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of LEVEL.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Further descriptive note about LEVEL
	<b>PublicUse</b>	<i>boolean</i>	0:1	Name of a nearby landmark which can be used to refer to SITE
	<b>AllAreasWheelchair</b>	<i>boolean</i>	0:1	Whether all areas of component are accessible in a Wheelchair.

**LIFT EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.LIFT EQUIPMENT)

Specialisation of PLACE ACCESS EQUIPMENT for LIFTs (provides lift characteristics like depth, maximum load, etc.).

**LIFT EQUIPMENT – Relations**

Source	Target
<b>LIFT EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:
<b>LIFT EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF HANDRAIL</b> Role: a characterisation for Cardinality: 0..1

**LIFT EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE ACCESS EQUIPMENT	::>	<b>LIFT EQUIPMENT</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of LIFT EQUIPMENT.
	<b>Depth</b>	LengthType	0:1	Depth of LIFT.
	<b>MaximumLoad</b>	WeightType	0:1	Maximum load of LIFT.
	<b>WheelchairPassable</b>	boolean	0:1	Whether LIFT is wheelchair passable
	<b>WheelchairTurningCircle</b>	LengthType	0:1	Wheelchair turning circle of LIFT.
	<b>InternalWidth</b>	LengthType	0:1	Internal Width Of Lift
	<b>HandrailHeight</b>	LengthType	0:1	Height of handrail from step.
	<b>CallButtonHeight</b>	LengthType	0:1	Height of Call Buttons of LIFT.
	<b>DirectionButtonHeight</b>	LengthType	0:1	Height of any direction button from floor
	<b>LowerHandrailHeight</b>	LengthType	0:1	Height of any handrail from floor.
	<b>RaisedButtons</b>	boolean	0:1	Whether LIFT has Raised Buttons.
	<b>BrailleButtons</b>	boolean	0:1	Whether LIFT has Braille Buttons.
	<b>ThroughLoader</b>	boolean	0:1	Whether LIFT is through loader.
	<b>MirrorOnOppositeSide</b>	boolean	0:1	Whether LIFT has a mirror on opposite side.
	<b>Attendant</b>	boolean	0:1	Whether LIFT has attendant.
	<b>Automatic</b>	boolean	0:1	Whether LIFT is automatic.
	<b>AlarmButton</b>	boolean	0:1	Whether LIFT has alarm Button.
	<b>TactileActuators</b>	boolean	0:1	Whether LIFT has tactile actuators.
	<b>AcousticAnnouncements</b>	boolean	0:1	Whether LIFT has acoustic announcements.
	<b>SignageToLift</b>	boolean	0:1	Whether LIFT has signage
	<b>SuitableForCycles</b>	boolean	0:1	Whether LIFT is suitable for cycles.

**LINE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.LINE)

A group of ROUTEs which is generally known to the public by a similar name or number.

## LINE – Relations

Source	Target
<b>VEHICLE MODE</b> Role: used as primary for Cardinality: <b>0..1</b> Relation type: Association	<b>LINE</b> Role: primarily run by Cardinality: *
<b>ACCESSIBILITY ASSESSMENT</b> Role: characterising Cardinality: <b>0..1</b> Relation type: Association	<b>LINE</b> Role: characterised by Cardinality: <b>0..1</b>
<b>LINE</b> Role: classified by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF LINE</b> Role: a classification for Cardinality: <b>0..1</b>
<b>ALLOWED LINE DIRECTION</b> Role: used by Cardinality: <b>0..*</b> Relation type: Aggregation	<b>LINE</b> Role: uses Cardinality: <b>1</b>
<b>FLEXIBLE LINE</b> Role: Cardinality: Relation type: Generalization	<b>LINE</b> Role: Cardinality:
<b>ROUTE</b> Role: on Cardinality: <b>1..*</b> Relation type: Association	<b>LINE</b> Role: made up of Cardinality: <b>1</b>
<b>LINE</b> Role: included in Cardinality: <b>1..*</b> Relation type: Association	<b>GROUP OF LINES</b> Role: composed of Cardinality: *
<b>LINE</b> Role: operated by Cardinality: <b>0..*</b> Relation type: Association	<b>VEHICLE MODE</b> Role: operating Cardinality: <b>0..*</b>
<b>LINE</b> Role: characterised by Cardinality: <b>0..*</b> Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: characterising Cardinality: <b>0..*</b>
<b>GROUP OF LINES</b> Role: represented by Cardinality: <b>0..*</b> Relation type: Association	<b>LINE</b> Role: main line for Cardinality: <b>0..1</b>
<b>SCHEMATIC MAP</b> Role: depicting Cardinality: <b>0..*</b> Relation type: Association	<b>LINE</b> Role: depicted by Cardinality: <b>0..*</b>
<b>HEADING SIGN</b> Role: referring to Cardinality: <b>0..*</b> Relation type: Association	<b>LINE</b> Role: a reference for Cardinality: <b>0..1</b>
<b>LINE</b> Role: run by Cardinality: <b>0..*</b> Relation type: Association	<b>OPERATOR</b> Role: operating Cardinality: <b>0..*</b>

<b>ROUTING CONSTRAINT ZONE</b> <i>Role: constraint for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>LINE</b> <i>Role: constrained by</i> <i>Cardinality: 0..*</i>
<b>DISPLAY ASSIGNMENT</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>LINE</b> <i>Role: used to define</i> <i>Cardinality: 0..1</i>
<b>OPERATOR</b> <i>Role: primary for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>LINE</b> <i>Role: run primarily by</i> <i>Cardinality: 0..*</i>
<b>LINE SECTION</b> <i>Role: comprised in</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>LINE</b> <i>Role: comprising</i> <i>Cardinality: 0..1</i>
<b>LINE</b> <i>Role: served by</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>COURSE OF JOURNEYS</b> <i>Role: operated on</i> <i>Cardinality: *</i>
<b>LINE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>LINE</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>

#### LINE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LineIdType</i>	1:1	Identifier of LINE.
	<b>Name</b>	<i>MultilingualString</i>	1:1	Name of LINE.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of LINE.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of LINE.
	<b>LineUrl</b>	<i>any</i>	0:1	A URL associated with the LINE.
	<b>Monitored</b>	<i>boolean</i>	0:1	Whether real-time data is available for LINE.

#### LINE NETWORK

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Line Network MODEL.LINE NETWORK)

The topological structure of a NETWORK as a graph of LINE SECTIONs. This allows the branches and loops of a LINE to be described as a whole.



**LINE NETWORK – Relations**

Source	Target
<b>LINE NETWORK</b> Role: a representation of Cardinality: 0..* Relation type: Association	<b>GROUP OF LINES</b> Role: represented by Cardinality: 0..1
<b>LINE SECTION</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>LINE NETWORK</b> Role: made up of Cardinality: 1
<b>LINE NETWORK</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**LINE NETWORK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LineNetworkIdType</i>	1:1	Identifier of LINE NETWORK.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of LINE NETWORK.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of LINE NETWORK.

**LINE SECTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Line Network MODEL.LINE SECTION)

A part of a NETWORK comprising an edge between two nodes. Not directional.

**LINE SECTION – Relations**

Source	Target
<b>LINE SECTION</b> Role: Cardinality: Relation type: Generalization	<b>COMMON SECTION</b> Role: Cardinality:
<b>LINE SECTION</b> Role: comprised in Cardinality: 0..* Relation type: Association	<b>LINE</b> Role: comprising Cardinality: 0..1
<b>LINE SECTION</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>LINE NETWORK</b> Role: made up of Cardinality: 1

**LINE SECTION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>COMMON SECTION</i>	::>	<b>LINE SECTION</b> inherits from <b>COMMON SECTION</b>
«UID»	<b>Id</b>	<i>CommonSectionIdType</i>	1:1	Identifier of LINE SECTION.
	<b>SectionType</b>	<i>SectionTypeEnum</i>	0:1	Type of LINE SECTION.

**LINE SHAPE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Projection MODEL.LINE SHAPE)

The graphical shape of a LINK obtained from a formula or other means, using the LOCATION of its limiting POINTs and depending on the LOCATING SYSTEM used for the graphical representation.

**LINE SHAPE – Relations**

Source	Target
<b>LINE SHAPE</b> <i>Role:</i> for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>LINK</b> <i>Role:</i> described by <i>Cardinality:</i> 1
<b>LINE SHAPE</b> <i>Role:</i> referring to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>LOCATING SYSTEM</b> <i>Role:</i> reference for <i>Cardinality:</i> 1

**LINE SHAPE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of LINE SHAPE.
	<b>Formula</b>	Name	1:1	Formula for calculating line e.g. Bezier
	<b>Name</b>	normalizedString	0:1	Name of LINE SHAPE

**LINK**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link MODEL.LINK)

An oriented spatial object of dimension 1 with view to the overall description of a network, describing a connection between two POINTs.

**LINK – Relations**

Source	Target
<b>LINK</b> <i>Role:</i> viewed as <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>SIMPLE FEATURE</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>LINK</b> <i>Role:</i> not available on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DAY TYPE</b> <i>Role:</i> limiting the availability of <i>Cardinality:</i> *
<b>LINE SHAPE</b> <i>Role:</i> for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>LINK</b> <i>Role:</i> described by <i>Cardinality:</i> 1
<b>LINK</b> <i>Role:</i> used as source in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>LINK PROJECTION</b> <i>Role:</i> calling as source <i>Cardinality:</i> *
<b>LINK</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>LINK IN LINK SEQUENCE</b> <i>Role:</i> a view of <i>Cardinality:</i> *

<b>LINK</b> Role: used as target in Cardinality: 1 Relation type: Association	<b>POINT PROJECTION</b> Role: to Cardinality: *
<b>POINT</b> Role: start of Cardinality: 1 Relation type: Association	<b>LINK</b> Role: from Cardinality: *
<b>LINK</b> Role: to Cardinality: * Relation type: Association	<b>POINT</b> Role: end of Cardinality: 1
<b>GROUP OF LINKS</b> Role: made up of Cardinality: * Relation type: Association	<b>LINK</b> Role: included in Cardinality: 1..*
<b>LINK</b> Role: passing through Cardinality: 1 Relation type: Association	<b>POINT ON LINK</b> Role: located on Cardinality: *
<b>TYPE OF LINK</b> Role: a classification for Cardinality: 1..* Relation type: Association	<b>LINK</b> Role: classified as Cardinality: *
<b>SERVICE LINK</b> Role: Cardinality: Relation type: Generalization	<b>LINK</b> Role: Cardinality:
<b>FLEXIBLE LINK PROPERTIES</b> Role: characterising Cardinality: 0..1 Relation type: Aggregation	<b>LINK</b> Role: characterised by Cardinality: 1
<b>TIMING LINK</b> Role: Cardinality: Relation type: Generalization	<b>LINK</b> Role: Cardinality:
<b>ROUTE LINK</b> Role: Cardinality: Relation type: Generalization	<b>LINK</b> Role: Cardinality:
<b>INFRASTRUCTURE LINK</b> Role: Cardinality: Relation type: Generalization	<b>LINK</b> Role: Cardinality:
<b>LINK</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

## LINK – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LinkIdType</i>	1:1	Identifier of LINK.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of LINK
	<b>Distance</b>	<i>DistanceType</i>	0:1	Distance along LINK

**LINK IN LINK SEQUENCE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link Sequence MODEL.LINK IN LINK SEQUENCE)

The order of a LINK in a LINK SEQUENCE to which it belongs.

**LINK IN LINK SEQUENCE – Relations**

Source	Target
<b>LINK SEQUENCE</b> Role: made up of Cardinality: 1 Relation type: Association	<b>LINK IN LINK SEQUENCE</b> Role: in Cardinality: 1..*
<b>LINK</b> Role: viewed as Cardinality: 1 Relation type: Association	<b>LINK IN LINK SEQUENCE</b> Role: a view of Cardinality: *
<b>LINK IN LINK SEQUENCE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

**LINK IN LINK SEQUENCE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LinkInLinkSequenceIdType</i>	1:1	Identifier of LINK in LINK SEQUENCE.
	<b>Order</b>	<i>positiveInteger</i>	1:1	Order of LINK in LINK SEQUENCE.

**LINK PROJECTION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Projection MODEL.LINK PROJECTION)

An oriented correspondence from one LINK of a source layer, onto an entity in a target layer: e.g. LINK SEQUENCE, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.

## LINK PROJECTION – Relations

Source	Target
<b>LINK PROJECTION</b> <i>Role: concerning</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TYPE OF PROJECTION</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>COMPLEX FEATURE</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>LINK PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>
<b>LINK SEQUENCE</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>LINK PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>
<b>LINK</b> <i>Role: used as source in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>LINK PROJECTION</b> <i>Role: calling as source</i> <i>Cardinality: *</i>
<b>LINK PROJECTION</b> <i>Role: ending at</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>POINT ON LINK</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>LINK PROJECTION</b> <i>Role: starting at</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>POINT ON LINK</b> <i>Role: start of</i> <i>Cardinality: 1</i>

## LINK PROJECTION – Attributes

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LinkProjectionIdType</i>	1:1	Identifier of LINK PROJECTION.

**LINK SEQUENCE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link Sequence MODEL.LINK SEQUENCE)

An ordered sequence either of POINTs or of LINKs, defining a path through the network.

## LINK SEQUENCE – Relations

Source	Target
<b>ZONE</b> Role: bordered by Cardinality: 0..1 Relation type: Association	<b>LINK SEQUENCE</b> Role: border for Cardinality: 0..1
<b>LINK SEQUENCE</b> Role: used as target in Cardinality: 1 Relation type: Association	<b>LINK PROJECTION</b> Role: to Cardinality: *
<b>LINK SEQUENCE</b> Role: used as target in Cardinality: 1 Relation type: Association	<b>POINT PROJECTION</b> Role: to Cardinality: *
<b>LINK SEQUENCE</b> Role: included in Cardinality: 1..* Relation type: Association	<b>GROUP OF LINK SEQUENCES</b> Role: composed of Cardinality: *
<b>LINK SEQUENCE</b> Role: made up of Cardinality: 1 Relation type: Association	<b>POINT IN LINK SEQUENCE</b> Role: in Cardinality: 1..*
<b>LINK SEQUENCE</b> Role: made up of Cardinality: 1 Relation type: Association	<b>LINK IN LINK SEQUENCE</b> Role: in Cardinality: 1..*
<b>TYPE OF LINK SEQUENCE</b> Role: a classification for Cardinality: 1 Relation type: Association	<b>LINK SEQUENCE</b> Role: classified as Cardinality: *
<b>JOURNEY PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>LINK SEQUENCE</b> Role: Cardinality:
<b>TIMING PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>LINK SEQUENCE</b> Role: Cardinality:
<b>ROUTE</b> Role: Cardinality: Relation type: Generalization	<b>LINK SEQUENCE</b> Role: Cardinality:
<b>LINK SEQUENCE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

## LINK SEQUENCE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LinkSequenceIdType</i>	1:1	Identifier of LINK SEQUENCE.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of LINK SEQUENCE.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of LINK SEQUENCE.
	<b>Distance</b>	<i>DistanceType</i>	0:1	Distance of ROUTE SEQUENCE. Units are as specified for Frame. Default is SI Metres

**LOCAL SERVICE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Generic Equipment MODEL.LOCAL SERVICE)

A named service relating to the use of the SITE or transport services at a particular location, for example portage, assistance for disabled users, booking offices etc. The service may have a VALIDITY CONDITION associated with it. A LOCAL SERVICE is treated as a form of immaterial EQUIPMENT.

**LOCAL SERVICE – Relations**

Source	Target
<b>LOCAL SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>EQUIPMENT</b> Role: Cardinality:
<b>HIRE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>MONEY SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>CATERING SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>COMMUNICATION SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>RETAIL SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>LUGGAGE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>ASSISTANCE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>CUSTOMER SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>LEFT LUGGAGE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>TICKETING SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>LOCAL SERVICE</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF LOCAL SERVICE</b> Role: classification for Cardinality: 0..1

**LOCAL SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	EQUIPMENT	::>	<b>LOCAL SERVICE</b> inherits from <b>EQUIPMENT</b>
«UID»	<b>Id</b>	LocalServiceIdType	1:1	Identifier of LOCAL SERVICE.

**LOCATING SYSTEM**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Location MODEL.LOCATING SYSTEM)

The system used as reference for location and graphical representation of the network and other spatial objects.

**LOCATING SYSTEM – Relations**

Source	Target
<b>LINE SHAPE</b> Role: referring to Cardinality: * Relation type: Association	<b>LOCATING SYSTEM</b> Role: reference for Cardinality: 1
<b>LOCATION</b> Role: referring to Cardinality: * Relation type: Association	<b>LOCATING SYSTEM</b> Role: reference for Cardinality: 1
<b>LAYER</b> Role: referenced by Cardinality: 0..* Relation type: Association	<b>LOCATING SYSTEM</b> Role: referencing Cardinality: 1

**LOCATING SYSTEM – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of the LOCATING SYSTEM.
	<b>LocatingSystem Name</b>	LocatingSystemNameType	1:1	Name of Locating system used for coordinates. Same as SrsName.

**LOCATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Location MODEL.LOCATION)

The position of a POINT with a reference to a given LOCATING SYSTEM (e. g. coordinates).

**LOCATION – Relations**

Source	Target
<b>LOCATION</b> Role: locating Cardinality: * Relation type: Association	<b>POINT</b> Role: located by Cardinality: 1
<b>LOCATION</b> Role: referring to Cardinality: * Relation type: Association	<b>LOCATING SYSTEM</b> Role: reference for Cardinality: 1



**LOCATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of the LOCATION.
	<b>Coordinates</b>	<i>CoordinateString</i>	0:1	Pair of coordinates in specified locating system.
	<b>Latitude</b>	<i>LatitudeType</i>	0:1	Latitude of Location.
	<b>Longitude</b>	<i>LongitudeType</i>	0:1	Longitude of Location.
	<b>Altitude</b>	<i>LengthType</i>	0:1	Altitude of Location.
	<b>Precision</b>	<i>Decimal</i>	0:1	Precision of coordinates.

**LOGICAL DISPLAY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Passenger Information Display Assignment MODEL.LOGICAL DISPLAY)

A set of data that can be assembled for assignment to a physical PASSENGER INFORMATION EQUIPMENT or to a logical channel such as web or media. It is independent of any physical embodiment.

A LOGICAL DISPLAY may have a set of DISPLAY ASSIGNMENTS each of which associates a JOURNEY PATTERN whose journeys are to be shown at the LOGICAL DISPLAY. It may also be associated with a SCHEDULED STOP POINT. A LOGICAL DISPLAY corresponds to a SIRI STOP MONITORING point.

**LOGICAL DISPLAY – Relations**

Source	Target
<b>DISPLAY ASSIGNMENT</b> Role: specifying Cardinality: * Relation type: Aggregation	<b>LOGICAL DISPLAY</b> Role: specified by Cardinality: 1
<b>LOGICAL DISPLAY</b> Role: assigned to Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: visualising Cardinality: 0..*
<b>LOGICAL DISPLAY</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**LOGICAL DISPLAY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LogicalDisplayIdType</i>	1:1	Identifier of LOGICAL DISPLAY.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of LOGICAL DISPLAY.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of LOGICAL DISPLAY.

**LOST PROPERTY SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Local Service Equipment MODEL.LOST PROPERTY SERVICE)

Specialisation of CUSTOMER SERVICE for lost properties.

**LOST PROPERTY SERVICE – Relations**

Source	Target
<b>LOST PROPERTY SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>CUSTOMER SERVICE</b> Role: Cardinality:

**LOST PROPERTY SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	CUSTOMER SERVICE	::>	<b>LOST PROPERTY SERVICE</b> inherits from <b>CUSTOMER SERVICE</b>
«UID»	<b>Id</b>	LostPropertyServiceIdType	1:1	Identifier of LOST PROPERTY SERVICE.

**LUGGAGE SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .LUGGAGE SERVICE)

Specialisation of CUSTOMER SERVICE for luggage services (provides luggage service facilities and characteristics like luggage trolley, free to use, etc.).

**LUGGAGE SERVICE – Relations**

Source	Target
<b>LUGGAGE SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:

**LUGGAGE SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>LUGGAGE SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>	LuggageServiceIdType	1:1	Identifier of LUGGAGE SERVICE.
	<b>LuggageServiceType</b>	LuggageServiceFacilityEnum	0:1	Type of luggage services available.
	<b>LuggageTrolleys</b>	Boolean	0:1	Whether Luggage trolleys are available.
	<b>WheelchairLuggageTrolleys</b>	Boolean	0:1	Whether there are Luggage trolleys for wheelchair users.
	<b>FreeToUse</b>	Boolean	0:1	Whether Luggage trolleys are free to use.
	<b>MaximumBagWidth</b>	LengthType	0:1	Maximum width of luggage allowed.
	<b>MaximumBagHeight</b>	LengthType	0:1	Maximum width of luggage allowed.
	<b>MaximumBagDepth</b>	LengthType	0:1	Maximum depth of luggage allowed.

**LUGGAGE LOCKER EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.LUGGAGE LOCKER EQUIPMENT)

Specialisation of STOP PLACE EQUIPMENT for luggage lockers.

**LUGGAGE LOCKER EQUIPMENT – Relations**

Source	Target
<b>LUGGAGE LOCKER EQUIPMENT</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF LUGGAGE LOCKER</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1
<b>LUGGAGE LOCKER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

**LUGGAGE LOCKER EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	SITE EQUIPMENT	::>	<b>LUGGAGE LOCKER EQUIPMENT</b> inherits from <b>SITE EQUIPMENT</b>
«UID»	<b>Id</b>	LockerEquipmentIdType	1:1	Identifier of LOCKER EQUIPMENT.
	<b>NumberOfLockers</b>	integer	0:1	Number of Lockers.
	<b>LockerHeight</b>	LengthType	0:1	Height of Lockers.
	<b>LockerDepth</b>	LengthType	0:1	Depth of Lockers.
	<b>LockerWidth</b>	LengthType	0:1	Width of Lockers.
	<b>Luggage</b>	LuggageLockerEnum	0:1	Type of Luggage locker.

**MANAGEMENT AGENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Additional Organisation MODEL.MANAGEMENT AGENT)

Specialisation of ORGANISATION for MANAGEMENT AGENTs.

**MANAGEMENT AGENT – Relations**

Source	Target
<b>MANAGEMENT AGENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>OTHER ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i>

**MANAGEMENT AGENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	OTHER ORGANISATION	::>	<b>MANAGEMENT AGENT</b> inherits from <b>OTHER ORGANISATION</b>
«UID»	<b>Id</b>	ManagementAgentIdType	1:1	Identifier of MANAGEMENT AGENT.

**MANOEUVRING REQUIREMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.MANOEUVRING REQUIREMENT)

A classification of requirements for a public transport VEHICLE according to the manoeuvring capabilities of the vehicle.

**MANOEUVRING REQUIREMENT – Relations**

Source	Target
<b>MANOEUVRING REQUIREMENT</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE TYPE</b> Role: satisfying Cardinality: 0..*

**MANOEUVRING REQUIREMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ManoeuvringRequirementIdType</i>	1:1	Identifier of VEHICLE MANOEUVRING REQUIREMENT.
	<b>Reversible</b>	<i>boolean</i>	0:1	Whether VEHICLE must be Reversible.
	<b>MinimumTurningCircle</b>	<i>LengthType</i>	0:1	Minimum turning circle needed to turn a VEHICLE,
	<b>MinimumLength</b>	<i>LengthType</i>	0:1	Minimum length needed to accommodate VEHICLE.
	<b>MinimumOvertakingWidth</b>	<i>LengthType</i>	0:1	Minimum width needed by VEHICLE TYPE to overtake.

**MEDICAL NEED**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.MEDICAL NEED)

A specific USER NEED, i.e. a requirement of a passenger as regards medical constraint (e.g. allergy) to access public transport .

**MEDICAL NEED – Relations**

Source	Target
<b>MEDICAL NEED</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF USER NEED</b> Role: Cardinality:

**MEDICAL NEED – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>TYPE OF USER NEED</i>	::>	<b>MEDICAL NEED</b> inherits from <b>TYPE OF USER NEED</b>
	<b>Need</b>	<i>MedicalNeedEnum</i>	1:1	Type of Medical need
«UID»	<b>Id</b>		1:1	Identifier of MEDICAL NEED.

**MEETING POINT SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .MEETING POINT SERVICE)

Specialisation of CUSTOMER SERVICE for meeting points (provides characteristics like description, label, etc.).

**MEETING POINT SERVICE – Relations**

Source	Target
<b>MEETING POINT SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>CUSTOMER SERVICE</b> Role: Cardinality:

**MEETING POINT SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	CUSTOMER SERVICE	::>	<b>MEETING POINT SERVICE</b> inherits from <b>CUSTOMER SERVICE</b>
«UID»	<b>Id</b>	MeetingServiceIdType	1:1	Identifier of MEETING POINT SERVICE.
	<b>MeetingPointType</b>	MeetingPointEnum	0:1	Type of meeting point.

**MEETING RESTRICTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Network Restriction MODEL.MEETING RESTRICTION)

A pair of INFRASTRUCTURE LINKs where vehicles of specified VEHICLE TYPEs are not allowed to meet.

**MEETING RESTRICTION – Relations**

Source	Target
<b>VEHICLE TYPE</b> Role: subject to Cardinality: 1 Relation type: Association	<b>MEETING RESTRICTION</b> Role: for Cardinality: *
<b>VEHICLE TYPE</b> Role: subject of Cardinality: 1 Relation type: Association	<b>MEETING RESTRICTION</b> Role: against Cardinality: *
<b>MEETING RESTRICTION</b> Role: with regard to the opposite Cardinality: * Relation type: Association	<b>INFRASTRUCTURE LINK</b> Role: referred to in Cardinality: 1
<b>INFRASTRUCTURE LINK</b> Role: referred to in Cardinality: 1 Relation type: Association	<b>MEETING RESTRICTION</b> Role: on Cardinality: *
<b>MEETING RESTRICTION</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**MEETING RESTRICTION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	MeetingRestrictionIdType	1:1	Identifier of MEETING RESTRICTION.

**MOBILITY NEED**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.MOBILITY NEED)

A specific USER NEED, i.e. a constraint of a passenger as regards his mobility, e.g. wheelchair, assisted wheelchair, etc.

**MOBILITY NEED – Relations**

Source	Target
<b>MOBILITY NEED</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>TYPE OF USER NEED</b> <i>Role:</i> <i>Cardinality:</i>

**MOBILITY NEED – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	TYPE OF USER NEED	::>	<b>MOBILITY NEED</b> inherits from <b>TYPE OF USER NEED</b>
	<b>Need</b>	MobilityNeedEnum	1:1	Type of Mobility need
«UID»	<b>Id</b>		1:1	Identifier of MOBILITY NEED.

**MODE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Mode MODEL.MODE)

Any means of transport.

**MODE – Relations**

Source	Target
<b>ACCESS MODE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>MODE</b> <i>Role:</i> <i>Cardinality:</i>
<b>SUBMODE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>MODE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1
<b>VEHICLE MODE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>MODE</b> <i>Role:</i> <i>Cardinality:</i>
<b>MODE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1

**MODE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	ModelIdType	1:1	Identifier of TRANSPORT MODE.
	<b>Name</b>	MultilingualString	0:1	Name of MODE.

**MONEY SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.MONEY SERVICE)

Specialisation of LOCAL SERVICE dedicated to money services.

**MONEY SERVICE – Relations**

Source	Target
<b>TYPE OF MONEY SERVICE</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>MONEY SERVICE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..*
<b>MONEY SERVICE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>LOCAL SERVICE</b> <i>Role:</i> <i>Cardinality:</i>

**MONEY SERVICE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>MONEY SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>		1:1	Identifier of MONEY SERVICE.

**NAVIGATION PATH**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Path & Navigation Path MODEL.NAVIGATION PATH)

A designated path between two places. May include an ordered sequence of PATH LINKs.

**NAVIGATION PATH – Relations**

Source	Target
<b>NAVIGATION PATH ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>NAVIGATION PATH</b> <i>Role:</i> to <i>Cardinality:</i> 0..1
<b>NAVIGATION PATH</b> <i>Role:</i> accessed by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ACCESS MODE</b> <i>Role:</i> for <i>Cardinality:</i> 0..*
<b>NAVIGATION PATH</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ACCESSIBILITY ASSESSMENT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..*
<b>PATH LINK IN SEQUENCE</b> <i>Role:</i> in <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>NAVIGATION PATH</b> <i>Role:</i> made up of <i>Cardinality:</i> 1
<b>PLACE IN SEQUENCE</b> <i>Role:</i> defining <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>NAVIGATION PATH</b> <i>Role:</i> madeup of <i>Cardinality:</i> 1
<b>NAVIGATION PATH</b> <i>Role:</i> inside <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>STOP PLACE</b> <i>Role:</i> traversed with <i>Cardinality:</i> 1

<b>TRANSFER</b> <i>Role:</i> traversed with <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>NAVIGATION PATH</b> <i>Role:</i> for <i>Cardinality:</i> 0..*
<b>NAVIGATION PATH</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

#### NAVIGATION PATH – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>NavigationPathIdType</i>	1:1	Identifier of a NAVIGATION PATH.
	<b>From</b>	<i>PathLinkEnd</i>	0:1	Origin end of NAVIGATION PATH. Only needed if detailed PATH LINKs are not given.
	<b>To</b>	<i>PathLinkEnd</i>	0:1	Destination end of NAVIGATION PATH. Only needed if detailed PATH LINKs are not given.
	<b>AccessibilityAssessment</b>	<i>AccessibilityAssessment</i>	0:1	ACCESSIBILITY ASSESSMENT associated with NAVIGATION PATH.
	<b>TransferDuration</b>	<i>TransferDuration</i>	0:1	Time it takes to traverse a NAVIGATION PATH. May be derived from summing individual PATH LINK durations.
	<b>PublicUse</b>	<i>Boolean</i>	0:1	Whether PATH is for PUBLIC use.
	<b>Covered</b>	<i>CoveredEnum</i>	0:1	Nature of covering of NAVIGATION PATH.
	<b>Gated</b>	<i>GatedEnum</i>	0:1	Whether element is within a gated area.
	<b>Lighting</b>	<i>LightingEnum</i>	0:1	How element is lit.
	<b>AllAreasWheelchair</b>	<i>Boolean</i>	0:1	Whether all areas of component are accessible in a Wheelchair.
	<b>PersonCapacity</b>	<i>NumberOfPeople</i>	0:1	Number of people that can be in component at a time.
	<b>AccessFeatureType</b>	<i>AccessFeatureEnum</i>	0:1	Type of an ACCESS Feature.
	<b>NavigationType</b>	<i>NavigationTypeEnum</i>	1:1	Type of NAVIGATION PATH.

#### NAVIGATION PATH ASSIGNMENT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Path Assignment MODEL.NAVIGATION PATH ASSIGNMENT)

The allocation of a NAVIGATION PATH to a specific STOP POINT ASSIGNMENT, for example to indicate the path to be taken to make a CONNECTION



## NAVIGATION PATH ASSIGNMENT – Relations

Source	Target
<b>NAVIGATION PATH ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>NAVIGATION PATH ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>CONNECTION</b> <i>Role:</i> to <i>Cardinality:</i> 0..1
<b>NAVIGATION PATH ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>SITE CONNECTION</b> <i>Role:</i> to <i>Cardinality:</i> 0..1
<b>NAVIGATION PATH ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>NAVIGATION PATH</b> <i>Role:</i> to <i>Cardinality:</i> 0..1

## NAVIGATION PATH ASSIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	STOP ASSIGNMENT	::>	<b>NAVIGATION PATH ASSIGNMENT</b> inherits from <b>STOP ASSIGNMENT</b>
«UID»	<b>Id</b>	PathAssignmentIdType	1:1	Identifier of a NAVIGATION PATH ASSIGNMENT.

## NETWORK

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.NETWORK)

A named grouping of LINEs under which a transport network is known.

## NETWORK – Relations

Source	Target
<b>GROUP OF LINES</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>NETWORK</b> <i>Role:</i> made up of <i>Cardinality:</i> 1
<b>NETWORK</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>GROUP OF LINES</b> <i>Role:</i> <i>Cardinality:</i>
<b>NETWORK</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## NETWORK – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	GROUP OF LINES	::>	<b>NETWORK</b> inherits from <b>GROUP OF LINES</b>
«UID»	<b>Id</b>	NetworkIdType	1:1	Identifier of NETWORK.
	<b>Name</b>	MultilingualString	1:1	Name of NETWORK.

**NORMAL DATED BLOCK**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.NORMAL DATED BLOCK)

A DATED BLOCK identical to a long-terms planned BLOCK, possibly updated according to short-term modifications decided by the control staff.

**NORMAL DATED BLOCK – Relations**

Source	Target
<b>NORMAL DATED BLOCK</b> Role: Cardinality: Relation type: Generalization	<b>DATED BLOCK</b> Role: Cardinality:
<b>NORMAL DATED BLOCK</b> Role: using Cardinality: * Relation type: Association	<b>BLOCK</b> Role: used by Cardinality: 1

**NORMAL DATED BLOCK – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	DATED BLOCK	::>	<b>NORMAL DATED BLOCK</b> inherits from <b>DATED BLOCK</b>
«UID»	<b>Id</b>	NormalDatedBlockIdType	1:1	Identifier of NORMAL DATED BLOCK.

**NORMAL DATED VEHICLE JOURNEY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Dated Journey MODEL .NORMAL DATED VEHICLE JOURNEY)

A DATED VEHICLE JOURNEY identical to a long-term planned VEHICLE JOURNEY, possibly updated according to short-term modifications of the PRODUCTION PLAN decided by the control staff.

**NORMAL DATED VEHICLE JOURNEY – Relations**

Source	Target
<b>NORMAL DATED VEHICLE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>DATED VEHICLE JOURNEY</b> Role: Cardinality:
<b>NORMAL DATED VEHICLE JOURNEY</b> Role: using Cardinality: * Relation type: Association	<b>VEHICLE JOURNEY</b> Role: used by Cardinality: 1

**NORMAL DATED VEHICLE JOURNEY – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	DATED VEHICLE JOURNEY	::>	<b>NORMAL DATED VEHICLE JOURNEY</b> inherits from <b>DATED VEHICLE JOURNEY</b>
	<b>ServiceAlteration</b>	ServiceAlterationEnum	0:1	Service alteration type for NORMAL JOURNEY.
«UID»	<b>Id</b>		1:1	Identifier of NORMAL DATED VEHICLE JOURNEY.

**NOTICE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Notice MODEL.NOTICE)

A text for informational purposes on exceptions in a LINE, a JOURNEY PATTERN, etc. The information may be usable for passenger or driver information.

**NOTICE – Relations**

Source	Target
<b>NOTICE</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF NOTICE</b> Role: a classification for Cardinality: 0..1
<b>DELIVERY VARIANT</b> Role: providing Cardinality: 0..* Relation type: Association	<b>NOTICE</b> Role: provided as Cardinality: 1
<b>NOTICE ASSIGNMENT</b> Role: using Cardinality: * Relation type: Association	<b>NOTICE</b> Role: used by Cardinality: 1
<b>NOTICE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:

**NOTICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	NoticeIdType	1:1	Identifier of NOTICE.
	<b>Name</b>	MultilingualString	0:1	Name of NOTICE
	<b>Text</b>	MultilingualString	0:1	Content text for NOTICE.
	<b>CanBeAdvertised</b>	Boolean	0:1	Whether NOTICE is advertised.
	<b>DriverDisplayText</b>	MultilingualString	0:1	Driver Display text associated with NOTICE.

**NOTICE ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Notice Assignment MODEL.NOTICE ASSIGNMENT)

The assignment of a NOTICE showing an exception in a JOURNEY PATTERN, a COMMON SECTION, or a VEHICLE JOURNEY, possibly specifying at which POINT IN JOURNEY PATTERN the validity of the NOTICE starts and ends respectively.

## NOTICE ASSIGNMENT – Relations

Source	Target
<b>VALIDITY CONDITION</b> <i>Role:</i> applicable for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>NOTICE ASSIGNMENT</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>NOTICE ASSIGNMENT</b> <i>Role:</i> using <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>NOTICE</b> <i>Role:</i> used by <i>Cardinality:</i> 1
<b>COMMON SECTION</b> <i>Role:</i> marked by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>NOTICE ASSIGNMENT</b> <i>Role:</i> assigned to <i>Cardinality:</i> *
<b>JOURNEY PATTERN</b> <i>Role:</i> marked by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>NOTICE ASSIGNMENT</b> <i>Role:</i> assigned to <i>Cardinality:</i> *
<b>NOTICE ASSIGNMENT</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> end of <i>Cardinality:</i> 0..1
<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> start of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>NOTICE ASSIGNMENT</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>NOTICE ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>NOTICE ASSIGNMENT</b> <i>Role:</i> assigned by <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INTERCHANGE</b> <i>Role:</i> marked by <i>Cardinality:</i> 0..1
<b>GROUP OF SERVICES</b> <i>Role:</i> marked by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>NOTICE ASSIGNMENT</b> <i>Role:</i> assigned to <i>Cardinality:</i> 0..*
<b>NOTICE ASSIGNMENT</b> <i>Role:</i> assigned to <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>VEHICLE JOURNEY</b> <i>Role:</i> marked by <i>Cardinality:</i> 0..1

## NOTICE ASSIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>NoticeAssignmentIdType</i>	1:1	Identifier of NOTICE ASSIGNMENT.
	<b>Mark</b>	<i>any</i>	0:1	Mark associated with NOTICE.
	<b>MarkUrl</b>	<i>anyURI</i>	0:1	URL to fetch icon for Mark associated with NOTICE.
	<b>Advertised</b>	<i>boolean</i>	0:1	Whether NOTICE is shown to public.

## ONBOARD STAY

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Facility MODEL.ONBOARD STAY)

Permission to board early before the journey or stay on board after the journey.

**ONBOARD STAY – Relations**

Source	Target
<b>ONBOARD STAY</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE FACILITY SET</b> <i>Role:</i> <i>Cardinality:</i>

**ONBOARD STAY – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	SERVICE FACILITY SET	::>	<b>ONBOARD STAY</b> inherits from <b>SERVICE FACILITY SET</b>
	<b>FareClass</b>	FareClassEnum	0:1	FARE CLASS to which BOARDING PERMISSION applies.
	<b>Permission</b>	BoardingPermisssionEnum	0:1	Nature of BOARDING PERMISSION
	<b>Duration</b>	duration	0:1	Duration of BOARDING PERMISSION
«UID»	<b>Id</b>		1:1	

**OPERATING DAY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.OPERATING DAY)

A day of public transport operation of which the characteristics are defined within in a specific SERVICE CALENDAR.  
An OPERATING DAY may last more than 24 hours.

**OPERATING DAY – Relations**

Source	Target
<b>OPERATING DAY</b> <i>Role:</i> determining <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>AVAILABILITY CONDITION</b> <i>Role:</i> valid for <i>Cardinality:</i> 0..*
<b>OPERATING DAY</b> <i>Role:</i> the start day of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>OPERATING PERIOD</b> <i>Role:</i> starting at <i>Cardinality:</i> 0..*
<b>OPERATING DAY</b> <i>Role:</i> the end of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>OPERATING PERIOD</b> <i>Role:</i> ending at <i>Cardinality:</i> 0..*
<b>OPERATING DAY</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DAY TYPE ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>OPERATING DAY</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1

<b>OPERATING DAY</b> <i>Role:</i> date of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DATED BLOCK</b> <i>Role:</i> dated on <i>Cardinality:</i> *
<b>DATED VEHICLE JOURNEY</b> <i>Role:</i> dated on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>OPERATING DAY</b> <i>Role:</i> date of <i>Cardinality:</i> 1

#### OPERATING DAY – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>OperatingDayIdType</i>	1:1	Identifier of OPERATING DAY.
	<b>CalendarDate</b>	<i>date</i>	1:1	Calendar date of OPERATING DAY.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of OPERATING DAY.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of DAY TYPE.
	<b>EarliestTime</b>	<i>time</i>	0:1	Start time of OPERATING DAY.
	<b>DayLength</b>	<i>duration</i>	0:1	Length of OPERATING DAY.

#### OPERATING DEPARTMENT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Organisations MODEL.OPERATING DEPARTMENT)

A specific DEPARTMENT which administers certain LINES.

#### OPERATING DEPARTMENT – Relations

Source	Target
<b>OPERATING DEPARTMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>DEPARTMENT</b> <i>Role:</i> <i>Cardinality:</i>

#### OPERATING DEPARTMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>DEPARTMENT</i>	::>	<b>OPERATING DEPARTMENT</b> inherits from <b>DEPARTMENT</b>
«UID»	<b>Id</b>	<i>OperatingDepartmentIdType</i>	1:1	Identifier of OPERATING DEPARTMENT.

#### OPERATING PERIOD

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.OPERATING PERIOD)

A continuous interval of time between two OPERATING DAYs which will be used to define validities.

**OPERATING PERIOD – Relations**

Source	Target
<b>OPERATING DAY</b> Role: the start day of Cardinality: 1 Relation type: Association	<b>OPERATING PERIOD</b> Role: starting at Cardinality: 0..*
<b>OPERATING DAY</b> Role: the end of Cardinality: 1 Relation type: Association	<b>OPERATING PERIOD</b> Role: ending at Cardinality: 0..*
<b>SERVICE CALENDAR</b> Role: within Cardinality: 1 Relation type: Association	<b>OPERATING PERIOD</b> Role: for Cardinality: 0..*

**OPERATING PERIOD – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PeriodIdType</i>	1:1	Identifier of OPERATING PERIOD.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of OPERATING PERIOD.
	<b>HolidayType</b>	<i>HolidayTypeEnum</i>	0:*	Holiday type of OPERATING PERIOD.
	<b>Season</b>	<i>SeasonEnum</i>	0:*	Season of OPERATING PERIOD.

**OPERATIONAL CONTEXT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Organisations MODEL.OPERATIONAL CONTEXT)

Characterization of a set of operational objects, such as timing or links determined either by a DEPARTMENT or by an ORGANISATIONAL UNIT.

**OPERATIONAL CONTEXT – Relations**

Source	Target
<b>VEHICLE MODE</b> Role: determining Cardinality: 1 Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: determined by Cardinality: 0..*
<b>SUBMODE</b> Role: determining Cardinality: 1 Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: determined by Cardinality: 0..*
<b>OPERATIONAL CONTEXT</b> Role: determined by Cardinality: 0..* Relation type: Aggregation	<b>DEPARTMENT</b> Role: determining Cardinality:
<b>OPERATIONAL CONTEXT</b> Role: determined by Cardinality: 0..* Relation type: Aggregation	<b>ORGANISATIONAL UNIT</b> Role: determining Cardinality:
<b>TIME DEMAND TYPE</b> Role: determined for Cardinality: 0..* Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: determining Cardinality: 0..1
<b>SERVICE LINK</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: characterising Cardinality: 0..*

<b>JOURNEY PATTERN</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..*
<b>TIMING LINK</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..*
<b>ROUTE LINK</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..*
<b>LINE</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..*
<b>OPERATIONAL CONTEXT</b> <i>Role:</i> determining <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY TIMING</b> <i>Role:</i> determined by <i>Cardinality:</i> 0..*
<b>OPERATIONAL CONTEXT</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..1

#### OPERATIONAL CONTEXT – Attributes

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>OperationalContextIdType</i>	1:1	Identifier of OPERATIONAL CONTEXT.
	<b>Name</b>	<i>normalizedString</i>	0:1	Name of OPERATIONAL CONTEXT.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short name of OPERATIONAL CONTEXT.

#### OPERATOR

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Organisations MODEL.OPERATOR)

*A company providing public transport services.*



## OPERATOR – Relations

Source	Target
<b>GROUP OF OPERATORS</b> <i>Role:</i> grouping <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>OPERATOR</b> <i>Role:</i> grouped in <i>Cardinality:</i> 1..*
<b>OPERATOR</b> <i>Role:</i> serving PT for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>AUTHORITY</b> <i>Role:</i> ordering PT service from <i>Cardinality:</i> *
<b>OPERATOR</b> <i>Role:</i> owner of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEPARTMENT</b> <i>Role:</i> owned by <i>Cardinality:</i> 1..*
<b>OPERATOR</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i>
<b>OPERATOR</b> <i>Role:</i> managing <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>PASSENGER INFORMATION EQUIPMENT</b> <i>Role:</i> managed by <i>Cardinality:</i> *
<b>SITE CONNECTION END</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATOR</b> <i>Role:</i> servicing <i>Cardinality:</i> 0..1
<b>DEFAULT CONNECTION END</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATOR</b> <i>Role:</i> servicing <i>Cardinality:</i> 0..1
<b>LINE</b> <i>Role:</i> run by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATOR</b> <i>Role:</i> operating <i>Cardinality:</i> 0..*
<b>OPERATOR</b> <i>Role:</i> primary for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>LINE</b> <i>Role:</i> run primarily by <i>Cardinality:</i> 0..*
<b>INTERCHANGE RULE PARAMETER</b> <i>Role:</i> using <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATOR</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1

## OPERATOR – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	ORGANISATION	::>	<b>OPERATOR</b> inherits from <b>ORGANISATION</b>
«UID»	<b>Id</b>	OperatorIdType	1:1	Identifier of OPERATOR.
	<b>PrimaryMode</b>	VehicleModeEnum	1:1	Primary TRANSPORT MODE of ORGANISATION.

**ORGANISATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.ORGANISATION)

A legally incorporated body associated with any aspect of the transport system.

## ORGANISATION – Relations

Source	Target
<b>OTHER ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i>
<b>POSTAL ADDRESS</b> <i>Role:</i> locating <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ORGANISATION</b> <i>Role:</i> located at <i>Cardinality:</i> 0..*
<b>AUTHORITY</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i>
<b>OPERATOR</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i>
<b>CONTACT DETAILS</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ORGANISATION</b> <i>Role:</i> characterised by <i>Cardinality:</i> 1
<b>ORGANISATION</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF ORGANISATION</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1
<b>ORGANISATION PART</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>ORGANISATION</b> <i>Role:</i> made up of <i>Cardinality:</i> 1
<b>RESPONSIBILITY ROLE ASSIGNMENT</b> <i>Role:</i> assigned to <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ORGANISATION</b> <i>Role:</i> in charge of <i>Cardinality:</i> 1
<b>ORGANISATION</b> <i>Role:</i> delegating <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>RESPONSIBILITY SET</b> <i>Role:</i> delegated to <i>Cardinality:</i> 0..*
<b>ENTITY</b> <i>Role:</i> under the responsibility of <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>ORGANISATION</b> <i>Role:</i> responsible for <i>Cardinality:</i> 0..*
<b>ORGANISATION</b> <i>Role:</i> operator <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>SITE</b> <i>Role:</i> operated by <i>Cardinality:</i> 0..*
<b>ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>JOURNEY ACCOUNTING</b> <i>Role:</i> defined by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ORGANISATION</b> <i>Role:</i> defining <i>Cardinality:</i> 0..1

**ORGANISATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>OrganisationIdType</i>	1:1	Identifier of ORGANISATION.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Further description of ORGANISATION..
	<b>LegalName</b>	<i>MultilingualString</i>	0:1	Legal name of ORGANISATION..
	<b>Name</b>	<i>normalizedString</i>	1:1	Name of ORGANISATION..
	<b>Remarks</b>	<i>MultilingualString</i>	0:1	Further remarks about ORGANISATION..
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short name of ORGANISATION..
	<b>TradingName</b>	<i>MultilingualString</i>	0:1	Trading name of ORGANISATION..
	<b>Status</b>	<i>boolean</i>	0:1	Status of ORGANISATION. Active or Inactive.
	<b>ValidFromDate</b>	<i>date</i>	0:1	Start of period for which ORGANISATION is active.
	<b>ValidToDate</b>	<i>date</i>	0:1	End date up to which ORGANISATION is active.

**ORGANISATION DAY TYPE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Additional Organisation MODEL.ORGANISATION DAY TYPE)

DAY TYPE that is defined in terms of operation or not operation of a referenced SERVICED ORGANISATION.

**ORGANISATION DAY TYPE – Relations**

Source	Target
<b>SERVICED ORGANISATION</b> <i>Role: serviced on</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>ORGANISATION DAY TYPE</b> <i>Role: for</i> <i>Cardinality: 0..*</i>
<b>ORGANISATION DAY TYPE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>DAY TYPE</b> <i>Role:</i> <i>Cardinality:</i>

**ORGANISATION DAY TYPE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>DAY TYPE</i>	::>	<b>ORGANISATION DAY TYPE</b> inherits from <b>DAY TYPE</b>
«UID»	<b>Id</b>	<i>OrganisationDayTypeIdType</i>	1:1	Identifier of DAY TYPE.
	<b>IsServiceDay</b>	<i>boolean</i>	0:1	Transport Service required for ORGANISATION on this DAY TYPE .

**ORGANISATION PART**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.ORGANISATION PART)

A part of an ORGANISATION to which specific responsibilities upon the data and data management may be assigned.

**ORGANISATION PART – Relations**

Source	Target
<b>ADMINISTRATIVE ZONE</b> <i>Role:</i> managed by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ORGANISATION PART</b> <i>Role:</i> managing <i>Cardinality:</i> 1
<b>CONTROL CENTRE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ORGANISATION PART</b> <i>Role:</i> <i>Cardinality:</i>
<b>DEPARTMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ORGANISATION PART</b> <i>Role:</i> <i>Cardinality:</i>
<b>ORGANISATION PART</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>ORGANISATION</b> <i>Role:</i> made up of <i>Cardinality:</i> 1
<b>ORGANISATIONAL UNIT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ORGANISATION PART</b> <i>Role:</i> <i>Cardinality:</i>
<b>ORGANISATION PART</b> <i>Role:</i> in charge of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> <i>Role:</i> delegated to <i>Cardinality:</i> 0..*

**ORGANISATION PART – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b><i>Id</i></b>	<i>OrganisationPartIdType</i>	1:1	Identifier of an ORGANISATION PART.
	<b><i>Name</i></b>	<i>MultilingualString</i>	0:1	NAME of the ORGANISATION PART.
	<b><i>ShortName</i></b>	<i>MultilingualString</i>	0:1	SHORT NAME of the ORGANISATION PART.
	<b><i>Description</i></b>	<i>MultilingualString</i>	0:1	Description of the ORGANISATION PART.

**ORGANISATIONAL UNIT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.ORGANISATIONAL UNIT)

An ORGANISATION PART to which a set of responsibilities in a public transport company for planning and control is assigned.

## ORGANISATIONAL UNIT – Relations

Source	Target
<b>ORGANISATIONAL UNIT</b> Role: Cardinality: Relation type: Generalization	<b>ORGANISATION PART</b> Role: Cardinality:
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>VEHICLE</b> Role: managed by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: part of Cardinality: 1..* Relation type: Association	<b>DEPARTMENT</b> Role: comprising Cardinality: 1
<b>OPERATIONAL CONTEXT</b> Role: determined by Cardinality: 0..* Relation type: Aggregation	<b>ORGANISATIONAL UNIT</b> Role: determining Cardinality:
<b>ORGANISATIONAL UNIT</b> Role: operationally responsible for Cardinality: 0..1 Relation type: Association	<b>CLASS IN REPOSITORY</b> Role: operationally managed by Cardinality: 0..*
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: managed by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: using Cardinality: * Relation type: Association	<b>JOURNEY PATTERN</b> Role: used by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>POINT IN JOURNEY PATTERN</b> Role: by default managed by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: manager of Cardinality: 0..1 Relation type: Association	<b>CREW BASE</b> Role: managed by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: manager of Cardinality: 0..1 Relation type: Association	<b>GARAGE</b> Role: managed by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>BLOCK</b> Role: managed by Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>JOURNEY PART</b> Role: managed by Cardinality: *

## ORGANISATIONAL UNIT – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	ORGANISATION PART	::>	<b>ORGANISATIONAL UNIT</b> inherits from <b>ORGANISATION PART</b>
«UID»	<b>Id</b>	OrganisationUnitIdType	1:1	Identifier of an ORGANISATIONAL UNIT..

**OTHER ORGANISATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Additional Organisation MODEL.OTHER ORGANISATION)

Generic ORGANISATION being neither an AUTHORITY, neither a public transport OPERATOR (TRAVEL AGENT, MANAGEMENT AGENT, etc.).

**OTHER ORGANISATION – Relations**

Source	Target
<b>SERVICED ORGANISATION</b> Role: Cardinality: Relation type: Generalization	<b>OTHER ORGANISATION</b> Role: Cardinality:
<b>TRAVEL AGENT</b> Role: Cardinality: Relation type: Generalization	<b>OTHER ORGANISATION</b> Role: Cardinality:
<b>MANAGEMENT AGENT</b> Role: Cardinality: Relation type: Generalization	<b>OTHER ORGANISATION</b> Role: Cardinality:
<b>OTHER ORGANISATION</b> Role: Cardinality: Relation type: Generalization	<b>ORGANISATION</b> Role: Cardinality:

**OTHER ORGANISATION – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	ORGANISATION	::>	<b>OTHER ORGANISATION</b> inherits from <b>ORGANISATION</b>
«UID»	<b>Id</b>	OtherOrganisationIdType	1:1	Identifier of OTHER ORGANISATION.

**OVERTAKING POSSIBILITY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Network Restriction MODEL.OVERTAKING POSSIBILITY)

NETWORK RESTRICTION specifying a POINT or a LINK where vehicles of specified VEHICLE TYPEs are or are not allowed to overtake each other.

## OVERTAKING POSSIBILITY – Relations

Source	Target
<b>VEHICLE TYPE</b> <i>Role: overtaken at</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>OVERTAKING POSSIBILITY</b> <i>Role: against</i> <i>Cardinality: *</i>
<b>VEHICLE TYPE</b> <i>Role: overtaking at</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>OVERTAKING POSSIBILITY</b> <i>Role: for</i> <i>Cardinality: *</i>
<b>INFRASTRUCTURE POINT</b> <i>Role: overtaking at</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>OVERTAKING POSSIBILITY</b> <i>Role: at</i> <i>Cardinality: *</i>
<b>INFRASTRUCTURE LINK</b> <i>Role: overtaking at</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>OVERTAKING POSSIBILITY</b> <i>Role: at</i> <i>Cardinality: *</i>
<b>OVERTAKING POSSIBILITY</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## OVERTAKING POSSIBILITY – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>OvertakingPossibilityIdType</i>	1:1	Identifier of OVERTAKING RESTRICTION.
	<b>OvertakingWidth</b>	<i>LengthType</i>	0:1	Width at overtaking point

## PARKING

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING)

Designated locations for leaving vehicles such as cars, motorcycles and bicycles.

## PARKING – Relations

Source	Target
<b>PARKING AREA</b> <i>Role: part of</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>PARKING</b> <i>Role: made up of</i> <i>Cardinality: 1</i>
<b>PARKING</b> <i>Role: characterised by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF PAYMENT METHOD</b> <i>Role: available for</i> <i>Cardinality: 0..*</i>
<b>PARKING PASSENGER ENTRANCE</b> <i>Role: to</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>PARKING</b> <i>Role: entered through</i> <i>Cardinality: 1</i>
<b>PARKING PROPERTIES</b> <i>Role: characterising</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>PARKING</b> <i>Role: characterised by</i> <i>Cardinality: 1</i>

<b>PARKING ENTRANCE FOR VEHICLES</b> <i>Role: to</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>PARKING</b> <i>Role: entered through</i> <i>Cardinality: 1</i>
<b>PARKING</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>SITE</b> <i>Role:</i> <i>Cardinality:</i>
<b>PARKING</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

#### PARKING – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>SITE</i>	::>	<b>PARKING</b> inherits from <b>SITE</b>
«UID»	<b>Id</b>	<i>ParkingIdType</i>	1:1	Identifier of PARKING.
	<b>ParkingType</b>	<i>ParkingTypeEnum</i>	0:*	Nature of PARKING.
	<b>ParkingLayout</b>	<i>ParkingLayoutEnum</i>	0:1	Layout type of PARKING.
	<b>NumberOfParkingLevels</b>	<i>Integer</i>	1:1	
	<b>TotalCapacity</b>	<i>NumberOfSpaces</i>	0:1	Total Capacity of PARKING.
	<b>PrincipalCapacity</b>	<i>NumberOfSpaces</i>	0:1	Principal Capacity of PARKING.
	<b>OvernightParkingPermitted</b>	<i>boolean</i>	0:1	Whether overnight PARKING is allowed.
	<b>SecureParking</b>	<i>boolean</i>	0:1	Whether the parking is secure
	<b>ProhibitedForAnyHazardousMaterialLoads</b>	<i>boolean</i>	0:1	Whether PARKING is prohibited for any Hazard.
	<b>ElectricRechargingAvailable</b>	<i>boolean</i>	0:1	Whether car park has recharging points
	<b>RealTimeOccupancyAvailable</b>	<i>boolean</i>	0:1	Whether there is real-time occupancy data for PARKING.
	<b>ParkingPaymentProcess</b>	<i>PaymentProcessEnum</i>	0:1	How to pay for PARKING.
	<b>DefaultCurrency</b>	<i>CurrencyType</i>	0:1	Default Currency for payment
	<b>CardsAccepted</b>	<i>normalizedString</i>	1:1	List of cards accepted
	<b>ParkingReservations</b>	<i>ParkingReservationEnum</i>	0:1	How to reserve for PARKING.
	<b>BookingUrl</b>	<i>anyUrl</i>	1:1	Url for booking.
	<b>PaymentByPhone</b>	<i>PaymentByPhone</i>	0:1	Phone Payment details
	<b>FreeParkingOutOfHours</b>	<i>boolean</i>	0:1	Whether there is free parking out of hours
	<b>CurrenciesAccepted</b>	<i>Currency</i>	0:*	

#### PARKING ENTRANCE FOR VEHICLES

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING ENTRANCE FOR VEHICLES)



An entrance for vehicles to the PARKING from the road.

#### PARKING ENTRANCE FOR VEHICLES – Relations

Source	Target
<b>PARKING ENTRANCE FOR VEHICLES</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>PARKING</b> Role: entered through Cardinality: 1
<b>PARKING ENTRANCE FOR VEHICLES</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE ENTRANCE</b> Role: Cardinality:
<b>PARKING ENTRANCE FOR VEHICLES</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>PARKING AREA</b> Role: entered through Cardinality:

#### PARKING ENTRANCE FOR VEHICLES – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	VEHICLE ENTRANCE	::>	<b>PARKING ENTRANCE FOR VEHICLES</b> inherits from <b>VEHICLE ENTRANCE</b>
«UID»	<b>Id</b>	VehicleEntranceIdType	1:1	Identifier of PARKING VEHICLE ENTRANCE.

#### PARKING AREA

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING AREA)

A marked zone within a PARKING containing PARKING BAYs.

#### PARKING AREA – Relations

Source	Target
<b>PARKING AREA</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>PARKING</b> Role: made up of Cardinality: 1
<b>PARKING BAY</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>PARKING AREA</b> Role: made up of Cardinality: 1
<b>PARKING AREA</b> Role: Cardinality: Relation type: Generalization	<b>PARKING COMPONENT</b> Role: Cardinality:
<b>PARKING PASSENGER ENTRANCE</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>PARKING AREA</b> Role: entered through Cardinality:
<b>PARKING ENTRANCE FOR VEHICLES</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>PARKING AREA</b> Role: entered through Cardinality:

**PARKING AREA – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>PARKING COMPONENT</i>	::>	<b>PARKING AREA</b> inherits from <b>PARKING COMPONENT</b>
«UID»	<b>Id</b>	<i>ParkingAreaIdType</i>	1:1	Identifier of PARKING AREA.
	<b>TotalCapacity</b>	<i>NumberOfSpaces</i>	0:1	Total Capacity of PARKING AREA.

**PARKING BAY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING BAY)

A place to park an individual vehicle.

**PARKING BAY – Relations**

Source	Target
<b>PARKING BAY</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>PARKING AREA</b> Role: made up of Cardinality: 1
<b>PARKING BAY</b> Role: Cardinality: Relation type: Generalization	<b>PARKING COMPONENT</b> Role: Cardinality:

**PARKING BAY – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>PARKING COMPONENT</i>	::>	<b>PARKING BAY</b> inherits from <b>PARKING COMPONENT</b>
«UID»	<b>Id</b>	<i>ParkingBayIdType</i>	1:1	Identifier of PARKING BAY.
	<b>ParkingVehicleType</b>	<i>ParkingVehicleEnum</i>	0:1	TYPEs of VEHICLE that may use PARKING BAY.
	<b>Length</b>	<i>LengthType</i>	0:1	Length of BAY.
	<b>Width</b>	<i>LengthType</i>	0:1	Width of BAY.
	<b>Height</b>	<i>LengthType</i>	0:1	Height of BAY.

**PARKING CAPACITY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING CAPACITY)

PARKING properties providing information about its CAPACITY.

**PARKING CAPACITY – Relations**

Source	Target
<b>PARKING CAPACITY</b> Role: available for Cardinality: 0..* Relation type: Aggregation	<b>PARKING PROPERTIES</b> Role: making space for Cardinality: 1

**PARKING CAPACITY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ParkingCapacityIdType</i>	1:1	Identifier of PARKING CAPACITY
	<b>NumberOfSpaces</b>	<i>integer</i>	0:1	Number of parking spaces specified by this PARKING CAPACITY
	<b>ParkingUserType</b>	<i>ParkingUserEnum</i>	0:1	Types of Users of PARKING PROPERTIES.
	<b>ParkingVehicleType</b>	<i>ParkingVehicleEnum</i>	0:1	TYPE OF VEHICLE specified by this PARKING CAPACITY
	<b>ParkingStayType</b>	<i>ParkingStayEnum</i>	0:1	Type of stay of PARKING CAPACITY

**PARKING COMPONENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING COMPONENT)

Generic COMPONENT of a PARKING (e.g. PARKING AREA or PARKING BAY)

**PARKING COMPONENT – Relations**

Source	Target
<b>PARKING AREA</b> Role: Cardinality: Relation type: Generalization	<b>PARKING COMPONENT</b> Role: Cardinality:
<b>PARKING BAY</b> Role: Cardinality: Relation type: Generalization	<b>PARKING COMPONENT</b> Role: Cardinality:
<b>PARKING COMPONENT</b> Role: Cardinality: Relation type: Generalization	<b>SITE COMPONENT</b> Role: Cardinality:

**PARKING COMPONENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>SITE COMPONENT</i>	::>	<b>PARKING COMPONENT</b> inherits from <b>SITE COMPONENT</b>
«UID»	<b>Id</b>	<i>ParkingComponentIdType</i>	1:1	Identifier of PARKING COMPONENT.
	<b>PaymentCode</b>	<i>normalizedString</i>	0:1	Identifier of PARKING COMPONENT for payment purposes, eg for SMS
	<b>MaximumLength</b>	<i>LengthType</i>	0:1	Maximum length of Vehicle to use Parking Component.
	<b>MaximumHeight</b>	<i>LengthType</i>	0:1	Maximum height of Vehicle to use Parking Component.
	<b>MaximumWidth</b>	<i>LengthType</i>	0:1	Maximum height of Vehicle to use Parking Component.
	<b>MaximumWeight</b>	<i>WeightType</i>	0:1	Maximum weight of Vehicle to use Parking Component.

**PARKING PASSENGER ENTRANCE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING PASSENGER ENTRANCE)

An entrance to the PARKING for passengers on foot or other out-of-vehicle mode, such as wheelchair.

**PARKING PASSENGER ENTRANCE – Relations**

Source	Target
<b>PARKING PASSENGER ENTRANCE</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>PARKING</b> Role: entered through Cardinality: 1
<b>PARKING PASSENGER ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>ENTRANCE</b> Role: Cardinality:
<b>PARKING PASSENGER ENTRANCE</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>PARKING AREA</b> Role: entered through Cardinality:

**PARKING PASSENGER ENTRANCE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	ENTRANCE	::>	<b>PARKING PASSENGER ENTRANCE</b> inherits from <b>ENTRANCE</b>
«UID»	<b>Id</b>	PassengerEntranceId	1:1	Identifier of PARKING PASSENGER ENTRANCE.

**PARKING POINT**

(Transmodel v6, Part 2 - Public Transport Network Topology (NT). ND Network Description MODEL.NT Vehicle & Crew Point MODEL.PARKING POINT)

A TIMING POINT where vehicles may stay unattended for a long time. A vehicle's return to park at a PARKING POINT marks the end of a BLOCK.

**PARKING POINT – Relations**

Source	Target
<b>PARKING POINT</b> Role: Cardinality: Relation type: Generalization	<b>RELIEF POINT</b> Role: Cardinality:
<b>GARAGE POINT</b> Role: Cardinality: Relation type: Generalization	<b>PARKING POINT</b> Role: Cardinality:
<b>PARKING POINT</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:
<b>BLOCK</b> Role: started at Cardinality: * Relation type: Association	<b>PARKING POINT</b> Role: start of Cardinality: 1
<b>BLOCK</b> Role: ended at Cardinality: * Relation type: Association	<b>PARKING POINT</b> Role: end of Cardinality: 1

**PARKING POINT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	RELIEF POINT	::>	<b>PARKING POINT</b> inherits from <b>RELIEF POINT</b>
«UID»	<b>Id</b>	ParkingPointIdType	1:1	Identifier of PARKING POINT.

**PARKING PROPERTIES**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Parking MODEL.PARKING PROPERTIES)

*PARKING specific properties other than its capacity.*

**PARKING PROPERTIES – Relations**

Source	Target
<b>PARKING CAPACITY</b> <i>Role:</i> available for <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PARKING PROPERTIES</b> <i>Role:</i> making space for <i>Cardinality:</i> 1
<b>PARKING PROPERTIES</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PARKING</b> <i>Role:</i> characterised by <i>Cardinality:</i> 1

**PARKING PROPERTIES – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	ParkingPropertiesIdType	1:1	Identifier of PARKING PROPERTIES.
	<b>ParkingUserType</b>	ParkingUserEnum	0:1	Types of Users of PARKING PROPERTIES.
	<b>MaximumStay</b>	duration	0:1	Maximum Stay specified by this PARKING PROPERTIES.
	<b>ParkingStayType</b>	ParkingStayEnum	0:1	Type of Stay specified by this PARKING PROPERTIES.
	<b>ParkingVehicleType</b>	ParkingVehicleEnum	0:*	TYPE sOF VEHICLE allowed by PARKING PROPERTIES.
	<b>SecureParking</b>	boolean	0:1	Whether the parking is secure

**PASSENGER ACCESSIBILITY NEED**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.PASSENGER ACCESSIBILITY NEED)

*A passenger's requirement for accessibility, comprising one or more USER NEEDs. For example, that he is unable to navigate stairs, or lifts, or has visual or auditory impairments. PASSENGER ACCESSIBILITY NEEDS can be used to derive an accessibility constraint for the passenger, allowing the computation of paths for passengers with specifically constrained mobility. Example: Wheelchair, No Lifts, No Stairs.*

**PASSENGER ACCESSIBILITY NEED – Relations**

Source	Target
<b>USER NEED</b> <i>Role:</i> determining <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PASSENGER ACCESSIBILITY NEED</b> <i>Role:</i> determined by <i>Cardinality:</i> 1

**PASSENGER ACCESSIBILITY NEED – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of PASSENGER ACCESSIBILITY NEED.
	<b>Carer</b>	<i>boolean</i>	1:1	Whether user has carer

**PASSENGER CARRYING REQUIREMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.PASSENGER CARRYING REQUIREMENT)

A classification of requirements for a public transport vehicle according to the passenger carrying capabilities of the vehicle.

**PASSENGER CARRYING REQUIREMENT – Relations**

Source	Target
<b>PASSENGER CARRYING REQUIREMENT</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE TYPE</b> Role: satisfying Cardinality: 0..*

**PASSENGER CARRYING REQUIREMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PassengerCarryingRequirementIdType</i>	1:1	Identifier of PASSENGER CARRYING REQUIREMENT.
	<b>MinimumCapacity</b>	<i>PassengerCapacity</i>	1:1	Minimum number of seated passengers that needs to be provided.
	<b>LowFloor</b>	<i>boolean</i>	0:1	Whether VEHICLE needs to be low floor.
	<b>HasLiftOrRamp</b>	<i>boolean</i>	0:1	Whether VEHICLE needs to have lift or ramp for wheelchair access.

**PASSENGER EQUIPMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Generic Equipment MODEL.PASSENGER EQUIPMENT)

An item of equipment of a particular type actually available at a location within a PLACE or a VEHICLE

## PASSENGER EQUIPMENT – Relations

Source	Target
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INSTALLED EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> located at <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>VEHICLE</b> <i>Role:</i> equipped with <i>Cardinality:</i> 0..1
<b>PASSENGER INFORMATION EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>TICKET VALIDATOR EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>TICKETING EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>RUBBISH DISPOSAL</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>SANITARY EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER SAFETY EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> located at <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>EQUIPMENT POSITION</b> <i>Role:</i> equipped with <i>Cardinality:</i> 0..1
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ACTUAL VEHICLE EQUIPMENT</b> <i>Role:</i> using <i>Cardinality:</i> 0..1
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>PLACE EQUIPMENT</b> <i>Role:</i> using <i>Cardinality:</i> 0..1

**PASSENGER EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INSTALLED EQUIPMENT	::>	<b>PASSENGER EQUIPMENT</b> inherits from <b>INSTALLED EQUIPMENT</b>
	<b>Fixed</b>	boolean	0:1	Whether this Equipment is fixed at a PLACE or in a mobile vehicle.
«UID»	<b>Id</b>		1:1	Identifier of PASSENGER EQUIPMENT.

**PASSENGER INFORMATION EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Passenger Information Display Assignment MODEL.PASSENGER INFORMATION EQUIPMENT)

A public transport information piece of equipment, as for instance terminals (on street, at information desks, telematic, ...) or printed material (leaflets displayed at stops, booklets, ...).

**PASSENGER INFORMATION EQUIPMENT – Relations**

Source	Target
<b>PASSENGER INFORMATION EQUIPMENT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF PASSENGER INFORMATION EQUIPMENT</b> Role: a classification for Cardinality: 0..1
<b>TRAIN ELEMENT</b> Role: the location of Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: located in Cardinality: *
<b>POINT</b> Role: the location of Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: located at Cardinality: *
<b>OPERATOR</b> Role: managing Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: managed by Cardinality: *
<b>LOGICAL DISPLAY</b> Role: assigned to Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: visualising Cardinality: 0..*
<b>AUTHORITY</b> Role: managing Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: managed by Cardinality: *
<b>DISPLAY ASSIGNMENT</b> Role: specifying Cardinality: * Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: specified by Cardinality: 1
<b>PASSENGER INFORMATION EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PASSENGER EQUIPMENT</b> Role: Cardinality:
<b>PASSENGER INFORMATION EQUIPMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:



**PASSENGER INFORMATION EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PASSENGER EQUIPMENT	::>	<b>PASSENGER INFORMATION EQUIPMENT</b> inherits from <b>PASSENGER EQUIPMENT</b>
«UID»	<b>Id</b>	PassengerInformationEquipmentIdType	1:1	Identifier of PASSENGER INFORMATION EQUIPMENT.
	<b>Name</b>	MultilingualString	0:1	Name of PASSENGER INFORMATION EQUIPMENT.
	<b>PassengerInfoFacilityType</b>	PassengerInformationEquipmentEnum	0:*	Types of Passenger Travel Info available.
	<b>AccessibilityInfo</b>	AccessibilityInfoFacilityEnum	0:*	Types of Accessibility Info available on PASSENGER INFORMATION EQUIPMENT.
	<b>Description</b>	MultilingualString	0:1	Description of PASSENGER INFORMATION EQUIPMENT.
	<b>Address</b>	anyURI	1:1	URL for PASSENGER INFORMATION EQUIPMENT.

**PASSENGER SAFETY EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Passenger Service Equipment MODEL.PASSENGER SAFETY EQUIPMENT)

Specialisation of PASSENGER EQUIPMENT for passenger safety.

**PASSENGER SAFETY EQUIPMENT – Relations**

Source	Target
<b>PASSENGER SAFETY EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PASSENGER EQUIPMENT</b> Role: Cardinality:

**PASSENGER SAFETY EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PASSENGER EQUIPMENT	::>	<b>PASSENGER SAFETY EQUIPMENT</b> inherits from <b>PASSENGER EQUIPMENT</b>
«UID»	<b>Id</b>	PassengerSafetyFacilityIdType	1:1	Identifier of PASSENGER SAFETY EQUIPMENT.
	<b>Cctv</b>	boolean	0:1	Whether there is CCTV coverage.
	<b>PanicButton</b>	boolean	0:1	Whether there is a panic button.
	<b>MobilePhoneCoverage</b>	boolean	0:1	Whether there is Mobile phone coverage.
	<b>SosPanel</b>	boolean	0:1	Whether there is a SoS Panel.
	<b>HeightOfSosPanel</b>	LengthType	0:1	Height of SoS panel above ground.
	<b>Lighting</b>	LightingEnum	0:1	Type of lighting.

**PASSENGER STOP ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Stop Assignment MODEL.PASSENGER STOP ASSIGNMENT)

The allocation of a SCHEDULED STOP POINT (i.e. a SCHEDULED STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific STOP PLACE for a SERVICE JOURNEY, and also possibly a QUAY and BOARDING POSITION.

PASSENGER STOP ASSIGNMENT – Relations

Source	Target
<b>TRAIN STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>PASSENGER STOP ASSIGNMENT</b> Role: to Cardinality: 0..1
<b>PASSENGER STOP ASSIGNMENT</b> Role: Cardinality: Relation type: Generalization	<b>STOP ASSIGNMENT</b> Role: Cardinality:
<b>DYNAMIC STOP ASSIGNMENT</b> Role: Cardinality: Relation type: Generalization	<b>PASSENGER STOP ASSIGNMENT</b> Role: Cardinality:
<b>DYNAMIC STOP ASSIGNMENT</b> Role: overriding Cardinality: 0..* Relation type: Association	<b>PASSENGER STOP ASSIGNMENT</b> Role: overridden by Cardinality: 1
<b>PASSENGER STOP ASSIGNMENT</b> Role: Cardinality: 1 Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: Cardinality: 0..*
<b>PASSENGER STOP ASSIGNMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

PASSENGER STOP ASSIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	STOP ASSIGNMENT	::>	<b>PASSENGER STOP ASSIGNMENT</b> inherits from <b>STOP ASSIGNMENT</b>
«UID»	<b>Id</b>	PassengerStopAssignmentIdType	1:1	Identifier of PASSENGER STOP ASSIGNMENT.

## PASSING TIME

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Passing Times MODEL .PASSING TIME)

Time data concerning public transport vehicles passing a particular POINT; e.g. arrival time, departure time, waiting time.

PASSING TIME – Relations

Source	Target
<b>TIMETABLED PASSING TIME</b> Role: Cardinality: Relation type: Generalization	<b>PASSING TIME</b> Role: Cardinality:
<b>DATED PASSING TIME</b> Role: Cardinality: Relation type: Generalization	<b>PASSING TIME</b> Role: Cardinality:

**PASSING TIME – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TimetabledPassingTimeIdType</i>	1:1	Identifier of TIMETABLED PASSING TIME.
	<b>AlightAndReboard</b>	<i>boolean</i>	0:1	Whether passengers can alight and reboard at TIMING POINT.
	<b>ArrivalDayOffset</b>		0:1	Day offset of arrival time from day of start of journey.
	<b>DepartureDayOffset</b>		0:1	Day offset of departure time from day of start of journey.

**PATH JUNCTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Path & Navigation Path MODEL.PATH JUNCTION)

A designated point, inside or outside of a STOP PLACE or POINT OF INTEREST, at which two or more PATH LINKs may connect or branch.

**PATH JUNCTION – Relations**

Source	Target
<b>PATH JUNCTION</b> Role: a view of Cardinality: 0..1 Relation type: Association	<b>PATH LINK END</b> Role: viewed as Cardinality: 0..*
<b>PATH JUNCTION</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

**PATH JUNCTION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PathJunctionIdType</i>	1:1	Identifier of a PATH JUNCTION.
	<b>Label</b>	<i>MultilingualString</i>	0:1	Label of a PATH JUNCTION.
	<b>PublicUse</b>	<i>PublicUseEnum</i>	0:1	Whether element can be used by the general public.
	<b>Covered</b>	<i>CoveredEnum</i>	0:1	Whether element is covered or outdoors.
	<b>Gated</b>	<i>GatedEnum</i>	0:1	Whether element is within a gated area.
	<b>Lighting</b>	<i>LightingEnum</i>	0:1	How element is lit.
	<b>AllAreasWheelchair</b>	<i>boolean</i>	0:1	Whether all areas of component are accessible in a Wheelchair.
	<b>PersonCapacity</b>	<i>NumberOfPeople</i>	0:1	Number of people that can be in component at a time.

**PATH LINK**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Path & Navigation Path MODEL.PATH LINK)

A link within a PLACE of or between two PLACEs (that is STOP PLACEs, ACCESS SPACEs or QUAYs,BOARDING POSITIONs,, POINTs OF INTEREST etc or PATH JUNCTIONs) that represents a step in a possible route for pedestrians, cyclists or other out-of-vehicle passengers within or between a PLACE.

NOTE: It is possible but not mandatory that a PATH LINK projects onto a more detailed set of infrastructure or mapping links that plot the spatial course, allowing it to be represented on maps and to tracking systems.

## PATH LINK – Relations

Source	Target
<b>PATH LINK END</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>PATH LINK</b> <i>Role:</i> from <i>Cardinality:</i> 0..*
<b>ACCESSIBILITY ASSESSMENT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PATH LINK</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..1
<b>CHECK CONSTRAINT</b> <i>Role:</i> affecting <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PATH LINK</b> <i>Role:</i> affected by <i>Cardinality:</i> 1
<b>PATH LINK END</b> <i>Role:</i> end of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>PATH LINK</b> <i>Role:</i> to <i>Cardinality:</i> 0..*
<b>PATH LINK IN SEQUENCE</b> <i>Role:</i> a view of <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>PATH LINK</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1
<b>PATH LINK</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>PATH LINK</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF DIRECTION OF USE</b> <i>Role:</i> <i>Cardinality:</i> 1
<b>PATH LINK</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i> 1
<b>PATH LINK</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i> 1

## PATH LINK – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PathLinkIdType</i>	1:1	Identifier of a PATH LINK.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of PATH LINK.
	<b>PublicUse</b>	<i>boolean</i>	0:1	Whether the link is available for PUBLIC use.
	<b>Covered</b>	<i>CoveredEnum</i>	0:1	Nature of covering of PATH LINK.
	<b>Gated</b>	<i>GatedEnum</i>	0:1	Whether element is within a gated area.
	<b>Lighting</b>	<i>LightingEnum</i>	0:1	How element is lit.
	<b>PersonCapacity</b>	<i>NumberOfPeople</i>	0:1	Number of people that can be in component at a time.
	<b>AllAreasWheelchair</b>	<i>boolean</i>	0:1	Whether all areas of component are accessible in a Wheelchair.
	<b>Towards</b>	<i>MultilingualString</i>	0:1	Description of a towards direction.
	<b>NumberOfSteps</b>	<i>integer</i>	0:1	Number of steps involved in using a PATH LINK.
	<b>AllowedUse</b>	<i>DirectionOfUseEnum</i>	0:1	Allowed direction of use of PATH LINK.
	<b>Transition</b>	<i>TransitionEnum</i>	0:1	Transition for with PATH LINK: up, down, level.
	<b>AccessFeatureType</b>	<i>AccessFeatureEnum</i>	0:1	Access feature type associated with PATH LINK.
	<b>PassageType</b>	<i>PassageTypeEnum</i>	0:1	Type of passage traversed by PATH LINK, if any. This provides a more precise description of Access Feature type.
	<b>Back</b>	<i>MultilingualString</i>	0:1	Direction heading to show for PATH LINK when travelling in its TO / FROM sense
	<b>MaximumFlowPerMinute</b>	<i>PassengersPerMinute</i>	0:1	Maximum number of passengers that can use a PATH LINK.

## PATH LINK END

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Path & Navigation Path MODEL.PATH LINK END)

Beginning or end SITE for a PATH LINK. May be linked to a specific LEVEL of the SITE.

## PATH LINK END – Relations

Source	Target
<b>PATH LINK END</b> Role: start of Cardinality: 1 Relation type: Association	<b>PATH LINK</b> Role: from Cardinality: 0..*
<b>PATH LINK END</b> Role: end of Cardinality: 1 Relation type: Association	<b>PATH LINK</b> Role: to Cardinality: 0..*
<b>PATH JUNCTION</b> Role: a view of Cardinality: 0..1 Relation type: Association	<b>PATH LINK END</b> Role: viewed as Cardinality: 0..*
<b>PATH LINK END</b> Role: represented by Cardinality: 0..* Relation type: Association	<b>SITE ELEMENT</b> Role: representing Cardinality: 1

<b>PATH LINK END</b> <i>Role: on</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>LEVEL</b> <i>Role: the location of</i> <i>Cardinality: 1</i>
<b>PATH LINK END</b> <i>Role: represented by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>ENTRANCE</b> <i>Role: representing</i> <i>Cardinality: 0..1</i>

#### PATH LINK END – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b><i>Id</i></b>	<i>PathJunctionIdType</i>	1:1	Identifier of a PATH JUNCTION.
	<b><i>Label</i></b>	<i>MultilingualString</i>	0:1	Label of a PATH JUNCTION.
	<b><i>PublicUse</i></b>	<i>PublicUseEnum</i>	0:1	Whether element can be used by the general public.
	<b><i>Covered</i></b>	<i>CoveredEnum</i>	0:1	Whether element is covered or outdoors.
	<b><i>Gated</i></b>	<i>GatedEnum</i>	0:1	Whether element is within a gated area.
	<b><i>Lighting</i></b>	<i>LightingEnum</i>	0:1	How element is lit.
	<b><i>AllAreasWheelchair</i></b>	<i>boolean</i>	0:1	Whether all areas of component are accessible in a Wheelchair.
	<b><i>PersonCapacity</i></b>	<i>NumberOfPeople</i>	0:1	Number of people that can be in component at a time.

#### PATH LINK IN SEQUENCE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Path & Navigation Path MODEL.PATH LINK IN SEQUENCE)

A step of a NAVIGATION PATH indicating traversal of a particular PATH LINK as part of a recommended route.

The same PATH LINK may occur in different sequences in different NAVIGATION PATHs.

## PATH LINK IN SEQUENCE – Relations

Source	Target
<b>PATH LINK IN SEQUENCE</b> <i>Role: in</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>NAVIGATION PATH</b> <i>Role: made up of</i> <i>Cardinality: 1</i>
<b>PATH LINK IN SEQUENCE</b> <i>Role: a view of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>PATH LINK</b> <i>Role: viewed as</i> <i>Cardinality: 1</i>
<b>PATH LINK IN SEQUENCE</b> <i>Role: to</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>PLACE IN SEQUENCE</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>PATH LINK IN SEQUENCE</b> <i>Role: from</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>PLACE IN SEQUENCE</b> <i>Role: start of</i> <i>Cardinality: 1</i>
<b>PATH LINK IN SEQUENCE</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF DIRECTION OF USE</b> <i>Role:</i> <i>Cardinality: 1</i>

## PATH LINK IN SEQUENCE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>LinkInSequenceIdType</i>	1:1	Identifier of PATH LINK IN SEQUENCE.
	<b>Order</b>	<i>integer</i>	1:1	Order of PATH LINK IN SEQUENCE. within LINK SEQUENCE.
	<b>Heading</b>	<i>HeadingEnum</i>	0:1	Heading instruction relative to point declared 'left', 'right' onwards, etc.
	<b>DirectionOfUse</b>	<i>DirectionOfUseEnum</i>	0:1	Permitted Direction of travel.
	<b>Label</b>	<i>MultilingualString</i>	0:1	Label of PATH LINK IN SEQUENCE.

## PLACE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Place MODEL.PLACE)

A geographic place of any type which may be specified as the origin or destination of a trip. A PLACE may be represented as a POINT (dimension 0) , a road section (dimension 1) or a ZONE (dimension 2).

## PLACE – Relations

Source	Target
<b>ZONE</b> <i>Role: described by</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>PLACE</b> <i>Role: a generic description of</i> <i>Cardinality: 0..1</i>
<b>TYPE OF PLACE</b> <i>Role: a classification for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>PLACE</b> <i>Role: classified by</i> <i>Cardinality: 0..*</i>
<b>ALTERNATIVE NAME</b> <i>Role: alias for</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>PLACE</b> <i>Role: provided with</i> <i>Cardinality: 1</i>

<b>PLACE</b> Role: depicted by Cardinality: 0..* Relation type: Association	<b>SCHEMATIC MAP</b> Role: depicting Cardinality: 0..*
<b>PLACE</b> Role: contained in Cardinality: 0..1 Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: containing Cardinality: 0..*
<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: Relation type: Generalization	<b>PLACE</b> Role: Cardinality:
<b>ADDRESSABLE PLACE</b> Role: Cardinality: Relation type: Generalization	<b>PLACE</b> Role: Cardinality:
<b>ACCESS END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>PLACE</b> Role: viewed as Cardinality: 0..1
<b>PLACE</b> Role: Cardinality: Relation type: Generalization	<b>ZONE</b> Role: Cardinality:
<b>PLACE SIGN</b> Role: referring to Cardinality: 0..* Relation type: Association	<b>PLACE</b> Role: a reference for Cardinality: 0..1

**PLACE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	ZONE	::>	<b>PLACE</b> inherits from <b>ZONE</b>
«UID»	<b>Id</b>	PlaceIdType	1:1	Identifier of PLACE.

**PLACE ACCESS EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.PLACE ACCESS EQUIPMENT)

Specialisation of PLACE EQUIPMENT dedicated to access (e.g. lifts, entrances, stairs, ramps, etc.).

**PLACE ACCESS EQUIPMENT – Relations**

Source	Target
<b>RAMP EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:
<b>PLACE ACCESS EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF DIRECTION OF USE</b> Role: characterising Cardinality: 0..1
<b>QUEUING EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:



<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>LIFT EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>STAIR EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>CROSSING EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>ENTRANCE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PLACE LIGHTING</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUGH SURFACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>TRAVELATOR EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

PLACE ACCESS EQUIPMENT – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	PLACE EQUIPMENT	::>	<b>PLACE ACCESS EQUIPMENT</b> inherits from <b>PLACE EQUIPMENT</b>
«UID»	<b>Id</b>	PlaceAccessEquipmentIdType	1:1	Identifier of PLACE ACCESS EQUIPMENT.
	<b>Width</b>	meters	0:1	Width of EQUIPMENT.or entrance to equipment ( Lift).
	<b>DirectionOfUse</b>	DirectionOfUseEnum	0:1	Direction in which EQUIPMENT. can be used. Default is both.
	<b>PassengerPerMinute</b>	PassengersPerMinuteType	0:1	Number of passengers per minute that can use EQUIPMENT.
	<b>RelativeWeighting</b>	integer	0:1	Relative weighting to be given to this item EQUIPMENT.

**PLACE EQUIPMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Generic Equipment MODEL.PLACE EQUIPMENT)

*An item of equipment of a particular type actually available at a location within a PLACE.*

## PLACE EQUIPMENT – Relations

Source	Target
<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INSTALLED EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PLACE EQUIPMENT</b> <i>Role:</i> located at <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>EQUIPMENT POSITION</b> <i>Role:</i> equipped with <i>Cardinality:</i> 1
<b>PLACE EQUIPMENT</b> <i>Role:</i> located at <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>EQUIPMENT PLACE</b> <i>Role:</i> equipped with <i>Cardinality:</i> 0..1
<b>CYCLE STORAGE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER EQUIPMENT</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>PLACE EQUIPMENT</b> <i>Role:</i> using <i>Cardinality:</i> 0..1
<b>SIGN EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE CHARGING EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

## PLACE EQUIPMENT – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	INSTALLED EQUIPMENT	::>	<b>PLACE EQUIPMENT</b> inherits from <b>INSTALLED EQUIPMENT</b>
	<b>Units</b>	nonNegativeInteger	0:1	Number of units of EQUIPMENT at PLACE
«UID»	<b>Id</b>		1:1	Identifier of PLACE EQUIPMENT.

## PLACE IN SEQUENCE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Path & Navigation Path MODEL.PLACE IN SEQUENCE)

Point traversed by a NAVIGATION PATH in sequence, connected by a PATH LINK to the next point. May be a Place, PATH JUNCTION or POINT.

**PLACE IN SEQUENCE – Relations**

Source	Target
<b>PATH LINK IN SEQUENCE</b> <i>Role: to</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>PLACE IN SEQUENCE</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>PLACE IN SEQUENCE</b> <i>Role: defining</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>NAVIGATION PATH</b> <i>Role: madeup of</i> <i>Cardinality: 1</i>
<b>PATH LINK IN SEQUENCE</b> <i>Role: from</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>PLACE IN SEQUENCE</b> <i>Role: start of</i> <i>Cardinality: 1</i>
<b>PLACE IN SEQUENCE</b> <i>Role: a view of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE ELEMENT</b> <i>Role: viewed as</i> <i>Cardinality: 1</i>

**PLACE IN SEQUENCE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>SitePointIdType</i>	1:1	Identifier of SITE POINT IN SEQUENCE.
	<b>Order</b>	<i>integer</i>	1:1	Order of SITE POINT IN SEQUENCE within NAVIGATION PATH..
	<b>Label</b>	<i>MultilingualString</i>	0:1	Label of SITE POINT IN SEQUENCE.

**PLACE LIGHTING**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.PLACE LIGHTING)

Specialisation of PLACE EQUIPMENT for LIGHTING EQUIPMENT (e.g. lamp post).

**PLACE LIGHTING – Relations**

Source	Target
<b>PLACE LIGHTING</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

**PLACE LIGHTING – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>PLACE ACCESS EQUIPMENT</i>	::>	<b>PLACE LIGHTING</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>	<i>PlaceLightingIdType</i>	1:1	Identifier of PLACE LIGHTING.
	<b>Lighting</b>	<i>LightingEnum</i>	0:1	Nature of Lighting.
	<b>AlwaysLit</b>	<i>boolean</i>	0:1	Whether Place is always lit.

**PLACE SIGN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Sign Equipment MODEL.PLACE SIGN)

Sign with the name of a PLACE on it.

## PLACE SIGN – Relations

Source	Target
<b>PLACE SIGN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SIGN EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PLACE SIGN</b> <i>Role:</i> referring to <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>PLACE</b> <i>Role:</i> a reference for <i>Cardinality:</i> 0..1

## PLACE SIGN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	SIGN EQUIPMENT	::>	<b>PLACE SIGN</b> inherits from <b>SIGN EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of PLACE SIGN.
	<b>PlaceName</b>	MultilingualString	1:1	Place Name shown on PLACE SIGN.

## POINT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link MODEL.POINT)

A 0-dimensional node of the network used for the spatial description of the network. POINTs may be located by a LOCATION in a given LOCATING SYSTEM.

## POINT – Relations

Source	Target
<b>POINT</b> <i>Role:</i> included in <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>GROUP OF POINTS</b> <i>Role:</i> composed of <i>Cardinality:</i> *
<b>ZONE</b> <i>Role:</i> represented by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> functional centroid for <i>Cardinality:</i> 0..1
<b>POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>LINK</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>POINT</b> <i>Role:</i> used as target in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>COMPLEX FEATURE PROJECTION</b> <i>Role:</i> to <i>Cardinality:</i> *
<b>POINT</b> <i>Role:</i> included in <i>Cardinality:</i> 2..* <i>Relation type:</i> Association	<b>COMMON SECTION</b> <i>Role:</i> comprising <i>Cardinality:</i> *
<b>POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>SIMPLE FEATURE</b> <i>Role:</i> a view of <i>Cardinality:</i> *

<b>POINT</b> <i>Role:</i> used as source in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT PROJECTION</b> <i>Role:</i> calling as source <i>Cardinality:</i> 0..*
<b>POINT</b> <i>Role:</i> used as target in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT PROJECTION</b> <i>Role:</i> to <i>Cardinality:</i> *
<b>LINK</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>COMPLEX FEATURE</b> <i>Role:</i> represented by <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> representation for <i>Cardinality:</i> 0..1
<b>POINT</b> <i>Role:</i> used as target in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ZONE PROJECTION</b> <i>Role:</i> to <i>Cardinality:</i> *
<b>POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT ON LINK</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>TYPE OF POINT</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>LOCATION</b> <i>Role:</i> locating <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> located by <i>Cardinality:</i> 1
<b>POINT</b> <i>Role:</i> the location of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>PASSENGER INFORMATION EQUIPMENT</b> <i>Role:</i> located at <i>Cardinality:</i> *
<b>SCHEDULED STOP POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>TRAFFIC CONTROL POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>ACTIVATION POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>

<b>FLEXIBLE POINT PROPERTIES</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..1 <i>Relation type:</i> Aggregation	<b>POINT</b> <i>Role:</i> characterised by <i>Cardinality:</i> 1
<b>TIMING POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTE POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>INFRASTRUCTURE POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PART</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>TRANSFER END</b> <i>Role:</i> a view of <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 0..1
<b>ACCESS END</b> <i>Role:</i> a view of <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 0..1
<b>POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>LAYER</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY PART</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1

## POINT – Attributes

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PointIdType</i>	1:1	Identifier of POINT.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of POINT.

## POINT IN JOURNEY PATTERN

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Journey Pattern MODEL.POINT IN JOURNEY PATTERN)

A SCHEDULED STOP POINT or TIMING POINT in a JOURNEY PATTERN with its order in that JOURNEY PATTERN.

## POINT IN JOURNEY PATTERN – Relations

Source	Target
<b>NOTICE ASSIGNMENT</b> <i>Role: to</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>POINT IN JOURNEY PATTERN</b> <i>Role: end of</i> <i>Cardinality: 0..1</i>
<b>POINT</b> <i>Role: viewed as</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT IN JOURNEY PATTERN</b> <i>Role: a view of</i> <i>Cardinality: *</i>
<b>ORGANISATIONAL UNIT</b> <i>Role: responsible for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>POINT IN JOURNEY PATTERN</b> <i>Role: by default managed by</i> <i>Cardinality: *</i>
<b>POINT IN JOURNEY PATTERN</b> <i>Role: on</i> <i>Cardinality: 1..*</i> <i>Relation type: Association</i>	<b>JOURNEY PATTERN</b> <i>Role: made up of</i> <i>Cardinality: 1</i>
<b>POINT IN JOURNEY PATTERN</b> <i>Role: start of</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>NOTICE ASSIGNMENT</b> <i>Role: from</i> <i>Cardinality: *</i>
<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTING CONSTRAINT ZONE</b> <i>Role: constraint for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>POINT IN JOURNEY PATTERN</b> <i>Role: constrained by</i> <i>Cardinality: 0..*</i>
<b>POINT IN JOURNEY PATTERN</b> <i>Role: passed at</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIMETABLED PASSING TIME</b> <i>Role: at</i> <i>Cardinality: *</i>
<b>TYPE OF FLEXIBLE SERVICE</b> <i>Role: classifying</i> <i>Cardinality: 1</i> <i>Relation type: Aggregation</i>	<b>POINT IN JOURNEY PATTERN</b> <i>Role: classified by</i> <i>Cardinality: *</i>
<b>POINT IN JOURNEY PATTERN</b> <i>Role: prescribing</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>DESTINATION DISPLAY</b> <i>Role: adapted for</i> <i>Cardinality: 0..1</i>

## POINT IN JOURNEY PATTERN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	POINT IN LINK SEQUENCE	::>	<b>POINT IN JOURNEY PATTERN</b> inherits from <b>POINT IN LINK SEQUENCE</b>
«UID»	<b>Id</b>	PointInJourneyPatternId Type	1:1	Identifier of POINT IN JOURNEY PATTERN.

## POINT IN LINK SEQUENCE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link Sequence MODEL.POINT IN LINK SEQUENCE)

A POINT in a LINK SEQUENCE indicating its order in that particular LINK SEQUENCE.

**POINT IN LINK SEQUENCE – Relations**

Source	Target
<b>LINK SEQUENCE</b> <i>Role:</i> made up of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> in <i>Cardinality:</i> 1..*
<b>POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>STOP POINT IN JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>LAYER</b> <i>Role:</i> <i>Cardinality:</i>

**POINT IN LINK SEQUENCE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PointInSequenceIdType</i>	1:1	Identifier of POINT in LINK SEQUENCE.
	<b>Order</b>	<i>positiveInteger</i>	1:1	Order of POINT in LINK SEQUENCE within sequence.

**POINT OF INTEREST**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST)

A type of *PLACE* to or through which passengers may wish to navigate as part of their journey and which is modelled in detail by journey planners.



## POINT OF INTEREST – Relations

Source	Target
<b>POINT OF INTEREST</b> Role: Cardinality: 0..* Relation type: Association	<b>COUNTRY</b> Role: Cardinality: 1
<b>POINT OF INTEREST</b> Role: part of Cardinality: 0..* Relation type: Association	<b>POINT OF INTEREST</b> Role: containing Cardinality: 0..1
<b>POINT OF INTEREST ENTRANCE</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>POINT OF INTEREST</b> Role: entered through Cardinality: 1
<b>POINT OF INTEREST CLASSIFICATION MEMBERSHIP</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>POINT OF INTEREST</b> Role: classified as Cardinality: 1
<b>POINT OF INTEREST SPACE</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>POINT OF INTEREST</b> Role: containing Cardinality: 0..1
<b>STOP PLACE</b> Role: servicing Cardinality: 0..* Relation type: Association	<b>POINT OF INTEREST</b> Role: serviced by Cardinality: 0..*
<b>POINT OF INTEREST</b> Role: Cardinality: Relation type: Generalization	<b>SITE</b> Role: Cardinality:
<b>POINT OF INTEREST</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>POINT OF INTEREST</b> Role: Cardinality: *

## POINT OF INTEREST – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	<i>SITE</i>	::>	<b>POINT OF INTEREST</b> inherits from <b>SITE</b>
«UID»	<i>id</i>	<i>PointOfInterestIdType</i>	1:1	Identifier of :POINT OF INTEREST.

## POINT OF INTEREST CLASSIFICATION

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST CLASSIFICATION)

A classification of a POINT OF INTEREST that may be used in a CLASSIFICATION HIERARCHY to categorise the point by nature of interest using a systematic taxonomy, for example Museum, Football, Stadium.

## POINT OF INTEREST CLASSIFICATION – Relations

Source	Target
<b>POINT OF INTEREST CLASSIFICATION HIERARCHY</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>POINT OF INTEREST CLASSIFICATION</b> <i>Role: classified as</i> <i>Cardinality: 1</i>
<b>POINT OF INTEREST CLASSIFICATION HIERARCHY</b> <i>Role: comprising</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>POINT OF INTEREST CLASSIFICATION</b> <i>Role: used in</i> <i>Cardinality: 1</i>
<b>POINT OF INTEREST CLASSIFICATION MEMBERSHIP</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>POINT OF INTEREST CLASSIFICATION</b> <i>Role: super category for</i> <i>Cardinality: 1</i>
<b>POINT OF INTEREST CLASSIFICATION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## POINT OF INTEREST CLASSIFICATION – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PoiClassificationIdType</i>	1:1	Identifier of a POINT OF INTEREST CLASSIFICATION.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of a POINT OF INTEREST CLASSIFICATION.

## POINT OF INTEREST CLASSIFICATION HIERARCHY

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST CLASSIFICATION HIERARCHY)

A logical hierarchy for organizing POINT OF INTEREST CLASSIFICATIONS. A POINT OF INTEREST CLASSIFICATION can belong to more than one hierarchy.

## POINT OF INTEREST CLASSIFICATION HIERARCHY – Relations

Source	Target
<b>POINT OF INTEREST CLASSIFICATION HIERARCHY</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>POINT OF INTEREST CLASSIFICATION</b> <i>Role: classified as</i> <i>Cardinality: 1</i>
<b>POINT OF INTEREST CLASSIFICATION HIERARCHY</b> <i>Role: comprising</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>POINT OF INTEREST CLASSIFICATION</b> <i>Role: used in</i> <i>Cardinality: 1</i>
<b>POINT OF INTEREST CLASSIFICATION HIERARCHY</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**POINT OF INTEREST CLASSIFICATION HIERARCHY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	<i>PoiHierarchyIdType</i>	1:1	Identifier of a POINT OF INTEREST CLASSIFICATION HIERARCHY.

**POINT OF INTEREST CLASSIFICATION MEMBERSHIP**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST CLASSIFICATION MEMBERSHIP)

The POINT OF INTEREST CLASSIFICATION and POINT OF INTEREST CLASSIFICATION MEMBERSHIP are used to encode a hierarchy of classifications to index and find different types of POINT OF INTEREST. For example, *Educational Building -> School -> Primary School*, or *Cultural Attraction -> Museum -> Art Museum*.

POINT OF INTEREST CLASSIFICATION MEMBERSHIP does not have to be disjoint, i.e. the same category may appear in more than one classification.

**POINT OF INTEREST CLASSIFICATION MEMBERSHIP – Relations**

Source	Target
<b>POINT OF INTEREST CLASSIFICATION MEMBERSHIP</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>POINT OF INTEREST</b> Role: classified as Cardinality: 1
<b>POINT OF INTEREST CLASSIFICATION MEMBERSHIP</b> Role: for Cardinality: 0..* Relation type: Association	<b>POINT OF INTEREST CLASSIFICATION</b> Role: super category for Cardinality: 1

**POINT OF INTEREST CLASSIFICATION MEMBERSHIP – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of POINT OF INTEREST CLASSIFICATION MEMBERSHIP.

**POINT OF INTEREST COMPONENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST COMPONENT)

*Specialisation of SITE COMPONENT for COMPONENT of POINT OF INTEREST. Usually used for POINT OF INTEREST SPACES.*

**POINT OF INTEREST COMPONENT – Relations**

Source	Target
<b>POINT OF INTEREST SPACE</b> Role: Cardinality: Relation type: Generalization	<b>POINT OF INTEREST COMPONENT</b> Role: Cardinality:
<b>POINT OF INTEREST COMPONENT</b> Role: Cardinality: Relation type: Generalization	<b>SITE COMPONENT</b> Role: Cardinality:

**POINT OF INTEREST COMPONENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>SITE COMPONENT</i>	::>	<b>POINT OF INTEREST COMPONENT</b> inherits from <b>SITE COMPONENT</b>
«UID»	<b>Id</b>	<i>PointOfInterestComponentIdType</i>	1:1	Identifier of POINT OF INTEREST COMPONENT.
	<b>Label</b>	<i>normalizedString</i>	0:1	Label given to POINT OF INTEREST COMPONENT.

**POINT OF INTEREST ENTRANCE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST ENTRANCE)

Specialisation of ENTRANCE to enter/exit a POINT OF INTEREST.

**POINT OF INTEREST ENTRANCE – Relations**

Source	Target
<b>POINT OF INTEREST ENTRANCE</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>POINT OF INTEREST</b> Role: entered through Cardinality: 1
<b>POINT OF INTEREST ENTRANCE</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>POINT OF INTEREST SPACE</b> Role: entered through Cardinality: 0..1
<b>POINT OF INTEREST ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>ENTRANCE</b> Role: Cardinality:

**POINT OF INTEREST ENTRANCE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>ENTRANCE</i>	::>	<b>POINT OF INTEREST ENTRANCE</b> inherits from <b>ENTRANCE</b>
«UID»	<b>Id</b>	<i>PoiEntranceId</i>	1:1	Identifier of a POINT OF INTEREST ENTRANCE

**POINT OF INTEREST SPACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST SPACE)

Specialisation of POINT OF INTEREST COMPONENT for SPACES. A physical area within the POINT OF INTEREST, such as a concourse.

## POINT OF INTEREST SPACE – Relations

Source	Target
<b>POINT OF INTEREST SPACE</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>POINT OF INTEREST</b> <i>Role:</i> containing <i>Cardinality:</i> 0..1
<b>POINT OF INTEREST SPACE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF POINT OF INTEREST SPACE</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1
<b>POINT OF INTEREST ENTRANCE</b> <i>Role:</i> to <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>POINT OF INTEREST SPACE</b> <i>Role:</i> entered through <i>Cardinality:</i> 0..1
<b>POINT OF INTEREST SPACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT OF INTEREST COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>POINT OF INTEREST SPACE</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF PASSAGE</b> <i>Role:</i> a characterisation of <i>Cardinality:</i> 0..1

## POINT OF INTEREST SPACE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>POINT OF INTEREST COMPONENT</i>	::>	<b>POINT OF INTEREST SPACE</b> inherits from <b>POINT OF INTEREST COMPONENT</b>
«UID»	<i>id</i>	<i>PointOfInterestSpaceIdType</i>	1:1	Identifier of POINT OF INTEREST ACCESS SPACE.

## POINT OF INTEREST VEHICLE ENTRANCE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.POINT OF INTEREST VEHICLE ENTRANCE)

A physical entrance or exit to/from a POINT OF INTEREST for vehicles .

## POINT OF INTEREST VEHICLE ENTRANCE – Relations

Source	Target
<b>POINT OF INTEREST VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i>

## POINT OF INTEREST VEHICLE ENTRANCE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>VEHICLE ENTRANCE</i>	::>	<b>POINT OF INTEREST VEHICLE ENTRANCE</b> inherits from <b>VEHICLE ENTRANCE</b>
«UID»	<i>id</i>	<i>PoiVehicleEntranceId</i>	1:1	Identifier of a POINT OF INTEREST VEHICLE ENTRANCE.

**POINT ON LINK**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link MODEL.POINT ON LINK)

A POINT on a LINK which is not needed for LINK definition, but may be used for other purposes, e.g. for purposes of automatic vehicle monitoring, passenger information or for driver information.

**POINT ON LINK – Relations**

Source	Target
<b>POINT</b> Role: viewed as Cardinality: 1 Relation type: Association	<b>POINT ON LINK</b> Role: a view of Cardinality: *
<b>LINK PROJECTION</b> Role: ending at Cardinality: * Relation type: Association	<b>POINT ON LINK</b> Role: end of Cardinality: 1
<b>LINK</b> Role: passing through Cardinality: 1 Relation type: Association	<b>POINT ON LINK</b> Role: located on Cardinality: *
<b>LINK PROJECTION</b> Role: starting at Cardinality: * Relation type: Association	<b>POINT ON LINK</b> Role: start of Cardinality: 1
<b>POINT ON LINK</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

**POINT ON LINK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PointOnLinkIdType</i>	1:1	Identifier of POINT On Link.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of POINT ON LINK.
	<b>Order</b>	<i>Integer</i>	1:1	Order of POINT along link relative to other POINTs ON LINK
	<b>DistanceFromStart</b>	<i>Distance</i>	0:1	Distance of POINT along LINK.

**POINT ON ROUTE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.POINT ON ROUTE)

A ROUTE POINT used to define a ROUTE with its order on that ROUTE.

**POINT ON ROUTE – Relations**

Source	Target
<b>ROUTE</b> <i>Role: through</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT ON ROUTE</b> <i>Role: on</i> <i>Cardinality: 1..*</i>
<b>ROUTE POINT</b> <i>Role: viewed as</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT ON ROUTE</b> <i>Role: a view of</i> <i>Cardinality: *</i>
<b>POINT ON ROUTE</b> <i>Role: characterised by</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>FLEXIBLE POINT PROPERTIES</b> <i>Role: characterising</i> <i>Cardinality: 0..1</i>
<b>TURN STATION</b> <i>Role: from</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>POINT ON ROUTE</b> <i>Role: start of</i> <i>Cardinality: 1..*</i>
<b>TURN STATION</b> <i>Role: to</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>POINT ON ROUTE</b> <i>Role: end of</i> <i>Cardinality: 1..*</i>

**POINT ON ROUTE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PointOnRouteIdType</i>	1:1	Identifier of POINT ON ROUTE.
	<b>Order</b>	<i>int</i>	1:1	Order of POINT ON ROUTE in a given ROUTE.

**POINT PROJECTION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Projection MODEL.POINT PROJECTION)

An oriented correspondence from one POINT of a source layer, onto a entity in a target layer: e.g. POINT, LINK, LINK SEQUENCE, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.

**POINT PROJECTION – Relations**

Source	Target
<b>POINT PROJECTION</b> <i>Role: concerning</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TYPE OF PROJECTION</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>COMPLEX FEATURE</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>
<b>LINK SEQUENCE</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>
<b>LINK</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>
<b>POINT</b> <i>Role: used as source in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT PROJECTION</b> <i>Role: calling as source</i> <i>Cardinality: 0..*</i>
<b>POINT</b> <i>Role: used as target in</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>POINT PROJECTION</b> <i>Role: to</i> <i>Cardinality: *</i>

**POINT PROJECTION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PointProjectionIdType</i>	1:1	Identifier of POINT PROJECTION.
	<b>Distance</b>	<i>DistanceType</i>	0:1	Distance along projection

**POSTAL ADDRESS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Topographic Place MODEL.POSTAL ADDRESS)

A specification of ADDRESS refining it by using the attributes used for conventional identification for mail. Comprises variously a building Identifier, Street name, Post code and other descriptors.

**POSTAL ADDRESS – Relations**

Source	Target
<b>POSTAL ADDRESS</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>ADDRESS</b> <i>Role:</i> <i>Cardinality:</i>
<b>POSTAL ADDRESS</b> <i>Role: locating</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>ORGANISATION</b> <i>Role: located at</i> <i>Cardinality: 0..*</i>
<b>CUSTOMER SERVICE</b> <i>Role: described by</i> <i>Cardinality:</i> <i>Relation type: Association</i>	<b>POSTAL ADDRESS</b> <i>Role: description of</i> <i>Cardinality: 0..1</i>



## POSTAL ADDRESS – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	ADDRESS	::>	<b>POSTAL ADDRESS</b> inherits from <b>ADDRESS</b>
«UID»	<b>Id</b>	PostalAddressIdType	1:1	Identifier of POSTAL ADDRESS.
	<b>HouseNumber</b>	normalizedString	0:1	House or building number of POSTAL ADDRESS.
	<b>BuildingName</b>	normalizedString	0:1	Building name of POSTAL ADDRESS.
	<b>AddressLine1</b>	normalizedString	0:1	First line of POSTAL ADDRESS.
	<b>Street</b>	normalizedString	0:1	Street name of POSTAL ADDRESS.
	<b>Town</b>	normalizedString	0:1	Town of POSTAL ADDRESS.
	<b>PostCode</b>	PostCodeType	0:1	Post code
	<b>PostCodeExtension</b>	normalizedString	0:1	Post code extension
	<b>Province</b>	normalizedString	0:1	Post code

## PROPERTY OF DAY

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.PROPERTY OF DAY)

A property which a day may possess, such as school holiday, weekday, summer, winter etc.

## PROPERTY OF DAY – Relations

Source	Target
<b>PROPERTY OF DAY</b> Role: used to describe Cardinality: * Relation type: Association	<b>DAY TYPE</b> Role: described by Cardinality: *
<b>DAY OF WEEK</b> Role: used to define Cardinality: * Relation type: Association	<b>PROPERTY OF DAY</b> Role: defined as Cardinality: 0..1

## PROPERTY OF DAY – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of PROPERTY OF DAY.
	<b>Name</b>	MultilingualString	0:1	Name of PROPERTY OF DAY.
	<b>Description</b>	MultilingualString	0:1	Description of PROPERTY OF DAY.
	<b>WeekOfMonth</b>	WeekOfMonthEnum	0:5	Weeks of month (1-5) assigned to PROPERTY OF DAY.
	<b>DayOfYear</b>	monthDay	0:1	For those day types that occur on the same day every year, month and day, assigned to PROPERTY OF DAY.
	<b>Month</b>	month	0:1	
	<b>Season</b>	SeasonEnum	0:4	Season of year assigned to PROPERTY OF DAY.
	<b>HolidayType</b>	HolidayTypeEnum	0:5	Holiday type assigned to PROPERTY OF DAY.
	<b>HolidayCountry</b>	CountryEnum	0:*	Country of Holiday type assigned to PROPERTY OF DAY.
	<b>Tide</b>	TideEnum	0:4	State of tide assigned to PROPERTY OF DAY.

**PSYCHOSENSORY NEED**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.PSYCHOSENSORY NEED)

A specific USER NEED, i.e. a constraint of a passenger as regards his psycho-sensory impairments, such as visual impairment, auditory impairment, averse to confined spaces, etc.

**PSYCHOSENSORY NEED – Relations**

Source	Target
<b>PSYCHOSENSORY NEED</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF USER NEED</b> Role: Cardinality:

**PSYCHOSENSORY NEED – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	TYPE OF USER NEED	::>	<b>PSYCHOSENSORY NEED</b> inherits from <b>TYPE OF USER NEED</b>
«UID»	<b>Id</b>		1:1	Identifier of PSYCHOSENSORY NEED.
	<b>Need</b>	PsychosensoryNeedEnum	1:1	Type of Psychosensory need

**PURPOSE OF EQUIPMENT PROFILE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.PURPOSE OF EQUIPMENT PROFILE)

A functional purpose which requires a certain set of equipment of different types put together in a VEHICLE EQUIPMENT PROFILE.

**PURPOSE OF EQUIPMENT PROFILE – Relations**

Source	Target
<b>PURPOSE OF EQUIPMENT PROFILE</b> Role: defining Cardinality: 1 Relation type: Association	<b>VEHICLE EQUIPMENT PROFILE</b> Role: defined for Cardinality: *
<b>PURPOSE OF EQUIPMENT PROFILE</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1

**PURPOSE OF EQUIPMENT PROFILE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	PurposeOfEquipmentIdType	1:1	Identifier of PURPOSE OF EQUIPMENT PROFILE.

**PURPOSE OF GROUPING**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Grouping MODEL.PURPOSE OF GROUPING)

Functional purpose for which GROUPs of elements are defined. The PURPOSE OF GROUPING may be restricted to one or more types of the given object.

#### PURPOSE OF GROUPING – Relations

Source	Target
<b>PURPOSE OF GROUPING</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>GROUP OF LINK SEQUENCES</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>GROUP OF POINTS</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF LINK SEQUENCE</b> <i>Role:</i> allowed for <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF LINK</b> <i>Role:</i> allowed for <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF POINT</b> <i>Role:</i> allowed for <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>GROUP OF LINKS</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>GROUP OF ENTITIES</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PURPOSE OF GROUPING</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1
<b>TYPE OF ENTITY</b> <i>Role:</i> allowed for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> 0..*
<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>TYPE OF JOURNEY PATTERN</b> <i>Role:</i> allowed for <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> the classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>GROUP OF LINES</b> <i>Role:</i> classified by <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1

#### PURPOSE OF GROUPING – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PurposeOfGroupingIdType</i>	1:1	Identifier of PURPOSE OF GROUPING.

**PURPOSE OF JOURNEY PARTITION**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Coupled Journey MODEL.PURPOSE OF JOURNEY PARTITION)

An operational purpose changing within a JOURNEY PATTERN and with this subdividing the SERVICE JOURNEY into JOURNEY PARTs.

**PURPOSE OF JOURNEY PARTITION – Relations**

Source	Target
<b>PURPOSE OF JOURNEY PARTITION</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>PURPOSE OF JOURNEY PARTITION</b> Role: causing Cardinality: 1 Relation type: Association	<b>JOURNEY PART</b> Role: caused by Cardinality: 1..*

**PURPOSE OF JOURNEY PARTITION – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	PurposeOfJourneyPartiti onIdType	1:1	Identifier of PURPOSE OF JOURNEY PARTITION.

**QUAY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.QUAY)

A place such as platform, stance, or quayside where passengers have access to PT vehicles, Taxi, cars or other means of transportation. A QUAY may serve one or more VEHICLE STOPPING PLACES and be associated with one or more SCHEDULED STOP POINTS. A QUAY may contain other sub QUAYs. A child QUAY must be physically contained within its parent QUAY.

## QUAY – Relations

Source	Target
<b>BOARDING POSITION</b> Role: a part of Cardinality: 0..* Relation type: Aggregation	<b>QUAY</b> Role: composed by Cardinality: 1
<b>VEHICLE QUAY ALIGNMENT</b> Role: serving Cardinality: 0..* Relation type: Association	<b>QUAY</b> Role: linked to Cardinality: 1
<b>STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>QUAY</b> Role: to Cardinality: 0..1
<b>QUAY</b> Role: in Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE</b> Role: containing Cardinality: 1
<b>QUAY</b> Role: Cardinality: Relation type: Generalization	<b>STOP PLACE SPACE</b> Role: Cardinality:
<b>QUAY</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF QUAY</b> Role: a classification for Cardinality: 0..1
<b>QUAY</b> Role: Cardinality: 0..* Relation type: Association	<b>QUAY</b> Role: Cardinality: 1

## QUAY – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	STOP PLACE SPACE	::>	<b>QUAY</b> inherits from <b>STOP PLACE SPACE</b>
«UID»	<b>Id</b>	QuayIdType	1:1	Identifier of QUAY.
	<b>DestinationDisplay</b>	MultilingualString	0:1	Destination shown on QUAY.
	<b>CompassBearing</b>	CompassBearingType	0:1	Bearing of street relative to QUAY in degrees.
	<b>CompassOctant</b>	CompassOctantEnum	0:1	Bearing of street relative to QUAY in compass quadrant.

## QUEUEING EQUIPMENT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.QUEUEING EQUIPMENT)

Specialisation of PLACE ACCESS EQUIPMENT dedicated to queuing.

## QUEUEING EQUIPMENT – Relations

Source	Target
<b>QUEUEING EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:

**QUEUING EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>PLACE ACCESS EQUIPMENT</i>	::>	<b>QUEUING EQUIPMENT</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>	<i>QueuingEquipmentIdType</i>	1:1	Identifier of QUEUING EQUIPMENT.
	<b>NumberOfServers</b>	<i>integer</i>	0:1	Number of tills or servers serving QUEUE.
	<b>RailedQueue</b>	<i>boolean</i>	0:1	Whether QUEUE is bounded by rails.
	<b>TicketedQueue</b>	<i>boolean</i>	0:1	Whether QUEUE is controlled by issuing priority tickets.

**RAILWAY ELEMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.RAILWAY ELEMENT)

A type of INFRASTRUCTURE LINK used to describe a railway network.

**RAILWAY ELEMENT – Relations**

Source	Target
<b>RAILWAY ELEMENT</b> Role: Cardinality: Relation type: Generalization	<b>INFRASTRUCTURE LINK</b> Role: Cardinality:
<b>RAILWAY ELEMENT</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**RAILWAY ELEMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>INFRASTRUCTURE LINK</i>	::>	<b>RAILWAY ELEMENT</b> inherits from <b>INFRASTRUCTURE LINK</b>
«UID»	<b>Id</b>	<i>RailwayElementIdType</i>	1:1	Identifier of RAILWAY ELEMENT.

**RAILWAY JUNCTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.RAILWAY JUNCTION)

A type of INFRASTRUCTURE POINT used to describe a railway network.

**RAILWAY JUNCTION – Relations**

Source	Target
<b>RAILWAY JUNCTION</b> Role: Cardinality: Relation type: Generalization	<b>INFRASTRUCTURE POINT</b> Role: Cardinality:
<b>RAILWAY JUNCTION</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**RAILWAY JUNCTION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INFRASTRUCTURE POINT	::>	<b>RAILWAY JUNCTION</b> inherits from <b>INFRASTRUCTURE POINT</b>
«UID»	<b>Id</b>	<i>RailwayJunctionIdType</i>	1:1	Identifier of RAILWAY JUNCTION.

**RAMP EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.RAMP EQUIPMENT)

Specialisation of PLACE ACCESS EQUIPMENT for ramps (provides ramp characteristics like length, gradient, etc.).

**RAMP EQUIPMENT – Relations**

Source	Target
<b>RAMP EQUIPMENT</b> Role: characterised by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF HANDRAIL</b> Role: a characteriation for Cardinality: <b>0..1</b>
<b>RAMP EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:

**RAMP EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE ACCESS EQUIPMENT	::>	<b>RAMP EQUIPMENT</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>	<i>RampIdType</i>	1:1	Identifier of RAMP.
	<b>Length</b>	<i>LengthType</i>	0:1	Length of RAMP.
	<b>Gradient</b>	<i>decimal</i>	0:1	Gradient of RAMP.
	<b>Pedestal</b>	<i>boolean</i>	0:1	Whether RAMP has pedestal.
	<b>HandrailHeight</b>	<i>LengthType</i>	0:1	Height of Handrail on RAMP.
	<b>TactileGuidanceStrips</b>	<i>boolean</i>	0:1	Whether RAMP has tactile guidance strips.
	<b>VisualGuidanceBands</b>	<i>boolean</i>	0:1	Whether RAMP has visual guidance strips.
	<b>Temporary</b>	<i>boolean</i>	0:1	Whether RAMP is temporary.
	<b>SuitableForCycles</b>	<i>boolean</i>	0:1	Whether RAMP is suitable for cycles.

**RELIEF OPPORTUNITY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.RELIEF OPPORTUNITY)

A time in a BLOCK where a vehicle passes a RELIEF POINT. This opportunity may or may not be actually used for a relief.

**RELIEF OPPORTUNITY – Relations**

Source	Target
<b>RELIEF POINT</b> <i>Role:</i> the location of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>RELIEF OPPORTUNITY</b> <i>Role:</i> at <i>Cardinality:</i> *
<b>BLOCK</b> <i>Role:</i> including <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>RELIEF OPPORTUNITY</b> <i>Role:</i> in <i>Cardinality:</i> *

**RELIEF OPPORTUNITY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ReliefOpportunityIdType</i>	1:1	Identifier of RELIEF OPPORTUNITY.
	<b>Name</b>	<i>MultilingualString</i>	0:1	NAME of RELIEF OPPORTUNITY.
	<b>Time</b>	<i>time</i>	1:1	TIME at which RELIEF OPPORTUNITY takes place.
	<b>Description</b>	<i>MultilingualString</i>	0:1	DESCRIPTION of RELIEF OPPORTUNITY.

**RELIEF POINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Vehicle & Crew Point MODEL.RELIEF POINT)

A TIMING POINT where a relief is possible, i.e. a driver may take on or hand over a vehicle. The vehicle may sometimes be left unattended.

**RELIEF POINT – Relations**

Source	Target
<b>PARKING POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>RELIEF POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>CREW BASE</b> <i>Role:</i> manager of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>RELIEF POINT</b> <i>Role:</i> managed by <i>Cardinality:</i> *
<b>RELIEF POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>TIMING POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>RELIEF POINT</b> <i>Role:</i> the location of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>RELIEF OPPORTUNITY</b> <i>Role:</i> at <i>Cardinality:</i> *
<b>RELIEF POINT</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**RELIEF POINT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>TIMING POINT</i>	::>	<b>RELIEF POINT</b> inherits from <b>TIMING POINT</b>
«UID»	<b>Id</b>	<i>ReliefPointIdType</i>	1:1	Identifier of RELIEF POINT.



**RESOURCE FRAME**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Explicit Frames MODEL .CC Resource Frame MODEL.RESOURCE FRAME)

A set of resource data to which the same VALIDITY CONDITIONS have been assigned.

**RESOURCE FRAME – Relations**

<b>Source</b>	<b>Target</b>
<b>PURPOSE OF EQUIPMENT PROFILE</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>EQUIPMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>GROUP OF OPERATORS</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>TYPE OF PROJECTION</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>TYPE OF LINK SEQUENCE</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>TYPE OF POINT</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>TYPE OF LINK</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>ORGANISATION</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>RESPONSIBILITY SET</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1
<b>RESOURCE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>RESOURCE FRAME</b> Role: Cardinality: Relation type: Aggregation	<b>COMPOSITE FRAME</b> Role: Cardinality:
<b>TYPE OF FRAME</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1

<b>TYPE OF VERSION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>TYPE OF ZONE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>PURPOSE OF GROUPING</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>MODE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>OPERATIONAL CONTEXT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>VEHICLE TYPE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>VEHICLE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>VEHICLE MODEL</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>VEHICLE EQUIPMENT PROFILE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>SCHEMATIC MAP</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>DATA SOURCE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>
<b>GROUP OF ENTITIES</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>

**RESOURCE FRAME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	<b>RESOURCE FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<b>Id</b>		1:1	Identifier of RESOURCE FRAME

**RESPONSIBILITY ROLE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Responsibility Role MODEL.RESPONSIBILITY ROLE)

A particular role an ORGANISATION or an ORGANISATION PART is playing as regards certain data, for example data origination, data augmentation, data aggregation, data distribution, planning, operation, control, ownership etc).

**RESPONSIBILITY ROLE – Relations**

Source	Target
<b>RESPONSIBILITY ROLE</b> Role: causing Cardinality: 1 Relation type: Association	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> Role: caused by Cardinality: 0..*
<b>TYPE OF RESPONSIBILITY ROLE</b> Role: a classification for Cardinality: 0..1 Relation type: Association	<b>RESPONSIBILITY ROLE</b> Role: classified as Cardinality: 0..*

**RESPONSIBILITY ROLE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identified of RESPONSIBILITY ROLE.

**RESPONSIBILITY ROLE ASSIGNMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Responsibility Role MODEL.RESPONSIBILITY ROLE ASSIGNMENT)

The assignment of one or more roles to an ORGANISATION or an ORGANISATION PART as regards the responsibility it will have as regards specific data (e.g. ownership, planning, etc.) and the management of this data (e.g. distribution, updates, etc.).

**RESPONSIBILITY ROLE ASSIGNMENT – Relations**

Source	Target
<b>ORGANISATION PART</b> Role: in charge of Cardinality: 0..1 Relation type: Association	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> Role: delegated to Cardinality: 0..*
<b>ADMINISTRATIVE ZONE</b> Role: in charge of Cardinality: 0..1 Relation type: Association	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> Role: delegated to Cardinality: 0..*
<b>RESPONSIBILITY ROLE ASSIGNMENT</b> Role: assigned to Cardinality: 0..* Relation type: Association	<b>ORGANISATION</b> Role: in charge of Cardinality: 1
<b>RESPONSIBILITY SET</b> Role: composed of Cardinality: 1 Relation type: Association	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> Role: part of Cardinality: 1..*
<b>RESPONSIBILITY ROLE</b> Role: causing Cardinality: 1 Relation type: Association	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> Role: caused by Cardinality: 0..*

<b>RESPONSIBILITY ROLE ASSIGNMENT</b> <i>Role: for</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>ENTITY IN VERSION</b> <i>Role: concerned by</i> <i>Cardinality: *</i>
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**RESPONSIBILITY ROLE ASSIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ResponsibilityRoleIdType</i>	1:1	Identifier of RESPONSIBILITY ROLE ASSIGNMENT.

**RESPONSIBILITY SET**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Responsibility Role MODEL.RESPONSIBILITY SET)

A list of possible responsibilities over one or more ENTITIES IN VERSION., resulting from the process of the assignment of RESPONSIBILITY ROLES (such as data origination, ownership, etc) on specific data (instances) to ORGANISATIONs or ORGANISATION PARTs.

**RESPONSIBILITY SET – Relations**

Source	Target
<b>ORGANISATION</b> <i>Role: delegating</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>RESPONSIBILITY SET</b> <i>Role: delegated to</i> <i>Cardinality: 0..*</i>
<b>RESPONSIBILITY SET</b> <i>Role: composed of</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>RESPONSIBILITY ROLE ASSIGNMENT</b> <i>Role: part of</i> <i>Cardinality: 1..*</i>
<b>ENTITY IN VERSION</b> <i>Role: managed by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>RESPONSIBILITY SET</b> <i>Role: managing</i> <i>Cardinality: 1</i>
<b>RESPONSIBILITY SET</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>

**RESPONSIBILITY SET – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ResponsibilitySetIdType</i>	1:1	Identifier of RESPONSIBILITY SET.

**RETAIL SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.RETAIL SERVICE)

Specialisation of LOCAL SERVICE dedicated to retail services.

**RETAIL SERVICE – Relations**

Source	Target
<b>RETAIL SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>TYPE OF RETAIL SERVICE</b> Role: classification for Cardinality: 1 Relation type: Association	<b>RETAIL SERVICE</b> Role: classified as Cardinality: 0..*

**RETAIL SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>RETAIL SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>		1:1	Identifier of RETAIL SERVICE.

**RHYTHMICAL JOURNEY GROUP**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL.TI Vehicle Journey Times MODEL.RHYTHMICAL JOURNEY GROUP)

A group of VEHICLE JOURNEYS following the same JOURNEY PATTERN having the same "rhythm" every hour (for example runs at xxh10, xxh25 and xxh45... ) between a specified start and end time.

**RHYTHMICAL JOURNEY GROUP – Relations**

Source	Target
<b>TIME BAND</b> Role: for Cardinality: 0..* Relation type: Association	<b>RHYTHMICAL JOURNEY GROUP</b> Role: active on Cardinality: 0..*
<b>RHYTHMICAL JOURNEY GROUP</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY FREQUENCY GROUP</b> Role: Cardinality:
<b>RHYTHMICAL JOURNEY GROUP</b> Role: defines Cardinality: 1..* Relation type: Association	<b>TEMPLATE VEHICLE JOURNEY</b> Role: is defined by Cardinality: 1..*

**RHYTHMICAL JOURNEY GROUP – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY FREQUENCY GROUP	::>	<b>RHYTHMICAL JOURNEY GROUP</b> inherits from <b>JOURNEY FREQUENCY GROUP</b>
«UID»	<b>Id</b>	RhythmcalJourneyGroup IdType	1:1	Identifier of RHYTHMICAL JOURNEY GROUP.

**ROAD ADDRESS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Topographic Place MODEL.ROAD ADDRESS)

Specialization of ADDRESS refining it by using the characteristics such as road number, and name used for conventional identification of along a road.

## ROAD ADDRESS – Relations

Source	Target
<b>ROAD ADDRESS</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ADDRESS</b> <i>Role:</i> <i>Cardinality:</i>

## ROAD ADDRESS – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	ADDRESS	::>	<b>ROAD ADDRESS</b> inherits from <b>ADDRESS</b>
«UID»	<b>Id</b>	<i>RoadAddressIdType</i>	1:1	Identifier of a ROAD ADDRESS.
	<b>RoadNumber</b>	<i>normalizedString</i>	0:1	Number of ROAD.
	<b>RoadName</b>	<i>normalizedString</i>	0:1	Name of ROAD.
	<b>BearingCompass</b>	<i>CompassEnum</i>	0:1	Bearing of ROAD at point of ADDRESS.
	<b>BearingDegrees</b>	<i>integer</i>	0:1	BEARING in degrees at point of ADDRESS.
	<b>OddNumberRange</b>	<i>normalizedString</i>	0:1	Odd number range of ADDRESS.
	<b>EvenNumberRange</b>	<i>normalizedString</i>	0:1	Even number range of ADDRESS on road.

## ROAD ELEMENT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.ROAD ELEMENT)

A type of INFRASTRUCTURE LINK used to describe a road network.

## ROAD ELEMENT – Relations

Source	Target
<b>ROAD ELEMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INFRASTRUCTURE LINK</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROAD ELEMENT</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## ROAD ELEMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	INFRASTRUCTURE LINK	::>	<b>ROAD ELEMENT</b> inherits from <b>INFRASTRUCTURE LINK</b>
«UID»	<b>Id</b>	<i>RoadElementIdType</i>	1:1	Identifier of ROAD ELEMENT.

## ROAD JUNCTION

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.ROAD JUNCTION)

A type of INFRASTRUCTURE POINT used to describe a road network.

**ROAD JUNCTION – Relations**

Source	Target
<b>ROAD JUNCTION</b> Role: Cardinality: Relation type: Generalization	<b>INFRASTRUCTURE POINT</b> Role: Cardinality:
<b>ROAD JUNCTION</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**ROAD JUNCTION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INFRASTRUCTURE POINT	::>	<b>ROAD JUNCTION</b> inherits from <b>INFRASTRUCTURE POINT</b>
«UID»	<b>Id</b>	RoadJunctionIdType	1:1	Identifier of ROAD JUNCTION.

**ROUGH SURFACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.ROUGH SURFACE)

Specialisation of PLACE EQUIPMENT for rough surfaces, giving properties of surface texture, mainly for impaired person information.

**ROUGH SURFACE – Relations**

Source	Target
<b>ROUGH SURFACE</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF SURFACE</b> Role: a classification for Cardinality: 1
<b>ROUGH SURFACE</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:

**ROUGH SURFACE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE ACCESS EQUIPMENT	::>	<b>ROUGH SURFACE</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>	SurfaceIdType	1:1	Identifier of ROUGH SURFACE.
	<b>SuitableForCycles</b>	boolean	0:1	Whether SURFACE is suitable for cycles.

**ROUTE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.ROUTE)

An ordered list of located POINTs defining one single path through the road (or rail) network. A ROUTE may pass through the same POINT more than once.

## ROUTE – Relations

Source	Target
<b>TIMING PATTERN</b> <i>Role:</i> defined on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ROUTE</b> <i>Role:</i> comprising <i>Cardinality:</i> 1
<b>JOURNEY PATTERN</b> <i>Role:</i> on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ROUTE</b> <i>Role:</i> covered by <i>Cardinality:</i> 1
<b>FLEXIBLE ROUTE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ROUTE</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE PATTERN</b> <i>Role:</i> defined on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ROUTE</b> <i>Role:</i> comprising <i>Cardinality:</i> 1
<b>ROUTE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTE</b> <i>Role:</i> through <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT ON ROUTE</b> <i>Role:</i> on <i>Cardinality:</i> 1..*
<b>ROUTE</b> <i>Role:</i> on <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>LINE</b> <i>Role:</i> made up of <i>Cardinality:</i> 1
<b>ROUTE</b> <i>Role:</i> oriented by <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DIRECTION</b> <i>Role:</i> for <i>Cardinality:</i> 0..1
<b>ROUTE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## ROUTE – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	LINK SEQUENCE	::>	<b>ROUTE</b> inherits from <b>LINK SEQUENCE</b>
«UID»	<b>Id</b>	<i>RouteldType</i>	1:1	Identifier of ROUTE.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of ROUTE.

## ROUTE LINK

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.ROUTE LINK)

An oriented link between two ROUTE POINTs allowing the definition of a unique path through the network.



## ROUTE LINK – Relations

Source	Target
<b>ROUTE LINK</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..*
<b>ROUTE POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ROUTE LINK</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>ROUTE LINK</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ROUTE POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>ROUTE LINK</b> <i>Role:</i> operated by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE MODE</b> <i>Role:</i> operating <i>Cardinality:</i> 0..*
<b>ROUTE LINK</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>LINK</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTE LINK</b> <i>Role:</i> safely traversed by <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> safe to traverse <i>Cardinality:</i> *
<b>ROUTE LINK</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## ROUTE LINK – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	LINK	::>	<b>ROUTE LINK</b> inherits from <b>LINK</b>
«UID»	<b>Id</b>	RouteLinkIdType	1:1	Identifier of ROUTE LINK.
	<b>Distance</b>	DistanceType	0:1	Distance of ROUTE LINK. Units are as specified for Frame. Default is SI Metres

## ROUTE POINT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.ROUTE POINT)

A POINT used to define the shape of a ROUTE through the network.

## ROUTE POINT – Relations

Source	Target
<b>ROUTE POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>VIA</b> <i>Role:</i> corresponding to <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ROUTE POINT</b> <i>Role:</i> playing the role of <i>Cardinality:</i> 0..1
<b>ROUTE POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>POINT ON ROUTE</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>ROUTE POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ROUTE LINK</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>ROUTE LINK</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ROUTE POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>ROUTE POINT</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## ROUTE POINT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>POINT</i>	::>	<b>ROUTE POINT</b> inherits from <b>POINT</b>
«UID»	<b>Id</b>	<i>RoutePointIdType</i>	1:1	Identifier of ROUTE POINT.
	<b>ViaFlag</b>	<i>boolean</i>	0:1	Whether ROUTE POINT is flagged as a via point
	<b>BorderCrossing</b>	<i>boolean</i>	0:1	Whether points is a border crossing

## ROUTING CONSTRAINT ZONE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Routing Constraint MODEL.ROUTING CONSTRAINT ZONE)

A ZONE defining a ROUTING CONSTRAINT. The ZONE may be defined by its contained SCHEDULED STOP POINTS or by its boundary points.

Examples of routing constraints are : "If you board in this ZONE, you can't alight in the same ZONE".

## ROUTING CONSTRAINT ZONE – Relations

Source	Target
<b>ROUTING CONSTRAINT ZONE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ZONE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTING CONSTRAINT ZONE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>STOP AREA</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTING CONSTRAINT ZONE</b> <i>Role:</i> constrained for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>POINT IN JOURNEY PATTERN</b> <i>Role:</i> constrained by <i>Cardinality:</i> 0..*
<b>ROUTING CONSTRAINT ZONE</b> <i>Role:</i> constraint for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>LINE</b> <i>Role:</i> constrained by <i>Cardinality:</i> 0..*

## ROUTING CONSTRAINT ZONE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	ZONE	::>	<b>ROUTING CONSTRAINT ZONE</b> inherits from <b>ZONE</b>
«UID»	<b>Id</b>	<i>RoutingConstraintIdType</i>	1:1	Identifier of ROUTING CONSTRAINT.
	<b>ZoneUse</b>	<i>ZoneUseTypeEnum</i>	0:1	How zone may be used.

## RUBBISH DISPOSAL

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Passenger Service Equipment MODEL.RUBBISH DISPOSAL)

Specialization of *EQUIPMENT* for Rubbish disposal, describing rubbish types, etc.

## RUBBISH DISPOSAL – Relations

Source	Target
<b>RUBBISH DISPOSAL</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

## RUBBISH DISPOSAL – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>PASSENGER EQUIPMENT</i>	::>	<b>RUBBISH DISPOSAL</b> inherits from <b>PASSENGER EQUIPMENT</b>
«UID»	<b>Id</b>	<i>RubbishDisposalEquipmentIdType</i>	1:1	Identifier of RUBBISH DISPOSAL EQUIPMENT.
	<b>Recycling</b>	<i>boolean</i>	0:*	Whether there are rubbish separation and recycling facilities.
	<b>SharpsDisposal</b>	<i>boolean</i>	0:*	Whether there is disposal facilities for needles or medical sharps.

**SANITARY EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Passenger Service Equipment MODEL.SANITARY EQUIPMENT)

Specialisation of PASSENGER EQUIPMENT for sanitary facilities.

**SANITARY EQUIPMENT – Relations**

Source	Target
<b>SANITARY EQUIPMENT</b> Role: characterised by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF GENDER LIMITATION</b> Role: characterisation of Cardinality: <b>0..1</b>
<b>SANITARY EQUIPMENT</b> Role: characterised by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF PAYMENT METHOD</b> Role: a characterisation of Cardinality: <b>0..*</b>
<b>SANITARY EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PASSENGER EQUIPMENT</b> Role: Cardinality:
<b>SANITARY EQUIPMENT</b> Role: classified as Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF SANITARY FACILITY</b> Role: a classification for Cardinality: <b>0..1</b>
<b>SANITARY EQUIPMENT</b> Role: Cardinality: <b>0..*</b> Relation type: Aggregation	<b>WAITING ROOM EQUIPMENT</b> Role: Cardinality: <b>1</b>
<b>WAITING ROOM EQUIPMENT</b> Role: Cardinality: Relation type: Aggregation	<b>SANITARY EQUIPMENT</b> Role: Cardinality:

**SANITARY EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PASSENGER EQUIPMENT	::>	<b>SANITARY EQUIPMENT</b> inherits from <b>PASSENGER EQUIPMENT</b>
«UID»	<b>Id</b>	SanitaryEquipmentIdType	1:1	Identifier of SANITARY EQUIPMENT.
	<b>Gender</b>	GenderLimitationEnum	0:1	Gender limitation on use of facility.
	<b>Staffing</b>	StaffingEnum	0:1	Whether facility is staffed.
	<b>NumberOfToilets</b>	Integer	0:1	Number of toilets.
	<b>SanitaryFacilityList</b>	SanitaryFacilityEnum	0:*	Type of facility.
	<b>FreeEntry</b>	boolean	0:1	Whether entry is free.
	<b>Charge</b>	Amount	0:1	Charge for use.
	<b>ChangeAvailable</b>	boolean	0:1	Whether payment entry machine can give change.
	<b>WheelchairTurningCircle</b>	LengthType	0:1	Wheelchair turning circle in Toilet.
	<b>SharpsDisposal</b>	boolean	0:1	Whether there is sharps disposal.
	<b>KeyScheme</b>	normalizedString	0:1	Whether facility is accessible through a key scheme.

**SCHEDULED STOP POINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.SCHEDULED STOP POINT)

A POINT where passengers can board or alight from vehicles.

**SCHEDULED STOP POINT – Relations**

Source	Target
<b>SCHEDULED STOP POINT</b> Role: end of Cardinality: 1 Relation type: Association	<b>TRANSFER RESTRICTION</b> Role: to Cardinality: 0..*
<b>SCHEDULED STOP POINT</b> Role: viewed as Cardinality: 1 Relation type: Association	<b>STOP POINT IN JOURNEY PATTERN</b> Role: a view of Cardinality: *
<b>SERVICE EXCLUSION</b> Role: to Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: end of Cardinality: 1
<b>TYPE OF STOP POINT</b> Role: the classification for Cardinality: 0..1 Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: classified as Cardinality: *
<b>ORGANISATIONAL UNIT</b> Role: responsible for Cardinality: 0..1 Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: managed by Cardinality: *
<b>CONNECTION END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: viewed as Cardinality: 1
<b>SCHEDULED STOP POINT</b> Role: Cardinality: Relation type: Generalization	<b>POINT</b> Role: Cardinality:
<b>SCHEDULED STOP POINT</b> Role: included in Cardinality: 1..* Relation type: Association	<b>STOP AREA</b> Role: composed of Cardinality: 0..1
<b>STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: to Cardinality: 1
<b>SERVICE EXCLUSION</b> Role: from Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: start of Cardinality: 1
<b>PASSENGER STOP ASSIGNMENT</b> Role: Cardinality: 1 Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: Cardinality: 0..*
<b>VEHICLE MODE</b> Role: servicing Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: serviced by Cardinality: 0..*

<b>SCHEDULED STOP POINT</b> <i>Role:</i> included in <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>TARIFF ZONE</b> <i>Role:</i> composed of <i>Cardinality:</i> *
<b>SCHEDULED STOP POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRANSFER RESTRICTION</b> <i>Role:</i> from <i>Cardinality:</i> 0..*
<b>SCHEDULED STOP POINT</b> <i>Role:</i> used to define <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>DISPLAY ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>SCHEDULED STOP POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>SERVICE LINK</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>SERVICE LINK</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>SCHEDULED STOP POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>SERVICE JOURNEY INTERCHANGE</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>SCHEDULED STOP POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>SCHEDULED STOP POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT INTERCHANGE</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>SCHEDULED STOP POINT</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role:</i> using <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>SERVICE JOURNEY INTERCHANGE</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>DEFAULT INTERCHANGE</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>JOURNEY MEETING</b> <i>Role:</i> concerning <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> concerned by <i>Cardinality:</i> 1..*

<b>SCHEDULED STOP POINT</b> <i>Role:</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TOPOGRAPHIC PLACE</b> <i>Role:</i> <i>Cardinality: 0..*</i>
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#### SCHEDULED STOP POINT – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	<i>POINT</i>	::>	<b>SCHEDULED STOP POINT</b> inherits from <b>POINT</b>
«UID»	<b>Id</b>	<i>ScheduledStopPointIdType</i>	1:1	Identifier of a SCHEDULED STOP POINT.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of SCHEDULED STOP POINT.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of SCHEDULED STOP POINT.
	<b>Label</b>	<i>MultilingualString</i>	0:1	Label of SCHEDULED STOP POINT.
	<b>Url</b>	<i>abyURI</i>	0:1	URL associated with SCHEDULED STOP POINT.
	<b>CompassBearing</b>	<i>degrees</i>	0:1	Heading of stop relative to street. Degrees from North. This should be considered as a derived value that can be used for presentation purposes when information about the physical stop is not available. . The definitive value is the compass bearing found on the QUAY (ie physical stop) to which a SCHEDULED STOP POINT is assigned.
	<b>ForAlighting</b>	<i>boolean</i>	0:1	Default for whether stop may be used for alighting. May be overridden on specific services.
	<b>ForBoarding</b>	<i>boolean</i>	0:1	Default for whether stop may be used for boarding . May be overridden on specific services.
	<b>RequestStop</b>	<i>boolean</i>	0:1	Default for whether stop is a request stop. May be overridden in JOURNEY PATTERNS.
	<b>AtCentre</b>	<i>boolean</i>	0:1	Whether STOP POINT can be considered as being at the centre of a TOPOGRAPHIC PLACE. Default is false.

#### SCHEMATIC MAP

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Schematic Map MODEL.SCHEMATIC MAP)

A map representing schematically the layout of the topographic structure of *PLACES* (e.g. a set of *SITES*) or the public transport network (a set of *LINEs*). It can include a pixel projection of a set of *ENTITies* onto a bitmap image so as to support hyperlinked interactions.

**SCHEMATIC MAP – Relations**

Source	Target
<b>SCHEMATIC MAP</b> <i>Role:</i> depicting <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>GROUP OF LINES</b> <i>Role:</i> depicted by <i>Cardinality:</i> 0..*
<b>SCHEMATIC MAP</b> <i>Role:</i> depicting <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>LINE</b> <i>Role:</i> depicted by <i>Cardinality:</i> 0..*
<b>SCHEMATIC MAP</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>PLACE</b> <i>Role:</i> depicted by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>SCHEMATIC MAP</b> <i>Role:</i> depicting <i>Cardinality:</i> 0..*
<b>SCHEMATIC MAP</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>SITE</b> <i>Role:</i> <i>Cardinality:</i> 0..*

**SCHEMATIC MAP – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>SchematicMapIdType</i>	1:1	Identifier of SCHEMATIC MAP.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of SCHEMATIC MAP.
	<b>ImageUri</b>	<i>anyURI</i>	0:1	URL associated with SCHEMATIC MAP.

**SEATING EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.SEATING EQUIPMENT)

Specialisation of PLACE EQUIPMENT describing the properties of seating

**SEATING EQUIPMENT – Relations**

Source	Target
<b>SEATING EQUIPMENT</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF SEATING EQUIPMENT</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1
<b>SEATING EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>WAITING EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

**SEATING EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>WAITING EQUIPMENT</i>	::>	<b>SEATING EQUIPMENT</b> inherits from <b>WAITING EQUIPMENT</b>
«UID»	<b>Id</b>	<i>SeatingEquipmentIdType</i>	1:1	Identifier of SEATING EQUIPMENT.



**SERVICE CALENDAR**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.SERVICE CALENDAR)

A collection of DAY TYPE ASSIGNMENTS.

**SERVICE CALENDAR – Relations**

Source	Target
<b>GROUP OF TIMEBANDS</b> Role: for the definition of Cardinality: 0..* Relation type: Aggregation	<b>SERVICE CALENDAR</b> Role: defined by Cardinality: 1
<b>SERVICED ORGANISATION</b> Role: serviced according to Cardinality: 0..* Relation type: Association	<b>SERVICE CALENDAR</b> Role: serviced for Cardinality: 0..*
<b>SERVICE CALENDAR</b> Role: within Cardinality: 1 Relation type: Association	<b>OPERATING PERIOD</b> Role: for Cardinality: 0..*
<b>SERVICE CALENDAR</b> Role: defined by Cardinality: 1 Relation type: Association	<b>DAY TYPE ASSIGNMENT</b> Role: for the definition of Cardinality: 0..*
<b>SERVICE CALENDAR</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE CALENDAR FRAME</b> Role: Cardinality: 0..1

**SERVICE CALENDAR – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ServiceCalendarIdType</i>	1:1	Identifier of SERVICE CALENDAR.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of SERVICE CALENDAR.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of SERVICE CALENDAR.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of SERVICE CALENDAR.
	<b>From</b>	<i>date</i>	1:1	Inclusive start date for validity of SERVICE CALENDAR.
	<b>To</b>	<i>date</i>	1:1	Inclusive end date for validity of SERVICE CALENDAR.
	<b>EarliestTime</b>	<i>time</i>	0:1	Earliest time that days start SERVICE CALENDAR. Default to use if not specified on individual OPERATING DAY.
	<b>DayLength</b>	<i>duration</i>	0:1	Day Length used with Earliest time to work out end of day. Default to use if not specified on individual OPERATING DAY.

**SERVICE CALENDAR FRAME**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Explicit Frames MODEL .CC Service Calendar Frame MODEL.SERVICE CALENDAR FRAME)

A coherent set of assignments of OPERATING DAYS to DAY TYPES.

**SERVICE CALENDAR FRAME – Relations**

Source	Target
<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>OPERATING DAY</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>SERVICE CALENDAR</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>TIME BAND</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>DAY TYPE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>TIMETABLE FRAME</b> <i>Role:</i> dated by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> take use of <i>Cardinality:</i> 0..1

**SERVICE CALENDAR FRAME – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	<b>SERVICE CALENDAR FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<b>Id</b>		1:1	Identifier of SERVICE CALENDAR FRAME.

**SERVICE EXCLUSION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Routing Constraint MODEL.SERVICE EXCLUSION)

A constraint expressing the fact that the service, on a specific JOURNEY PATTERN (usually a flexible transport service JOURNEY PATTERN) cannot operate when another (regular) service operates. This may occur only on a subpart of the JOURNEY PATTERN, or only on one or some specific SCHEDULED STOP POINTS.

**SERVICE EXCLUSION – Relations**

Source	Target
<b>SERVICE EXCLUSION</b> Role: to Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: end of Cardinality: 1
<b>SERVICE EXCLUSION</b> Role: from Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: start of Cardinality: 1
<b>SERVICE EXCLUSION</b> Role: protection for Cardinality: 0..* Relation type: Association	<b>JOURNEY PATTERN</b> Role: protected by Cardinality: 0..*
<b>SERVICE EXCLUSION</b> Role: constraint for Cardinality: 0..* Relation type: Association	<b>JOURNEY PATTERN</b> Role: constrained by Cardinality: 0..*
<b>SERVICE EXCLUSION</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**SERVICE EXCLUSION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ServiceExclusionIdType</i>	1:1	Identifier of SERVICE EXCLUSION.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of SERVICE EXCLUSION.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of SERVICE EXCLUSION.

**SERVICE FACILITY SET**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Facility MODEL.SERVICE FACILITY SET)

Set of FACILITIES available for a specific VEHICLE TYPE (e.g. carriage equipped with low floor) possibly only for a service (or for a SERVICE JOURNEY or a JOURNEY).

**SERVICE FACILITY SET – Relations**

Source	Target
<b>SERVICE FACILITY SET</b> Role: Cardinality: Relation type: Generalization	<b>FACILITY SET</b> Role: Cardinality:
<b>ACCOMODATION</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE FACILITY SET</b> Role: Cardinality:
<b>FACILITY</b> Role: part of Cardinality: 1..* Relation type: Aggregation	<b>SERVICE FACILITY SET</b> Role: comprising Cardinality: 0..1
<b>ONBOARD STAY</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE FACILITY SET</b> Role: Cardinality:

<b>SERVICE FACILITY SET</b> <i>Role: present at</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>VEHICLE TYPE</b> <i>Role: comprising</i> <i>Cardinality: 0..1</i>
<b>SERVICE FACILITY SET</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>JOURNEY PART</b> <i>Role: made using</i> <i>Cardinality: 0..1</i>
<b>SERVICE FACILITY SET</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>SERVICE JOURNEY</b> <i>Role: made using</i> <i>Cardinality: 0..1</i>

#### SERVICE FACILITY SET – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	FACILITY SET	::>	<b>SERVICE FACILITY SET</b> inherits from <b>FACILITY SET</b>
«UID»	<i>Id</i>	<i>ServiceFacilitySetIdType</i>	1:1	Identifier of SERVICE FACILITY SET.

#### SERVICE FRAME

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).NT Explicit Frames MODEL.Service Frame MODEL.SERVICE FRAME)

A set of network service data (and other data logically related to these) to which the same VALIDITY CONDITIONS has been assigned.

#### SERVICE FRAME – Relations

Source	Target
<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Aggregation</i>	<b>COMPOSITE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTE LINK</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>GROUP OF LINES</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTE POINT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>NETWORK</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

<b>FLEXIBLE ROUTE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>FLEXIBLE LINE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING POINT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING LINK</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING PATTERN</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>GROUP OF TIMING LINKS</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>LINE NETWORK</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SCHEDULED STOP POINT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>STOP AREA</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE EXCLUSION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TRAIN STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER INFORMATION EQUIPMENT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>LOGICAL DISPLAY</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

<b>TIME DEMAND TYPE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>DISPLAY ASSIGNMENT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>COMMON SECTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE PATTERN</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TRANSFER RESTRICTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>CONNECTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>DESTINATION DISPLAY</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>DIRECTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TYPE OF PASSENGER INFORMATION EQUIPMENT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE CONNECTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>DEFAULT CONNECTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

<b>LINE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE LINK</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

#### SERVICE FRAME – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	<b>SERVICE FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<b>Id</b>		1:1	Identifier of SERVICE FRAME.

#### SERVICE JOURNEY

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Service Journey MODEL.SERVICE JOURNEY)

A passenger carrying **VEHICLE JOURNEY** for one specified **DAY TYPE**. The pattern of working is in principle defined by a **SERVICE JOURNEY PATTERN**.

#### SERVICE JOURNEY – Relations

Source	Target
<b>VEHICLE TYPE</b> <i>Role: proposed for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>SERVICE JOURNEY</b> <i>Role: made using</i> <i>Cardinality: *</i>
<b>TEMPLATE SERVICE JOURNEY</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>SERVICE JOURNEY</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE JOURNEY INTERCHANGE</b> <i>Role: to</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>SERVICE JOURNEY</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>SERVICE FACILITY SET</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>SERVICE JOURNEY</b> <i>Role: made using</i> <i>Cardinality: 0..1</i>
<b>SERVICE JOURNEY</b> <i>Role: affected by</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>CHECK CONSTRAINT</b> <i>Role: a process for</i> <i>Cardinality: 0..*</i>
<b>SERVICE JOURNEY</b> <i>Role: start of</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>SERVICE JOURNEY INTERCHANGE</b> <i>Role: from</i> <i>Cardinality: *</i>
<b>SERVICE JOURNEY</b> <i>Role: determined as flexible by</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>FLEXIBLE SERVICE PROPERTIES</b> <i>Role: determining the flexibility for</i> <i>Cardinality: 0..1</i>

<b>SERVICE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE JOURNEY</b> Role: Cardinality:
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**SERVICE JOURNEY – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	VEHICLE JOURNEY	::>	<b>SERVICE JOURNEY</b> inherits from <b>VEHICLE JOURNEY</b>
«UID»	<b>Id</b>	ServiceJourneyIdType	1:1	Identifier of SERVICE JOURNEY.
	<b>ServiceAlteration</b>	ServiceAlterationEnum	0:1	Status to journey - planned, cancelled, etc.
	<b>Print</b>	boolean	0:1	Whether this journey should be visible to public in Print channels.
	<b>Dynamic</b>	DynamicAdvertisementEnum	0:1	When this journey should be visible to public in Dynamic channels.
	<b>DirectionType</b>	DirectionTypeEnum	0:1	Type of DIRECTION.

**SERVICE JOURNEY INTERCHANGE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange MODEL.SERVICE JOURNEY INTERCHANGE)

The scheduled possibility for transfer of passengers between two SERVICE JOURNEYS at the same or different SCHEDULED STOP POINTs.

**SERVICE JOURNEY INTERCHANGE – Relations**

Source	Target
<b>SCHEDULED STOP POINT</b> Role: start of Cardinality: 1 Relation type: Association	<b>SERVICE JOURNEY INTERCHANGE</b> Role: from Cardinality: *
<b>SERVICE JOURNEY INTERCHANGE</b> Role: to Cardinality: * Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: end of Cardinality: 1
<b>SERVICE JOURNEY INTERCHANGE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>SERVICE JOURNEY INTERCHANGE</b> Role: Cardinality: Relation type: Generalization	<b>INTERCHANGE</b> Role: Cardinality:
<b>SERVICE JOURNEY INTERCHANGE</b> Role: to Cardinality: * Relation type: Association	<b>SERVICE JOURNEY</b> Role: end of Cardinality: 1
<b>SERVICE JOURNEY</b> Role: start of Cardinality: 1 Relation type: Association	<b>SERVICE JOURNEY INTERCHANGE</b> Role: from Cardinality: *



**SERVICE JOURNEY INTERCHANGE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INTERCHANGE	::>	<b>SERVICE JOURNEY INTERCHANGE</b> inherits from <b>INTERCHANGE</b>
«UID»	<b>Id</b>	ServiceJourneyInterchangeIdType	1:1	Identifier of SERVICE JOURNEY INTERCHANGE.
	<b>FromVisitNumber</b>	integer	0:1	Visit number of feeder journey (only needed if multiple visits).
	<b>ToVisitNumber</b>	integer	0:1	Visit number of distributor journey (only needed if multiple visits).

**SERVICE JOURNEY PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.SERVICE JOURNEY PATTERN)

The JOURNEY PATTERN for a (passenger carrying) SERVICE JOURNEY.

**SERVICE JOURNEY PATTERN – Relations**

Source	Target
<b>SERVICE JOURNEY PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY PATTERN</b> Role: Cardinality:
<b>SERVICE JOURNEY PATTERN</b> Role: start of Cardinality: 1 Relation type: Association	<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> Role: from Cardinality: *
<b>SERVICE JOURNEY PATTERN</b> Role: used to define Cardinality: 1 Relation type: Association	<b>VEHICLE TYPE PREFERENCE</b> Role: for Cardinality: *
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> Role: to Cardinality: * Relation type: Association	<b>SERVICE JOURNEY PATTERN</b> Role: end of Cardinality: 1

**SERVICE JOURNEY PATTERN – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY PATTERN	::>	<b>SERVICE JOURNEY PATTERN</b> inherits from <b>JOURNEY PATTERN</b>
«UID»	<b>Id</b>	ServiceJourneyPatternIdType	1:1	Identifier of SERVICE JOURNEY PATTERN.

**SERVICE JOURNEY PATTERN INTERCHANGE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Interchange MODEL.SERVICE JOURNEY PATTERN INTERCHANGE)

A recognised/organised possibility for passengers to change public transport vehicles using two SCHEDULED STOP POINTs (which may be identical) on two particular SERVICE JOURNEY PATTERNs, including the maximum wait duration allowed and the standard to be aimed at. These may supersede the times given for the DEFAULT INTERCHANGE. Schedulers may use this entity for synchronisation of journeys.

**SERVICE JOURNEY PATTERN INTERCHANGE – Relations**

Source	Target
<b>SERVICE JOURNEY PATTERN</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>SCHEDULED STOP POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SERVICE JOURNEY PATTERN</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INTERCHANGE</b> <i>Role:</i> <i>Cardinality:</i>

**SERVICE JOURNEY PATTERN INTERCHANGE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INTERCHANGE	::>	<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> inherits from <b>INTERCHANGE</b>
«UID»	<b>Id</b>	<i>ServiceJourneyPatternInterchangeIdType</i>	1:1	Identifier of SERVICE JOURNEY PATTERN INTERCHANGE.

**SERVICE LINK**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.SERVICE LINK)

A LINK between an ordered pair of SCHEDULED STOP POINTs.

**SERVICE LINK – Relations**

Source	Target
<b>SERVICE LINK</b> Role: Cardinality: Relation type: Generalization	<b>LINK</b> Role: Cardinality:
<b>SERVICE LINK</b> Role: operated by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: operating Cardinality: 0..*
<b>SERVICE LINK</b> Role: primarily operated by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: used as primary on Cardinality: 0..1
<b>SCHEDULED STOP POINT</b> Role: start of Cardinality: 1 Relation type: Association	<b>SERVICE LINK</b> Role: from Cardinality: *
<b>SERVICE LINK</b> Role: to Cardinality: * Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: end of Cardinality: 1
<b>SERVICE LINK</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: characterising Cardinality: 0..*
<b>SERVICE LINK</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**SERVICE LINK – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	LINK	::>	<b>SERVICE LINK</b> inherits from <b>LINK</b>
«UID»	<b>Id</b>	ServiceLinkIdType	1:1	Identifier of a SERVICE LINK.
	<b>VehicleMode</b>	TransportModeEnum	0:1	Mode of transport for which SERVICE LINK applies.

**SERVICE PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.SERVICE PATTERN)

The subset of a JOURNEY PATTERN made up only of STOP POINTs IN JOURNEY PATTERN.

**SERVICE PATTERN – Relations**

Source	Target
<b>SERVICE PATTERN</b> <i>Role:</i> made up of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>STOP POINT IN JOURNEY PATTERN</b> <i>Role:</i> defining <i>Cardinality:</i> *
<b>JOURNEY PATTERN</b> <i>Role:</i> made up of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>SERVICE PATTERN</b> <i>Role:</i> contributing to <i>Cardinality:</i> 1
<b>SERVICE PATTERN</b> <i>Role:</i> defined on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>ROUTE</b> <i>Role:</i> comprising <i>Cardinality:</i> 1
<b>SERVICE PATTERN</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**SERVICE PATTERN – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ServicePatternIdType</i>	1:1	Identifier of a SERVICE PATTERN.

**SERVICE RESTRICTION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Restriction MODEL.SERVICE RESTRICTION)

Parameters describing the limitations as regards the use of equipment or service.

**SERVICE RESTRICTION – Relations**

Source	Target
<b>TYPE OF FARE CLASS</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i>
<b>TICKET SCOPE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i>
<b>CLASS OF USE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i>
<b>TYPE OF TICKETING</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i>
<b>TYPE OF PAYMENT METHOD</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i>
<b>TYPE OF TICKET</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i>

**SERVICE RESTRICTION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>		::>	<b>SERVICE RESTRICTION</b> inherits from

**SERVICE SITE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Site MODEL.SERVICE SITE)

A sub-type of SITE which is of specific interest for the operator (e.g. where a joint service or a joint fee is proposed), other than a STOP PLACE.

**SERVICE SITE – Relations**

Source	Target
<b>SERVICE SITE</b> Role: Cardinality: Relation type: Generalization	<b>SITE</b> Role: Cardinality:

**SERVICE SITE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	SITE	::>	<b>SERVICE SITE</b> inherits from <b>SITE</b>
«UID»	<b>Id</b>	ServiceSiteIdType	1:1	Identifier of SERVICE SITE.

**SERVICED ORGANISATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Additional Organisation MODEL.SERVICED ORGANISATION)

A public or private organisation for which public transport services are provided on specific days, e.g. a school, university or works.

**SERVICED ORGANISATION – Relations**

Source	Target
<b>SERVICED ORGANISATION</b> Role: Cardinality: Relation type: Generalization	<b>OTHER ORGANISATION</b> Role: Cardinality:
<b>SERVICED ORGANISATION</b> Role: serviced on Cardinality: 1 Relation type: Association	<b>ORGANISATION DAY TYPE</b> Role: for Cardinality: 0..*
<b>SERVICED ORGANISATION</b> Role: serviced according to Cardinality: 0..* Relation type: Association	<b>SERVICE CALENDAR</b> Role: serviced for Cardinality: 0..*

**SERVICED ORGANISATION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	OTHER ORGANISATION	::>	<b>SERVICED ORGANISATION</b> inherits from <b>OTHER ORGANISATION</b>
«UID»	<b>Id</b>	TravelAgentIdType	1:1	Identifier of TRAVEL AGENT.

**SHELTER EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.SHELTER EQUIPMENT)

Specialisation of WAITING EQUIPMENT for a shelter.

**SHELTER EQUIPMENT – Relations**

Source	Target
<b>SHELTER EQUIPMENT</b> Role: classified as Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF SHELTER</b> Role: a classification for Cardinality: <b>0..1</b>
<b>SHELTER EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>WAITING EQUIPMENT</b> Role: Cardinality:

**SHELTER EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	WAITING EQUIPMENT	::>	<b>SHELTER EQUIPMENT</b> inherits from <b>WAITING EQUIPMENT</b>
«UID»	<b>id</b>	ShelterEquipmentIdType	1:1	Identifier of SHELTER EQUIPMENT.
	<b>Enclosed</b>	boolean	0:1	Whether Shelter is enclosed for protection from weather etc.
	<b>DistanceFromNearestKerb</b>	LengthType	0:1	Distance of Shelter from kerb.

**SIGN EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Sign Equipment MODEL.SIGN EQUIPMENT)

Specialisation of PLACE EQUIPMENT for signs (heading signs, etc.).

**SIGN EQUIPMENT – Relations**

Source	Target
<b>GENERAL SIGN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SIGN EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PLACE SIGN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SIGN EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>HEADING SIGN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SIGN EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>SIGN EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

**SIGN EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE EQUIPMENT	::>	<b>SIGN EQUIPMENT</b> inherits from <b>PLACE EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of SIGN EQUIPMENT.
	<b>BrandGraphic</b>	<i>anyUrl</i>	1:1	URL for Brand graphic shown on SIGN
	<b>SignGraphic</b>	<i>anyUrl</i>	1:1	URL for Sign graphic shown on SIGN
	<b>Placement</b>	<i>string</i>	1:1	Description of placement of SIGN
	<b>AsBraille</b>	<i>boolean</i>	1:1	Whether SIGN has braille section
	<b>Height</b>	<i>LengthType</i>	1:1	Height of SIGN from bottom of sign
	<b>Width</b>	<i>LengthType</i>	1:1	Width of SIGN
	<b>HeightFromFloor</b>	<i>LengthType</i>	1:1	Height of SIGN above ground
	<b>MachineReadable</b>	<i>boolean</i>	1:1	Whether sign is machine readable

**SIMPLE FEATURE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Zone and Feature MODEL.SIMPLE FEATURE)

An abstract representation of elementary objects related to the spatial representation of the network. POINTs (0-dimensional objects), LINKs (1-dimensional objects) and ZONEs (2-dimensional objects) may be viewed as SIMPLE FEATUREs.

**SIMPLE FEATURE – Relations**

Source	Target
<b>ZONE</b> Role: viewed as Cardinality: 0..1 Relation type: Association	<b>SIMPLE FEATURE</b> Role: a view of Cardinality: *
<b>COMPLEX FEATURE</b> Role: made up of Cardinality: * Relation type: Association	<b>SIMPLE FEATURE</b> Role: contained in Cardinality: *
<b>LINK</b> Role: viewed as Cardinality: 0..1 Relation type: Association	<b>SIMPLE FEATURE</b> Role: a view of Cardinality: *
<b>POINT</b> Role: viewed as Cardinality: 0..1 Relation type: Association	<b>SIMPLE FEATURE</b> Role: a view of Cardinality: *
<b>SIMPLE FEATURE</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:
<b>SIMPLE FEATURE</b> Role: Cardinality: Relation type: Aggregation	<b>LAYER</b> Role: Cardinality:

**SIMPLE FEATURE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<i>Id</i>	<i>SimpleFeatureIdType</i>	1:1	Identifier of SIMPLE FEATURE.

**SITE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Site MODEL.SITE)

A well known PLACE to which passengers may refer to indicate the origin or a destination of a trip.

**SITE – Relations**

Source	Target
<b>PARKING</b> Role: Cardinality: Relation type: Generalization	<b>SITE</b> Role: Cardinality:
<b>LEVEL</b> Role: part of Cardinality: 0..* Relation type: Aggregation	<b>SITE</b> Role: composed of Cardinality: 1
<b>SITE</b> Role: determining Cardinality: 0..1 Relation type: Association	<b>DEFAULT CONNECTION</b> Role: determined within Cardinality: 0..*
<b>STOP PLACE</b> Role: Cardinality: Relation type: Generalization	<b>SITE</b> Role: Cardinality:



<b>SITE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE ELEMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>SERVICE SITE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE</b> <i>Role:</i> a reference for <i>Cardinality:</i> <b>0..1</b> <i>Relation type:</i> Association	<b>ACCESS ZONE</b> <i>Role:</i> referenced by <i>Cardinality:</i> <b>0..*</b>
<b>POINT OF INTEREST</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ORGANISATION</b> <i>Role:</i> operator <i>Cardinality:</i> <b>0..1</b> <i>Relation type:</i> Association	<b>SITE</b> <i>Role:</i> operated by <i>Cardinality:</i> <b>0..*</b>
<b>SITE COMPONENT</b> <i>Role:</i> part of <i>Cardinality:</i> <b>0..*</b> <i>Relation type:</i> Aggregation	<b>SITE</b> <i>Role:</i> containing <i>Cardinality:</i> <b>1</b>
<b>SITE</b> <i>Role:</i> accessed by <i>Cardinality:</i> <b>1</b> <i>Relation type:</i> Association	<b>ENTRANCE</b> <i>Role:</i> for <i>Cardinality:</i> <b>0..*</b>
<b>SCHEMATIC MAP</b> <i>Role:</i> <i>Cardinality:</i> <b>0..*</b> <i>Relation type:</i> Association	<b>SITE</b> <i>Role:</i> <i>Cardinality:</i> <b>0..*</b>

SITE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>SITE ELEMENT</i>	::>	<b>SITE</b> inherits from <b>SITE ELEMENT</b>
«UID»	<b>Id</b>	<i>SiteIdType</i>	1:1	Identifier of SITE.
	<b>SiteType</b>	<i>SiteTypeEnum</i>	0:1	Type of SITE.
	<b>AtCenter</b>	<i>boolean</i>	0:1	Whether the site is central to the locality, referenced at town centre.
	<b>Locale</b>	<i>Locale</i>	0:1	Locale setting time zone, default language etc, for the STOP PLACE.

**SITE COMPONENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Site MODEL.SITE COMPONENT)

An element of a SITE describing a part of its structure. SITE COMPONENTs share common properties for data management, accessibility and other features.

## SITE COMPONENT – Relations

Source	Target
<b>SITE COMPONENT</b> <i>Role:</i> located at <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>LEVEL</b> <i>Role:</i> locating <i>Cardinality:</i> 0..1
<b>SITE COMPONENT</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>SITE</b> <i>Role:</i> containing <i>Cardinality:</i> 1
<b>STOP PLACE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PARKING COMPONENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>CHECK CONSTRAINT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>SITE COMPONENT</b> <i>Role:</i> characterised by <i>Cardinality:</i> 1
<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE ELEMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>EQUIPMENT PLACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>POINT OF INTEREST COMPONENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE COMPONENT</b> <i>Role:</i> entered through <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ENTRANCE</b> <i>Role:</i> for <i>Cardinality:</i> 0..*
<b>ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>

## SITE COMPONENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	SITE ELEMENT	::>	<b>SITE COMPONENT</b> inherits from <b>SITE ELEMENT</b>
«UID»	<b>Id</b>	SiteComponentIdType	1:1	Identifier of SITE COMPONENT.

## SITE CONNECTION

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Connection MODEL.SITE CONNECTION)

The physical (spatial) possibility for a passenger to change from one public transport vehicle to another to continue the trip, determined by physical locations, such as SITES and/or its components and/or ENTRANCES, in particular STOP

*PLACEs and/or its components. Different times may be necessary to cover the resulting distance, depending on the kind of passenger.*

#### SITE CONNECTION – Relations

Source	Target
<b>SITE CONNECTION</b> <i>Role: from</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE CONNECTION END</b> <i>Role: start of</i> <i>Cardinality: 1</i>
<b>SITE CONNECTION</b> <i>Role: to</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE CONNECTION END</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>NAVIGATION PATH ASSIGNMENT</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE CONNECTION</b> <i>Role: to</i> <i>Cardinality: 0..1</i>
<b>SITE CONNECTION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>TRANSFER</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE CONNECTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

#### SITE CONNECTION – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	TRANSFER	::>	<b>SITE CONNECTION</b> inherits from <b>TRANSFER</b>
«UID»	<b>Id</b>	ConnectionIdType	1:1	Identifier of SITE CONNECTION link.

#### SITE CONNECTION END

*(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Connection MODEL.SITE CONNECTION END)*

*One end of a SITE CONNECTION.*

#### SITE CONNECTION END – Relations

Source	Target
<b>SITE CONNECTION END</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>CONNECTION END</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE CONNECTION END</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>OPERATOR</b> <i>Role: servicing</i> <i>Cardinality: 0..1</i>
<b>SITE CONNECTION</b> <i>Role: from</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE CONNECTION END</b> <i>Role: start of</i> <i>Cardinality: 1</i>
<b>SITE CONNECTION</b> <i>Role: to</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE CONNECTION END</b> <i>Role: end of</i> <i>Cardinality: 1</i>

<b>SITE CONNECTION END</b> <i>Role: a view of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE ELEMENT</b> <i>Role: viewed as</i> <i>Cardinality: 0..1</i>
<b>SITE CONNECTION END</b> <i>Role: a view of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>ENTRANCE</b> <i>Role: viewed as</i> <i>Cardinality: 0..1</i>

**SITE CONNECTION END – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	CONNECTION END	::>	<b>SITE CONNECTION END</b> inherits from <b>CONNECTION END</b>
	<i>Id</i>		1:1	Identifier of SITE CONNECTION END.

**SITE ELEMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Site MODEL.SITE ELEMENT)

A type of ADDRESSABLE PLACE specifying common properties of a SITE or a SITE COMPONENT to describe it, including accessibility.

**SITE ELEMENT – Relations**

Source	Target
<b>SITE ELEMENT</b> <i>Role: accessed by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>ACCESS MODE</b> <i>Role: for</i> <i>Cardinality: 0..*</i>
<b>ACCESSIBILITY ASSESSMENT</b> <i>Role: characterising</i> <i>Cardinality: 0..1</i> <i>Relation type: Aggregation</i>	<b>SITE ELEMENT</b> <i>Role: characterised by</i> <i>Cardinality: 0..1</i>
<b>SITE CONNECTION END</b> <i>Role: a view of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE ELEMENT</b> <i>Role: viewed as</i> <i>Cardinality: 0..1</i>
<b>SITE ELEMENT</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: applicable for</i> <i>Cardinality: 0..*</i>
<b>PATH LINK END</b> <i>Role: represented by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE ELEMENT</b> <i>Role: representing</i> <i>Cardinality: 1</i>
<b>PLACE IN SEQUENCE</b> <i>Role: a view of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SITE ELEMENT</b> <i>Role: viewed as</i> <i>Cardinality: 1</i>
<b>SITE FACILITY SET</b> <i>Role: available</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>SITE ELEMENT</b> <i>Role: concerned by</i> <i>Cardinality: 1</i>

<b>SITE ELEMENT</b> <i>Role:</i> located in <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>COUNTRY</b> <i>Role:</i> location of <i>Cardinality:</i> 1
<b>ALTERNATIVE NAME</b> <i>Role:</i> alias for <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>SITE ELEMENT</b> <i>Role:</i> provided with <i>Cardinality:</i> 1
<b>SITE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE ELEMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE ELEMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>SITE ELEMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ADDRESSABLE PLACE</b> <i>Role:</i> <i>Cardinality:</i>

## SITE ELEMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	ADDRESSABLE PLACE	::>	<b>SITE ELEMENT</b> inherits from <b>ADDRESSABLE PLACE</b>
	<b>Image</b>	<i>anyUri</i>	0:1	Image associated with SITE ELEMENT.
	<b>NameSuffix</b>	<i>MultilingualString</i>	0:1	Suffix to use on Name.
	<b>Url</b>	<i>anyUri</i>	0:1	URL associated with SITE ELEMENT.
	<b>CrossRoad</b>	<i>MultilingualString</i>	0:1	Name of nearest Cross road or crossing street on which SITE is on which can be used to locate stop.
	<b>Landmark</b>	<i>MultilingualString</i>	0:1	Name of nearby Landmark.
	<b>PublicUse</b>	<i>PublicUseEnum</i>	0:1	Whether SITE ELEMENT can be used by the general public.
	<b>Covered</b>	<i>CoveredEnum</i>	0:1	Whether element is covered or outdoors.
	<b>Gated</b>	<i>GatedEnum</i>	0:1	Whether element is within a gated area.
	<b>AllAreasWheelchair</b>	<i>boolean</i>	0:1	Whether all areas of component are accessible in a Wheelchair.
	<b>Lighting</b>	<i>LightingEnum</i>	0:1	How element is lit.
	<b>PersonCapacity</b>	<i>NumberOfPeople</i>	0:1	Number of people that can be in component at a time.

## SITE EQUIPMENT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.SITE EQUIPMENT)

Specialisation of PLACE EQUIPMENT for SITES (e.g. LUGGAGE LOCKER, WAITING EQUIPMENT, TROLLEY STAND, etc.)

## SITE EQUIPMENT – Relations

Source	Target
<b>LUGGAGE LOCKER EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>SITE EQUIPMENT</b> Role: Cardinality:
<b>SITE EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE EQUIPMENT</b> Role: Cardinality:
<b>TROLLEY STAND EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>SITE EQUIPMENT</b> Role: Cardinality:
<b>WAITING EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>SITE EQUIPMENT</b> Role: Cardinality:

## SITE EQUIPMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	PLACE EQUIPMENT	::>	<b>SITE EQUIPMENT</b> inherits from <b>PLACE EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of SITE EQUIPMENT.

## SITE FACILITY SET

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Facility MODEL.SITE FACILITY SET)

Set of FACILITIES available for a SITE ELEMENT .

## SITE FACILITY SET – Relations

Source	Target
<b>SITE FACILITY SET</b> Role: Cardinality: Relation type: Generalization	<b>FACILITY SET</b> Role: Cardinality:
<b>SITE FACILITY SET</b> Role: available Cardinality: 0..* Relation type: Aggregation	<b>SITE ELEMENT</b> Role: concerned by Cardinality: 1
<b>SITE FACILITY SET</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

## SITE FACILITY SET – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	FACILITY SET	::>	<b>SITE FACILITY SET</b> inherits from <b>FACILITY SET</b>
«UID»	<b>Id</b>	SiteFacilitySetIdType	1:1	Identifier of SITE FACILITY SET.

**SITE FRAME**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).NT Explicit Frames MODEL.Site Frame MODEL.SITE FRAME)

A set of SITE data to which the same VALIDITY CONDITIONS have been assigned.

**SITE FRAME – Relations**

Source	Target
<b>SITE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>SITE FRAME</b> Role: Cardinality: Relation type: Aggregation	<b>COMPOSITE FRAME</b> Role: Cardinality:
<b>SITE FACILITY SET</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>CHECK CONSTRAINT</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>CHECK CONSTRAINT DELAY</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>TARIFF ZONE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>ACCESS</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>NAVIGATION PATH</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>PARKING</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>PATH LINK</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>PATH JUNCTION</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>STOP PLACE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

<b>FLEXIBLE STOP PLACE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>POINT OF INTEREST</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>POINT OF INTEREST CLASSIFICATION</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>POINT OF INTEREST CLASSIFICATION HIERARCHY</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>ADDRESS</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>COUNTRY</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

SITE FRAME – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	<b>SITE FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<b>Id</b>		1:1	Identifier of SITE FRAME.

**SPECIAL SERVICE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Service Journey MODEL.SPECIAL SERVICE)

A work of a vehicle that is not planned in a classical way, i.e. that is generally not based on **VEHICLE JOURNEYS** using **JOURNEY PATTERNS**. It involves specific characteristics (such as specific access rights) and/or may be operated under specific circumstances.



**SPECIAL SERVICE – Relations**

Source	Target
<b>JOURNEY PATTERN</b> Role: for Cardinality: <b>0..1</b> Relation type: Association	<b>SPECIAL SERVICE</b> Role: described by Cardinality: *
<b>BLOCK</b> Role: including Cardinality: <b>0..1</b> Relation type: Association	<b>SPECIAL SERVICE</b> Role: in Cardinality: *
<b>SPECIAL SERVICE</b> Role: using Cardinality: * Relation type: Association	<b>VEHICLE TYPE</b> Role: proposed for Cardinality: <b>0..1</b>
<b>SPECIAL SERVICE</b> Role: operated for Cardinality: * Relation type: Association	<b>AUTHORITY</b> Role: managing Cardinality: <b>0..1</b>
<b>SPECIAL SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY</b> Role: Cardinality:

**SPECIAL SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY	::>	<b>SPECIAL SERVICE</b> inherits from <b>JOURNEY</b>
«UID»	<b>Id</b>	SpecialServiceIdType	1:1	Identifier of SPECIAL SERVICE.
	<b>Client</b>	normalizedString	0:1	Client for SPECIAL SERVICE.
	<b>DepartureTime</b>	time	0:1	Departure time of VEHICLE JOURNEY.
	<b>JourneyDuration</b>	duration	0:1	Duration of VEHICLE JOURNEY.
	<b>Print</b>	boolean	0:1	Whether this journey should be visible to public in Print channels.
	<b>Dynamic</b>	DynamicAdvertisementEnum	0:1	When this journey should be visible to public in Dynamic channels.

**STAIR EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.NT Stair Equipment MODEL.STAIR EQUIPMENT)

Specialisation of PLACE ACCESS EQUIPMENT for stairs (stair, escalator, staircase, etc.).

**STAIR EQUIPMENT – Relations**

Source	Target
<b>ESCALATOR EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>STAIR EQUIPMENT</b> Role: Cardinality:
<b>STAIRCASE EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>STAIR EQUIPMENT</b> Role: Cardinality:
<b>STAIR EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:

**STAIR EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE ACCESS EQUIPMENT	::>	<b>STAIR EQUIPMENT</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of STAIR EQUIPMENT.

**STAIRCASE EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.NT Stair Equipment MODEL.STAIRCASE EQUIPMENT)

Specialisation of STAIR EQUIPMENT for stair cases.

**STAIRCASE EQUIPMENT – Relations**

Source	Target
<b>STAIRCASE EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF HANDRAIL</b> Role: a characterisation for Cardinality: 0..1
<b>STAIRCASE EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>STAIR EQUIPMENT</b> Role: Cardinality:

**STAIRCASE EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	STAIR EQUIPMENT	::>	<b>STAIRCASE EQUIPMENT</b> inherits from <b>STAIR EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of STAIRCASE EQUIPMENT.
	<b>ContinuousHand rail</b>	Boolean	0:1	Whether Handrail is continuous across staircase.
	<b>SpiralStair</b>	Boolean	0:1	Whether Stairs are spiral.
	<b>NumberOfFlights</b>	Integer	0:1	Number of flights of Stairs.

**STOP AREA**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.STOP AREA)

A group of SCHEDULED STOP POINTs close to each other.

**STOP AREA – Relations**

Source	Target
<b>STOP AREA</b> Role: Cardinality: <b>0..*</b> Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: <b>0..*</b>
<b>GROUP OF POINTS</b> Role: used as Cardinality: <b>1</b> Relation type: Association	<b>STOP AREA</b> Role: a use of Cardinality: <b>0..1</b>
<b>ROUTING CONSTRAINT ZONE</b> Role: Cardinality: Relation type: Aggregation	<b>STOP AREA</b> Role: Cardinality:
<b>SCHEDULED STOP POINT</b> Role: included in Cardinality: <b>1..*</b> Relation type: Association	<b>STOP AREA</b> Role: composed of Cardinality: <b>0..1</b>
<b>DEFAULT CONNECTION</b> Role: determined within Cardinality: <b>0..*</b> Relation type: Association	<b>STOP AREA</b> Role: determining Cardinality: <b>0..1</b>
<b>STOP AREA</b> Role: Cardinality: <b>*</b> Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:
<b>INTERCHANGE RULE PARAMETER</b> Role: using Cardinality: <b>0..*</b> Relation type: Association	<b>STOP AREA</b> Role: used as Cardinality: <b>0..1</b>

**STOP AREA – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>StopAreaIdType</i>	1:1	Identifier of a STOP AREA.
	<b>PublicCode</b>	<i>normalizedString</i>	0:1	PUBLIC CODE for a STOP AREA.
	<b>Name</b>	<i>normalizedString</i>	1:1	Name of STOP AREA.

**STOP ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Stop Assignment MODEL.STOP ASSIGNMENT)

The allocation of a SCHEDULED STOP POINT (i.e. a SCHEDULED STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific STOP PLACE, for either a SERVICE JOURNEY or VEHICLE SERVICE.

## STOP ASSIGNMENT – Relations

Source	Target
<b>TRAIN STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>VALIDITY CONDITION</b> <i>Role:</i> applicable for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..*
<b>AVAILABILITY CONDITION</b> <i>Role:</i> applicable for <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..1
<b>NAVIGATION PATH ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>PASSENGER STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> to <i>Cardinality:</i> 1
<b>FLEXIBLE STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP PLACE</b> <i>Role:</i> to <i>Cardinality:</i> 1
<b>STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>BOARDING POSITION</b> <i>Role:</i> to <i>Cardinality:</i> 0..1
<b>STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>QUAY</b> <i>Role:</i> to <i>Cardinality:</i> 0..1
<b>VEHICLE TYPE STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP ASSIGNMENT</b> <i>Role:</i> <i>Cardinality:</i>

## STOP ASSIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>StopAssignmentIdType</i>	1:1	Identifier of a STOP ASSIGNMENT.
	<b>AlightingUse</b>	<i>boolean</i>	0:1	Whether STOP ASSIGNMENT allows alighting at the stop.
	<b>StopAssignment Type</b>	<i>StopAssignmentIdTypeEnum</i>	0:1	Type of STOP ASSIGNMENT.
	<b>BoardingUse</b>	<i>boolean</i>	0:1	Whether STOP ASSIGNMENT allows boarding at the stop.
	<b>PrivateCode</b>	<i>normalizedString</i>	0:1	Private code for element.

**STOP PLACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.STOP PLACE)

A place comprising one or more locations where vehicles may stop and where passengers may board or leave vehicles or prepare their trip. A STOP PLACE will usually have one or more wellknown names.

**STOP PLACE – Relations**

Source	Target
<b>VEHICLE STOPPING PLACE</b> Role: a part of Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE</b> Role: containing Cardinality: 1
<b>NAVIGATION PATH</b> Role: inside Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE</b> Role: traversed with Cardinality: 1
<b>STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>STOP PLACE</b> Role: to Cardinality: 1
<b>FLEXIBLE STOP PLACE</b> Role: Cardinality: Relation type: Generalization	<b>STOP PLACE</b> Role: Cardinality:
<b>STOP PLACE</b> Role: servicing Cardinality: 0..* Relation type: Association	<b>POINT OF INTEREST</b> Role: serviced by Cardinality: 0..*
<b>STOP PLACE COMPONENT</b> Role: part of Cardinality: 0..* Relation type: Association	<b>STOP PLACE</b> Role: composed by Cardinality: 1
<b>VEHICLE MODE</b> Role: primary for Cardinality: 0..1 Relation type: Association	<b>STOP PLACE</b> Role: characterised by Cardinality: 0..*
<b>STOP PLACE</b> Role: entered through Cardinality: 1 Relation type: Association	<b>STOP PLACE VEHICLE ENTRANCE</b> Role: to Cardinality: 0..*
<b>ACCESS SPACE</b> Role: in Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE</b> Role: containing Cardinality: 1
<b>STOP PLACE ENTRANCE</b> Role: to Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE</b> Role: entered through Cardinality: 1
<b>TYPE OF STOP PLACE</b> Role: a classification for Cardinality: 0..1 Relation type: Association	<b>STOP PLACE</b> Role: classified as Cardinality: 0..*

<b>QUAY</b> Role: in Cardinality: 0..* Relation type: Aggregation	<b>STOP PLACE</b> Role: containing Cardinality: 1
<b>STOP PLACE</b> Role: Cardinality: Relation type: Generalization	<b>SITE</b> Role: Cardinality:
<b>STOP PLACE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>STOP PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*
<b>STOP PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*
<b>STOP PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>STOP PLACE</b> Role: Cardinality: 0..*
<b>STOP PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*

**STOP PLACE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	<i>SITE</i>	::>	<b>STOP PLACE</b> inherits from <b>SITE</b>
«UID»	<b>id</b>	<i>StopPlaceIdType</i>	1:1	Identifier of a STOP PLACE.
	<b>Weighting</b>	<i>Integer</i>	0:1	Default relative weighting to be used for STOP PLACE.
	<b>BorderCrossingPoint</b>	<i>Boolean</i>	0:1	Whether STOP PLACE is a border crossing.
	<b>LimitedUse</b>	<i>LimitedUseEnum</i>	0:1	Categorisation of the stop as having topographic limitations which may affect its use in journey planners

**STOP PLACE COMPONENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.STOP PLACE COMPONENT)

An element of a STOP PLACE describing part of its structure. STOP PLACE COMPONENTs share common properties for data management, accessibility and other features.

**STOP PLACE COMPONENT – Relations**

Source	Target
<b>VEHICLE STOPPING POSITION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE STOPPING PLACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>EQUIPMENT PLACE</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>STOP PLACE COMPONENT</b> <i>Role:</i> containing <i>Cardinality:</i>
<b>VEHICLE MODE</b> <i>Role:</i> primary for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>STOP PLACE COMPONENT</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..*
<b>STOP PLACE COMPONENT</b> <i>Role:</i> part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP PLACE</b> <i>Role:</i> composed by <i>Cardinality:</i> 1
<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>STOP PLACE COMPONENT</b> <i>Role:</i> on <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>LEVEL</b> <i>Role:</i> assigned to <i>Cardinality:</i> 0..1
<b>STOP PLACE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SITE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>

**STOP PLACE COMPONENT – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	SITE COMPONENT	::>	<b>STOP PLACE COMPONENT</b> inherits from <b>SITE COMPONENT</b>
	<b>Label</b>	normalizedString	0:1	Label given to SITE COMPONENT.
	<b>OtherModes</b>	AccessModeEnum	0:*	Other MODEs associated with STOP PLACE COMPONENT.

**STOP PLACE ENTRANCE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.STOP PLACE ENTRANCE)

A physical entrance or exit to/from a STOP PLACE for a Passenger. May be a door, barrier, gate or other recognizable point of access.

**STOP PLACE ENTRANCE – Relations**

Source	Target
<b>STOP PLACE ENTRANCE</b> <i>Role:</i> to <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>STOP PLACE</b> <i>Role:</i> entered through <i>Cardinality:</i> 1
<b>STOP PLACE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i>

**STOP PLACE ENTRANCE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ENTRANCE	::>	<b>STOP PLACE ENTRANCE</b> inherits from <b>ENTRANCE</b>
«UID»	<i>Id</i>	<i>StopPlaceEntranceIdType</i>	1:1	Identifier of STOP PLACE ENTRANCE.

**STOP PLACE SPACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.STOP PLACE SPACE)

A physical area within a STOP PLACE, for example, a QUAY, BOARDING POSITION, ACCESS SPACE or EQUIPMENT PLACE.

**STOP PLACE SPACE – Relations**

Source	Target
<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>ACCESS SPACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i>
<b>BOARDING POSITION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i>
<b>QUAY</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i>
<b>PATH LINK</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i> 1
<b>PATH LINK</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>STOP PLACE SPACE</b> <i>Role:</i> <i>Cardinality:</i> 1



**STOP PLACE SPACE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>STOP PLACE COMPONENT</i>	::>	<b>STOP PLACE SPACE</b> inherits from <b>STOP PLACE COMPONENT</b>
	<b>BoardingUse</b>	<i>boolean</i>	0:1	Whether Passengers may use the component for Boarding vehicle transport.
	<b>AlightingUse</b>	<i>boolean</i>	0:1	Whether Passengers may use the component when Alighting from vehicle transport.
	<b>Label</b>	<i>normalizedString</i>	0:1	Alternative Local Label given to Component, e.g. a Point Letter on a stop.
«UID»	<b>Id</b>		1:1	

**STOP PLACE VEHICLE ENTRANCE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.STOP PLACE VEHICLE ENTRANCE)

A physical entrance or exit to/from a STOP PLACE for a vehicle.

**STOP PLACE VEHICLE ENTRANCE – Relations**

Source	Target
<b>STOP PLACE</b> Role: entered through Cardinality: 1 Relation type: Association	<b>STOP PLACE VEHICLE ENTRANCE</b> Role: to Cardinality: 0..*
<b>STOP PLACE VEHICLE ENTRANCE</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE ENTRANCE</b> Role: Cardinality:

**STOP PLACE VEHICLE ENTRANCE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>VEHICLE ENTRANCE</i>	::>	<b>STOP PLACE VEHICLE ENTRANCE</b> inherits from <b>VEHICLE ENTRANCE</b>
«UID»	<b>Id</b>	<i>StopPlaceVehicleEntranceIdType</i>	1:1	Identifier of STOP PLACE VEHICLE ENTRANCE.

**STOP POINT IN JOURNEY PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL.STOP POINT IN JOURNEY PATTERN)

A POINT in a JOURNEY PATTERN which is a SCHEDULED STOP POINT.

## STOP POINT IN JOURNEY PATTERN – Relations

Source	Target
<b>SERVICE PATTERN</b> <i>Role:</i> made up of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>STOP POINT IN JOURNEY PATTERN</b> <i>Role:</i> defining <i>Cardinality:</i> *
<b>STOP POINT IN JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>SCHEDULED STOP POINT</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>STOP POINT IN JOURNEY PATTERN</b> <i>Role:</i> a view of <i>Cardinality:</i> *

## STOP POINT IN JOURNEY PATTERN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	POINT IN LINK SEQUENCE	::>	<b>STOP POINT IN JOURNEY PATTERN</b> inherits from <b>POINT IN LINK SEQUENCE</b>
«UID»	<b>Id</b>	StopPointInJourneyPatternIdType	1:1	Identifier of a STOP POINT IN JOURNEY PATTERN.
	<b>ForAlighting</b>	boolean	0:1	Whether stop may be used for alighting.
	<b>ForBoarding</b>	boolean	0:1	Whether stop may be used for boarding.
	<b>RequestStop</b>	boolean	0:1	Whether the stop is a Request Stop.
	<b>ChangeOfDestinationDisplay</b>	boolean	0:1	Whether DESTINATION DISPLAY changes at this point.
	<b>ChangeOfServiceRequirements</b>	boolean	0:1	Whether SERVICE REQUIREMENTS change at this point.
	<b>StopUse</b>	StopUseEnum	0:1	Nature of use of stop, e.g. access, interchange only, or pass through. Default is Access.

## SUBMODE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Submode MODEL.SUBMODE)

A variant of a MODE, as for instance international or domestic rail (rail being the MODE).

## SUBMODE – Relations

Source	Target
<b>SUBMODE</b> <i>Role:</i> determining <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> determined by <i>Cardinality:</i> 0..*
<b>SUBMODE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>MODE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1
<b>SUBMODE</b> <i>Role:</i> characterizing <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN HEADWAY</b> <i>Role:</i> characterized by <i>Cardinality:</i> 0..*

<b>SUBMODE</b> <i>Role: characterizing</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>JOURNEY PATTERN RUN TIME</b> <i>Role: characterized by</i> <i>Cardinality: 0..*</i>
<b>SUBMODE</b> <i>Role: characterizing</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>JOURNEY PATTERN LAYOVER</b> <i>Role: characterized by</i> <i>Cardinality: 0..*</i>
<b>SUBMODE</b> <i>Role: characterizing</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>JOURNEY PATTERN WAIT TIME</b> <i>Role: characterized by</i> <i>Cardinality: 0..*</i>
<b>VEHICLE JOURNEY</b> <i>Role: characterized by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>SUBMODE</b> <i>Role: characterizing</i> <i>Cardinality: 0..1</i>

**SUBMODE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>SubmodeIdType</i>	1:1	Identifier of Submode

**SUITABILITY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.SUITABILITY)

A statement of whether a particular USER NEED can be met. It can be used to state whether a SITE can be accessed by a passenger with a particular USER NEED.

**SUITABILITY – Relations**

Source	Target
<b>SUITABILITY</b> <i>Role: classified by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF SUITABILITY</b> <i>Role: a classification for</i> <i>Cardinality: 1</i>
<b>SUITABILITY</b> <i>Role: determined for</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>USER NEED</b> <i>Role: determining</i> <i>Cardinality: 1..*</i>
<b>SUITABILITY</b> <i>Role: determining</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>ACCESSIBILITY ASSESSMENT</b> <i>Role: convenient for</i> <i>Cardinality: 1</i>

**SUITABILITY – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>SuitabilityIdType</i>	1:1	Identifier of SUITABILITY.
	<b>Suitable</b>	<i>SuitableEnum</i>	1:1	Whether the USER NEED is met.

**TARGET PASSING TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Passing Times MODEL .TARGET PASSING TIME)

Time data about when a public transport vehicle should pass a particular POINT IN JOURNEY PATTERN on a particular DATED VEHICLE JOURNEY, in order to match the latest valid plan.

**TARGET PASSING TIME – Relations**

Source	Target
<b>TIMING POINT IN JOURNEY PATTERN</b> Role: passed at Cardinality: 1 Relation type: Association	<b>TARGET PASSING TIME</b> Role: at Cardinality: *
<b>TARGET PASSING TIME</b> Role: Cardinality: Relation type: Generalization	<b>DATED PASSING TIME</b> Role: Cardinality:

**TARGET PASSING TIME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	DATED PASSING TIME	::>	<b>TARGET PASSING TIME</b> inherits from <b>DATED PASSING TIME</b>
«UID»	<b>Id</b>	AimedPassingTimeIdType	1:1	Identifier of AIMED PASSING TIME.
	<b>AimedArrivalTime</b>	time	0:1	Intended Arrival time at TIMING POINT IN JOURNEY PATTERN
	<b>AimedDepartureTime</b>	time	0:1	Intended Departure time at TIMING POINT IN JOURNEY PATTERN
	<b>AimedNonstopPassingTime</b>	time	0:1	Intended Passing time at TIMING POINT IN JOURNEY PATTERN if vehicle does not stop
	<b>AimedWaitingTime</b>	duration	0:1	Aimed waiting time at TIMING POINT IN JOURNEY PATTERN

**TARIFF ZONE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Zone and Feature MODEL.TARIFF ZONE)

A ZONE used to define a zonal fare structure in a zone-counting or zone-matrix system.

## TARIFF ZONE – Relations

Source	Target
<b>TARIFF ZONE</b> Role: Cardinality: Relation type: Generalization	<b>ZONE</b> Role: Cardinality:
<b>SCHEDULED STOP POINT</b> Role: included in Cardinality: 1..* Relation type: Association	<b>TARIFF ZONE</b> Role: composed of Cardinality: *
<b>ACTIVATION POINT</b> Role: located in Cardinality: * Relation type: Association	<b>TARIFF ZONE</b> Role: including Cardinality: *
<b>TARIFF ZONE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:

## TARIFF ZONE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	ZONE	::>	<b>TARIFF ZONE</b> inherits from <b>ZONE</b>
«UID»	<b>Id</b>	TariffZoneIdType	1:1	Identifier of TARIFF ZONE.

## TEMPLATE SERVICE JOURNEY

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Service Journey MODEL.TEMPLATE SERVICE JOURNEY)

A passenger carrying TEMPLATE SERVICE JOURNEY. As TEMPLATE SERVICE JOURNEY, it may represent multiple journeys.

## TEMPLATE SERVICE JOURNEY – Relations

Source	Target
<b>TEMPLATE SERVICE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>TEMPLATE VEHICLE JOURNEY</b> Role: Cardinality:
<b>TEMPLATE SERVICE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE JOURNEY</b> Role: Cardinality:

## TEMPLATE SERVICE JOURNEY – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	SERVICE JOURNEY, TEMPLATE VEHICLE JOURNEY	::>	<b>TEMPLATE SERVICE JOURNEY</b> inherits from <b>SERVICE JOURNEY, TEMPLATE VEHICLE JOURNEY</b>
«UID»	<b>Id</b>	TemplateServiceJourneyIdType	1:1	Identifier of TEMPLATE SERVICE JOURNEY.

**TEMPLATE VEHICLE JOURNEY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey MODEL.TEMPLATE VEHICLE JOURNEY)

A repeating VEHICLE JOURNEY for which a frequency has been specified, either as a HEADWAY JOURNEY GROUP (e.g. every 20 minutes) or a RHYTHMICAL JOURNEY GROUP (e.g. at 15, 27 and 40 minutes past the hour). It may thus represent multiple journeys.

**TEMPLATE VEHICLE JOURNEY – Relations**

Source	Target
<b>TEMPLATE SERVICE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>TEMPLATE VEHICLE JOURNEY</b> Role: Cardinality:
<b>RHYTHMICAL JOURNEY GROUP</b> Role: defines Cardinality: 1..* Relation type: Association	<b>TEMPLATE VEHICLE JOURNEY</b> Role: is defined by Cardinality: 1..*
<b>TEMPLATE VEHICLE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE JOURNEY</b> Role: Cardinality:

**TEMPLATE VEHICLE JOURNEY – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	VEHICLE JOURNEY	::>	<b>TEMPLATE VEHICLE JOURNEY</b> inherits from <b>VEHICLE JOURNEY</b>
«UID»	<b>Id</b>	TemplateVehicleJourneyIdType	1:1	Identifier of TEMPLATE VEHICLE JOURNEY.

**TICKET SCOPE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Restriction MODEL.TICKET SCOPE)

Scope of ticket.

**TICKET SCOPE – Relations**

Source	Target
<b>TICKET SCOPE</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE RESTRICTION</b> Role: Cardinality:
<b>TICKETING SERVICE</b> Role: restricted by Cardinality: 0..* Relation type: Association	<b>TICKET SCOPE</b> Role: restricting Cardinality: 0..*
<b>TICKET SCOPE</b> Role: a characterisation of Cardinality: 0..* Relation type: Association	<b>TICKETING EQUIPMENT</b> Role: characterised by Cardinality: 0..*

**TICKET SCOPE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	<i>SERVICE RESTRICTION</i>	::>	<b>TICKET SCOPE</b> inherits from <b>SERVICE RESTRICTION</b>
«UID»	<b>Id</b>		1:1	Identifier of TICKET SCOPE.

**TICKET VALIDATOR EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Ticketing Equipment MODEL.TICKET VALIDATOR EQUIPMENT)

Specialisation of PASSENGER EQUIPMENT (PLACE EQUIPMENT) describing ticket validators.

**TICKET VALIDATOR EQUIPMENT – Relations**

Source	Target
<b>TICKET VALIDATOR EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PASSENGER EQUIPMENT</b> Role: Cardinality:
<b>TICKET VALIDATOR EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF TICKET</b> Role: a characterisation of Cardinality: 0..*

**TICKET VALIDATOR EQUIPMENT – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	<i>PASSENGER EQUIPMENT</i>	::>	<b>TICKET VALIDATOR EQUIPMENT</b> inherits from <b>PASSENGER EQUIPMENT</b>
«UID»	<b>Id</b>	<i>TicketValidatorIdType</i>	1:1	Identifier of TICKET VALIDATOR.
	<b>ValidatorList</b>	<i>TicketValidatorEnum</i>	0..*	Type of TICKET VALIDATOR.

**TICKETING EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Ticketing Equipment MODEL.TICKETING EQUIPMENT)

Specialization of PASSENGER EQUIPMENT for ticketing.

**TICKETING EQUIPMENT – Relations**

Source	Target
<b>VEHICLE MODE</b> Role: concerned by Cardinality: 0..* Relation type: Association	<b>TICKETING EQUIPMENT</b> Role: for Cardinality: 0..*
<b>TYPE OF TICKET</b> Role: a characterisation of Cardinality: 0..* Relation type: Association	<b>TICKETING EQUIPMENT</b> Role: characterised by Cardinality: 0..*
<b>TICKET SCOPE</b> Role: a characterisation of Cardinality: 0..* Relation type: Association	<b>TICKETING EQUIPMENT</b> Role: characterised by Cardinality: 0..*

<b>TYPE OF PAYMENT METHOD</b> <i>Role: a characterisation of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TICKETING EQUIPMENT</b> <i>Role: characterised by</i> <i>Cardinality: 0..*</i>
<b>TICKETING EQUIPMENT</b> <i>Role: characterised by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF TICKETING</b> <i>Role: a characterisation of</i> <i>Cardinality: 0..*</i>
<b>TICKETING EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>PASSENGER EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

#### TICKETING EQUIPMENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	PASSENGER EQUIPMENT	::>	TICKETING EQUIPMENT inherits from PASSENGER EQUIPMENT
«UID»	<b>Id</b>	<i>TicketingEquipmentIdType</i>	1:1	Identifier of TICKETING EQUIPMENT.
	<b>TicketCounterService</b>	<i>boolean</i>	0:1	Whether there is a ticket counter.
	<b>NumberOfMachines</b>	<i>integer</i>	0:1	Number of ticket machines.
	<b>TicketMachines</b>	<i>boolean</i>	1:1	Whether there are ticket machines.
	<b>HeightOfMachineInterface</b>	<i>LengthType</i>	0:1	Whether there is a low counter for accessibility.
	<b>TicketingFacilityList</b>	<i>TicketingFacilityEnum</i>	0:*	Types of TICKETING available.
	<b>TicketOffice</b>	<i>boolean</i>	0:1	Whether there is a distinct ticket office.
	<b>NumberOfTills</b>	<i>integer</i>	0:1	Number of tills selling tickets.
	<b>QueueManagement</b>	<i>QueueManagementEnum</i>	0:*	Type of Queue Management.
	<b>HeightOfLowCounter</b>	<i>LengthType</i>	0:1	Height of counter for accessibility.
	<b>LowCounterAccess</b>	<i>boolean</i>	0:1	Whether there are induction loops.
	<b>InductionLoops</b>	<i>boolean</i>	0:1	Whether there are ticket machines.

#### TICKETING SERVICE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .TICKETING SERVICE)

Specialization of LOCAL SERVICE for ticketing, providing ticket counter and online purchase information, also associated with payment method and TYPE OF TICKET.



## TICKETING SERVICE – Relations

Source	Target
<b>TICKETING SERVICE</b> Role: restricted by Cardinality: 0..* Relation type: Association	<b>TYPE OF TICKET</b> Role: restricting Cardinality: 0..*
<b>TICKETING SERVICE</b> Role: restricted by Cardinality: 0..* Relation type: Association	<b>TYPE OF TICKETING</b> Role: restricting Cardinality: 0..*
<b>TICKETING SERVICE</b> Role: restricted by Cardinality: 0..* Relation type: Association	<b>TICKET SCOPE</b> Role: restricting Cardinality: 0..*
<b>TICKETING SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>LOCAL SERVICE</b> Role: Cardinality:
<b>TICKETING SERVICE</b> Role: for Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: concerned by Cardinality: 0..*
<b>TICKETING SERVICE</b> Role: restricted by Cardinality: 0..* Relation type: Association	<b>TYPE OF PAYMENT METHOD</b> Role: restricting Cardinality: 0..*

## TICKETING SERVICE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	LOCAL SERVICE	::>	<b>TICKETING SERVICE</b> inherits from <b>LOCAL SERVICE</b>
«UID»	<b>Id</b>	<i>TicketingServiceIdType</i>	1:1	Identifier of TICKETING SERVICE.
	<b>OnlinePurchaseForCollection</b>	<i>boolean</i>	0:1	Whether there is an on-line sale of tickets for collection in the station.
	<b>OnlinePurchaseForETicket</b>	<i>boolean</i>	0:1	Whether there is an on-line sale of tickets for etickets.
	<b>TicketCounterService</b>	<i>boolean</i>	0:1	Whether there is an over the counter sale of tickets.
	<b>OnlinePurchaseForSelfTicket</b>	<i>boolean</i>	0:1	Whether there is an on-line sale of tickets for self print tickets.
	<b>OnboardPurchase</b>	<i>boolean</i>	0:1	Whether there is an onboard purchase of tickets.
	<b>MobileDeviceTickets</b>	<i>boolean</i>	0:1	Whether there is an purchase of tickets from a mobile device.

## TIME BAND

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Calendar MODEL.TIME BAND)

A period in a day, significant for some aspect of public transport, e.g. similar traffic conditions or fare category.

## TIME BAND – Relations

Source	Target
<b>TIME BAND</b> <i>Role:</i> determining <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>AVAILABILITY CONDITION</b> <i>Role:</i> valid for <i>Cardinality:</i> 0..*
<b>GROUP OF TIMEBANDS</b> <i>Role:</i> made up of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>TIME BAND</b> <i>Role:</i> in <i>Cardinality:</i> 0..*
<b>TIME BAND</b> <i>Role:</i> used to define <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DAY TYPE ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..*
<b>TIME BAND</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>TIME BAND</b> <i>Role:</i> used to define <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY TIMING</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME BAND</b> <i>Role:</i> defining <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INTERCHANGE</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>TIME BAND</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>HEADWAY JOURNEY GROUP</b> <i>Role:</i> active on <i>Cardinality:</i> 0..*
<b>TIME BAND</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>RHYTHMICAL JOURNEY GROUP</b> <i>Role:</i> active on <i>Cardinality:</i> 0..*
<b>TIME BAND</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE CALENDAR FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1

## TIME BAND – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TimebandIdType</i>	1:1	Identifier of TIME BAND.
	<b>StartTime</b>	<i>time</i>	1:1	Inclusive start time of TIME BAND.
	<b>EndTime</b>	<i>time</i>	1:1	Inclusive end time of TIME BAND.
	<b>DayOffset</b>	<i>integer</i>	0:*	Day offset of end time from start time. If same day, zero.
	<b>Duration</b>	<i>duration</i>	0:*	Length of day - Alternative to use of end time -

## TIME DEMAND TYPE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Time Demand Type MODEL.TIME DEMAND TYPE)

An indicator of traffic conditions or other factors which may affect vehicle run or wait times. It may be entered directly by the scheduler or defined by the use of TIME BANDs.

## TIME DEMAND TYPE – Relations

Source	Target
<b>TIME DEMAND TYPE</b> <i>Role:</i> determined for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> determining <i>Cardinality:</i> 0..1
<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role:</i> used to define <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TIME DEMAND TYPE</b> <i>Role:</i> for <i>Cardinality:</i> 1
<b>JOURNEY TIMING</b> <i>Role:</i> associated with <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 0..1
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TURNAROUND TIME LIMIT</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN LAYOVER</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE TYPE PREFERENCE</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN WAIT TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT SERVICE JOURNEY RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT DEAD RUN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> used by default by <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> made using <i>Cardinality:</i> *
<b>TIME DEMAND TYPE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIME DEMAND TYPE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

<b>HEADWAY JOURNEY GROUP</b> <i>Role: made using</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIME DEMAND TYPE</b> <i>Role: used by default by</i> <i>Cardinality: 0..*</i>
<b>JOURNEY PATTERN HEADWAY</b> <i>Role: associated with</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIME DEMAND TYPE</b> <i>Role: used to define</i> <i>Cardinality: 1</i>

#### TIME DEMAND TYPE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TimeDemandTypeIdType</i>	1:1	Identifier of TIME DEMAND TYPE.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of TIME DEMAND TYPE.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of TIME DEMAND TYPE.

#### TIME DEMAND TYPE ASSIGNMENT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Time Demand Type MODEL.TIME DEMAND TYPE ASSIGNMENT)

The assignment of a TIME DEMAND TYPE to a TIME BAND depending on the DAY TYPE and GROUP OF TIMING LINKS.

#### TIME DEMAND TYPE ASSIGNMENT – Relations

Source	Target
<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role: used to define</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIME DEMAND TYPE</b> <i>Role: for</i> <i>Cardinality: 1</i>
<b>DAY TYPE</b> <i>Role: used to define</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role: for</i> <i>Cardinality: *</i>
<b>TIME BAND</b> <i>Role: used to define</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role: for</i> <i>Cardinality: *</i>
<b>GROUP OF TIMING LINKS</b> <i>Role: used to define</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role: for</i> <i>Cardinality: *</i>
<b>TIME DEMAND TYPE ASSIGNMENT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

#### TIME DEMAND TYPE ASSIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TimingDemandAssignmentIdType</i>	1:1	Identifier of TIME DEMAND TYPE ASSIGNMENT.

**TIMETABLE FRAME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Explicit Frames MODEL .Timetable Frame MODEL.TIMETABLE FRAME)

A set of timetable data to which the same VALIDITY CONDITIONs have been assigned.

<b>TIMETABLE FRAME – Relations</b>	
<b>Source</b>	<b>Target</b>
<b>TIMETABLE FRAME</b> Role: Cardinality: Relation type: Aggregation	<b>COMPOSITE FRAME</b> Role: Cardinality:
<b>TIME DEMAND TYPE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>GROUP OF LINKS</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>NOTICE ASSIGNMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>TIME DEMAND TYPE ASSIGNMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>NOTICE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>TIMETABLE FRAME</b> Role: dated by Cardinality: 0..* Relation type: Association	<b>SERVICE CALENDAR FRAME</b> Role: take use of Cardinality: 0..1
<b>TIMETABLE FRAME</b> Role: comprising Cardinality: 0..1 Relation type: Association	<b>VEHICLE SCHEDULE FRAME</b> Role: valid for Cardinality: 0..*
<b>TIMETABLE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>JOURNEY ACCOUNTING</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>FLEXIBLE SERVICE PROPERTIES</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>TYPE OF COUPLING</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:

<b>PURPOSE OF JOURNEY PARTITION</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY PART COUPLE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY PART</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>SERVICE JOURNEY PATTERN INTERCHANGE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>SERVICE JOURNEY INTERCHANGE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY MEETING</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY FREQUENCY GROUP</b> Role: Cardinality: Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY FREQUENCY GROUP</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY PATTERN RUN TIME</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY PATTERN WAIT TIME</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>GROUP OF SERVICES</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>TYPE OF SERVICE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>TRAIN NUMBER</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>JOURNEY</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:

**TIMETABLE FRAME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	<b>TIMETABLE FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<b>Id</b>		1:1	Identifier of TIMETABLE FRAME.

**TIMETABLED PASSING TIME**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Passing Times MODEL .TIMETABLED PASSING TIME)

Long-term planned time data concerning public transport vehicles passing a particular POINT IN JOURNEY PATTERN on a specified VEHICLE JOURNEY for a certain DAY TYPE.

**TIMETABLED PASSING TIME – Relations**

Source	Target
<b>POINT IN JOURNEY PATTERN</b> Role: passed at Cardinality: 1 Relation type: Association	<b>TIMETABLED PASSING TIME</b> Role: at Cardinality: *
<b>TIMETABLED PASSING TIME</b> Role: Cardinality: Relation type: Generalization	<b>PASSING TIME</b> Role: Cardinality:
<b>TIMETABLED PASSING TIME</b> Role: for Cardinality: * Relation type: Association	<b>VEHICLE JOURNEY</b> Role: at Cardinality: 1

**TIMETABLED PASSING TIME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PASSING TIME	::>	<b>TIMETABLED PASSING TIME</b> inherits from <b>PASSING TIME</b>
	<b>ArrivalTime</b>	time	0:1	Arrival time at POINT IN PATTERN
«UID»	<b>Id</b>	PassingTimeIdType	1:1	Identifier of PASSING TIME.
	<b>DepartureTime</b>	time	0:1	Departure time at POINT IN PATTERN
	<b>WaitingTime</b>	duration	0:1	Waiting time at POINT IN PATTERN
	<b>EarliestDepartureTime</b>	time	0:1	Earliest Departure time at POINT IN PATTERN
	<b>LatestArrivalTime</b>	time	0:1	Latest Arrival time at POINT IN PATTERN

**TIMING LINK**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Timing Pattern MODEL.TIMING LINK)

An ordered pair of TIMING POINTs for which run times may be recorded.

## TIMING LINK – Relations

Source	Target
<b>TIMING LINK</b> <i>Role:</i> primarily operated by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE MODE</b> <i>Role:</i> used as primary on <i>Cardinality:</i> 0..1
<b>TIMING LINK</b> <i>Role:</i> to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TIMING POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1
<b>TIMING LINK</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TIMING LINK IN JOURNEY PATTERN</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>GROUP OF TIMING LINKS</b> <i>Role:</i> made up of <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>TIMING LINK</b> <i>Role:</i> in <i>Cardinality:</i> 1..*
<b>TIMING LINK</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>LINK</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING LINK</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..*
<b>TIMING POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TIMING LINK</b> <i>Role:</i> from <i>Cardinality:</i> *
<b>TIMING LINK</b> <i>Role:</i> operated by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE MODE</b> <i>Role:</i> operating <i>Cardinality:</i> 0..*
<b>TIMING LINK</b> <i>Role:</i> covered in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PATTERN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIMING LINK</b> <i>Role:</i> covered in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT SERVICE JOURNEY RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIMING LINK</b> <i>Role:</i> covered in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>DEFAULT DEAD RUN RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> *
<b>TIMING LINK</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>JOURNEY RUN TIME</b> <i>Role:</i> associated with <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TIMING LINK</b> <i>Role:</i> covered in <i>Cardinality:</i> 1



**TIMING LINK – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	LINK	::>	<b>TIMING LINK</b> inherits from <b>LINK</b>
«UID»	<b>Id</b>	TimingLinkIdType	1:1	Identifier of a TIMING LINK.

**TIMING LINK IN JOURNEY PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Journey Pattern MODEL.TIMING LINK IN JOURNEY PATTERN)

The position of a TIMING LINK in a JOURNEY PATTERN. This entity is needed if a TIMING LINK is repeated in the same JOURNEY PATTERN, and separate information is to be stored about each iteration of the TIMING LINK.

**TIMING LINK IN JOURNEY PATTERN – Relations**

Source	Target
<b>JOURNEY PATTERN</b> Role: made up of Cardinality: 1 Relation type: Association	<b>TIMING LINK IN JOURNEY PATTERN</b> Role: in Cardinality: *
<b>TIMING LINK</b> Role: viewed as Cardinality: 1 Relation type: Association	<b>TIMING LINK IN JOURNEY PATTERN</b> Role: a view of Cardinality: *
<b>VEHICLE JOURNEY RUN TIME</b> Role: for Cardinality: * Relation type: Association	<b>TIMING LINK IN JOURNEY PATTERN</b> Role: covered in Cardinality: 1

**TIMING LINK IN JOURNEY PATTERN – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TimingLinkInJourneyPatternIdType	1:1	Identifier of TIMING LINK IN JOURNEY PATTERN.

**TIMING PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Timing Pattern MODEL.TIMING PATTERN)

The subset of a JOURNEY PATTERN made up only of TIMING POINTs IN JOURNEY PATTERN.

**TIMING PATTERN – Relations**

Source	Target
<b>JOURNEY PATTERN</b> Role: made up of Cardinality: * Relation type: Association	<b>TIMING PATTERN</b> Role: contributing to Cardinality: 1
<b>TIMING PATTERN</b> Role: made up of Cardinality: 1 Relation type: Association	<b>TIMING POINT IN JOURNEY PATTERN</b> Role: defining Cardinality: 1..*
<b>TIMING PATTERN</b> Role: Cardinality: Relation type: Generalization	<b>LINK SEQUENCE</b> Role: Cardinality:

<b>TIMING PATTERN</b> <i>Role: defined on</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>ROUTE</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>TIMING PATTERN</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## TIMING PATTERN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	LINK SEQUENCE	::>	<b>TIMING PATTERN</b> inherits from <b>LINK SEQUENCE</b>
«UID»	<i>Id</i>	<i>TimingPatternIdType</i>	1:1	Identifier of TIMING PATTERN.

## TIMING POINT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Timing Pattern MODEL.TIMING POINT)

A POINT against which the timing information necessary to build schedules may be recorded.

## TIMING POINT – Relations

Source	Target
<b>TIMING POINT</b> <i>Role: viewed as</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: a view of</i> <i>Cardinality: *</i>
<b>RELIEF POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>TIMING POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING LINK</b> <i>Role: to</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIMING POINT</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>TIMING POINT</b> <i>Role: start of</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIMING LINK</b> <i>Role: from</i> <i>Cardinality: *</i>
<b>TIMING POINT</b> <i>Role: start of</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TURNAROUND TIME LIMIT</b> <i>Role: from</i> <i>Cardinality: *</i>
<b>TIMING POINT</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

<b>JOURNEY WAIT TIME</b> <i>Role: timed at</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TIMING POINT</b> <i>Role: for</i> <i>Cardinality: 1</i>
<b>JOURNEY HEADWAY</b> <i>Role: for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TIMING POINT</b> <i>Role: passed every</i> <i>Cardinality: 1</i>
<b>TURNAROUND TIME LIMIT</b> <i>Role: to</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIMING POINT</b> <i>Role: end of</i> <i>Cardinality: 1</i>

## TIMING POINT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>POINT</i>	::>	<b>TIMING POINT</b> inherits from <b>POINT</b>
«UID»	<b>Id</b>	<i>TimingPointIdType</i>	1:1	Identifier of a TIMING POINT.
	<b>Category</b>	<i>string</i>	0:1	Category of a TIMING POINT.
	<b>AllowedForWaitTime</b>	<i>duration</i>	0:1	Default Wait time to use for TIMING PATTERNS that use TIMING POINT. TIME DEMAND TYPE specific values may be specified using a TIME DEMAND TYPE TIMING.
	<b>Flexible</b>	<i>boolean</i>	0:1	Whether TIMING POINT is usable in a FLEXIBLE JOURNEY.
	<b>TimingPointType</b>	<i>TimingStatusEnum</i>	0:1	Timing status of POINT; principle, secondary, other.

## TIMING POINT IN JOURNEY PATTERN

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Journey Pattern MODEL.TIMING POINT IN JOURNEY PATTERN)

A **POINT** in a **JOURNEY PATTERN** which is a **TIMING POINT**.

## TIMING POINT IN JOURNEY PATTERN – Relations

Source	Target
<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>POINT IN LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: the timing reference for</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>JOURNEY PATTERN</b> <i>Role: by default timed from</i> <i>Cardinality: 0..1</i>
<b>TIMING POINT</b> <i>Role: viewed as</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: a view of</i> <i>Cardinality: *</i>
<b>TIMING PATTERN</b> <i>Role: made up of</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: defining</i> <i>Cardinality: 1..*</i>

<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: passed at</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TARGET PASSING TIME</b> <i>Role: at</i> <i>Cardinality: *</i>
<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: associated with</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VEHICLE JOURNEY WAIT TIME</b> <i>Role: applied at</i> <i>Cardinality: *</i>
<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: the timing reference for</i> <i>Cardinality: 1..</i> <i>Relation type: Association</i>	<b>VEHICLE JOURNEY HEADWAY</b> <i>Role: for</i> <i>Cardinality: 0..*</i>
<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: timing reference for</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>JOURNEY PATTERN HEADWAY</b> <i>Role: referenced by</i> <i>Cardinality: 0..*</i>
<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: associated with</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>JOURNEY PATTERN WAIT TIME</b> <i>Role: applied at</i> <i>Cardinality: *</i>
<b>COMPOUND BLOCK</b> <i>Role: from</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: start of</i> <i>Cardinality: 1</i>
<b>COMPOUND BLOCK</b> <i>Role: to</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>VEHICLE JOURNEY</b> <i>Role: timed from</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role: the timing reference for</i> <i>Cardinality: 0..1</i>

#### TIMING POINT IN JOURNEY PATTERN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	POINT IN LINK SEQUENCE	::>	<b>TIMING POINT IN JOURNEY PATTERN</b> inherits from <b>POINT IN LINK SEQUENCE</b>
«UID»	<b>Id</b>	TimingPointInJourneyPatternId	1:1	Identifier of TIMING POINT IN JOURNEY PATTERN.
	<b>IsWaitPoint</b>	boolean	1:1	Whether TIMING POINT is a wait point.

#### TOPOGRAPHIC PLACE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Topographic Place MODEL.TOPOGRAPHIC PLACE)

A type of PLACE providing the topographical context when searching for or presenting travel information, for example as the origin or destination of a trip. It may be of any size (e.g. County, City, Town, Village) and of different specificity (e.g. Greater London, London, West End, Westminster, St James s).

## TOPOGRAPHIC PLACE – Relations

Source	Target
<b>TOPOGRAPHIC PLACE</b> Role: adjacent to Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: adjacent to Cardinality: 0..*
<b>STOP AREA</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*
<b>DEFAULT CONNECTION</b> Role: determined within Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: determining Cardinality: 0..1
<b>PLACE</b> Role: contained in Cardinality: 0..1 Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: containing Cardinality: 0..*
<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: Relation type: Generalization	<b>PLACE</b> Role: Cardinality:
<b>TOPOGRAPHIC PLACE</b> Role: part of Cardinality: 0..* Relation type: Association	<b>COUNTRY</b> Role: primary for Cardinality: 1
<b>COUNTRY</b> Role: intersected by Cardinality: 1..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: intersecting Cardinality: 0..*
<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: * Relation type: Aggregation	<b>SITE FRAME</b> Role: Cardinality:
<b>STOP PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*
<b>STOP PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*
<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>POINT OF INTEREST</b> Role: Cardinality: *
<b>SCHEDULED STOP POINT</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*
<b>STOP PLACE</b> Role: Cardinality: 0..* Relation type: Association	<b>TOPOGRAPHIC PLACE</b> Role: Cardinality: 0..*

## TOPOGRAPHIC PLACE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>PLACE</i>	::>	<b>TOPOGRAPHIC PLACE</b> inherits from <b>PLACE</b>
«UID»	<b>Id</b>	<i>TopographicalPlaceIdType</i>	1:1	Identifier of a TOPOGRAPHIC PLACE.
	<b>Name</b>	<i>MultilingualString</i>	1:1	Name of a TOPOGRAPHIC PLACE.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of a TOPOGRAPHIC PLACE.
	<b>TopographicType</b>	<i>TopographicTypeEnum</i>	1:1	Type of a TOPOGRAPHIC PLACE.
	<b>Qualifier</b>	<i>MultilingualString</i>	0:1	Name used to distinguish TOPOGRAPHIC PLACE from other similar named TOPOGRAPHIC PLACES. This should not be included in the Name but may be added by applications in context.
	<b>Centre</b>	<i>boolean</i>	0:1	Whether TOPOGRAPHIC PLACE lies at centre of settlement.

## TRACE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Delta MODEL.TRACE)

A way to record the context of the changes occurred in a given ENTITY instance, as regards the authors, the causes of the changes, etc., possibly accompanied by a descriptive text.

## TRACE – Relations

Source	Target
<b>TRACE</b> Role: document within Cardinality: * Relation type: Association	<b>ENTITY IN VERSION</b> Role: changed by Cardinality: 1

## TRACE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TRACE.
	<b>ChangedAt</b>	<i>dateTime</i>	1:1	Timestamp of when Object was Changed.
	<b>ChangedBy</b>	<i>normalizedString</i>	0:1	Who made change.
	<b>Description</b>	<i>normalizedString</i>	0:1	Description of context for change..

## TRAFFIC CONTROL POINT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.TRAFFIC CONTROL POINT)

A POINT where the traffic flow can be influenced. Examples are: traffic lights (lanterns), barriers.

## TRAFFIC CONTROL POINT – Relations

Source	Target
<b>TYPE OF TRAFFIC CONTROL POINT</b> <i>Role:</i> classifying <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRAFFIC CONTROL POINT</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>TRAFFIC CONTROL POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>ACTIVATED EQUIPMENT</b> <i>Role:</i> related to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TRAFFIC CONTROL POINT</b> <i>Role:</i> controlled by <i>Cardinality:</i> 1..*
<b>TRAFFIC CONTROL POINT</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## TRAFFIC CONTROL POINT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>POINT</i>	::>	<b>TRAFFIC CONTROL POINT</b> inherits from <i>POINT</i>
«UID»	<b>Id</b>	<i>TrafficControlPointIdType</i>	1:1	Identifier of TRAFFIC CONTROL POINT.

## TRAIN

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Train MODEL.TRAIN)

A *VEHICLE TYPE* composed of *TRAIN ELEMENT*s in a certain order, i.e. of wagons assembled together and generally propelled by a locomotive or one of the wagons.

## TRAIN – Relations

Source	Target
<b>TRAIN COMPONENT</b> <i>Role:</i> used for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TRAIN</b> <i>Role:</i> composed of <i>Cardinality:</i> 1
<b>TRAIN</b> <i>Role:</i> used for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRAIN IN COMPOUND TRAIN</b> <i>Role:</i> using <i>Cardinality:</i> *
<b>TRAIN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VEHICLE TYPE</b> <i>Role:</i> <i>Cardinality:</i>

## TRAIN – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>VEHICLE TYPE</i>	::>	<b>TRAIN</b> inherits from <i>VEHICLE TYPE</i>
«UID»	<b>Id</b>	<i>TrainIdType</i>	1:1	Identifier of TRAIN.

**TRAIN COMPONENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Train MODEL.TRAIN COMPONENT)

A specification of the order of TRAIN ELEMENTs in a TRAIN.

**TRAIN COMPONENT – Relations**

Source	Target
<b>TRAIN COMPONENT</b> Role: using Cardinality: * Relation type: Association	<b>TRAIN ELEMENT</b> Role: used for Cardinality: 1
<b>TRAIN COMPONENT</b> Role: used for Cardinality: * Relation type: Association	<b>TRAIN</b> Role: composed of Cardinality: 1
<b>TRAIN STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>TRAIN COMPONENT</b> Role: subject to Cardinality: 1
<b>TRAIN COMPONENT LABEL ASSIGNMENT</b> Role: for Cardinality: * Relation type: Association	<b>TRAIN COMPONENT</b> Role: subject to Cardinality: 1

**TRAIN COMPONENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TrainComponentIdType</i>	1:1	Identifier of TRAIN COMPONENT.
	<b>Order</b>	<i>positiveInteger</i>	1:1	Order of TRAIN COMPONENT in TRAIN.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of TRAIN COMPONENT.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of TRAIN COMPONENT.
	<b>Label</b>	<i>MultilingualString</i>	0:1	Label of TRAIN COMPONENT.

**TRAIN COMPONENT LABEL ASSIGNMENT**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Journey Assignment MODEL.TI Train Component Label Assignment MODEL.TRAIN COMPONENT LABEL ASSIGNMENT)

The allocation of an advertised designation for a vehicle or vehicle element for passengers.

**TRAIN COMPONENT LABEL ASSIGNMENT – Relations**

Source	Target
<b>TRAIN COMPONENT LABEL ASSIGNMENT</b> Role: for Cardinality: * Relation type: Association	<b>TRAIN COMPONENT</b> Role: subject to Cardinality: 1
<b>TRAIN COMPONENT LABEL ASSIGNMENT</b> Role: for Cardinality: * Relation type: Association	<b>VEHICLE JOURNEY</b> Role: determining Cardinality: 1



**TRAIN COMPONENT LABEL ASSIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TRAIN COMPONENT LABEL ASSIGNMENT.
	<b>Label</b>	<i>multilingualString</i>	1:1	Advertised label for the identification of coaches for passengers.

**TRAIN ELEMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Train MODEL.TRAIN ELEMENT)

An elementary component of a TRAIN (e.g. wagon, locomotive).

**TRAIN ELEMENT – Relations**

Source	Target
<b>TRAIN COMPONENT</b> Role: using Cardinality: * Relation type: Association	<b>TRAIN ELEMENT</b> Role: used for Cardinality: 1
<b>TYPE OF TRAIN ELEMENT</b> Role: classification for Cardinality: 1 Relation type: Association	<b>TRAIN ELEMENT</b> Role: classified as Cardinality: *
<b>TRAIN ELEMENT</b> Role: equipped with Cardinality: 1 Relation type: Association	<b>ACTUAL VEHICLE EQUIPMENT</b> Role: in Cardinality: *
<b>TRAIN ELEMENT</b> Role: the location of Cardinality: 0..1 Relation type: Association	<b>PASSENGER INFORMATION EQUIPMENT</b> Role: located in Cardinality: *

**TRAIN ELEMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TrainElementIdType</i>	1:1	Identifier of TRAIN ELEMENT.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of TRAIN ELEMENT.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of TRAIN ELEMENT
	<b>Length</b>	<i>LengthType</i>	0:1	Length of TRAIN ELEMENT

**TRAIN IN COMPOUND TRAIN**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Train MODEL.TRAIN IN COMPOUND TRAIN)

The specification of the order of TRAINs in a COMPOUND TRAIN.

**TRAIN IN COMPOUND TRAIN – Relations**

Source	Target
<b>TRAIN IN COMPOUND TRAIN</b> <i>Role:</i> used for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>COMPOUND TRAIN</b> <i>Role:</i> composed of <i>Cardinality:</i> 1
<b>TRAIN</b> <i>Role:</i> used for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRAIN IN COMPOUND TRAIN</b> <i>Role:</i> using <i>Cardinality:</i> *

**TRAIN IN COMPOUND TRAIN – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TrainInCompoundTrainId Type</i>	1:1	Identifier of TRAIN in COMPOUND TRAIN.
	<b>Order</b>	<i>positiveInteger</i>	1:1	Order of TRAIN in COMPOUND TRAIN.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of TRAIN COMPONENT.
	<b>OperationalOrientation</b>	<i>VehicleOrientationEnum</i>	0:1	Whether TRAIN is operating forwards or backwards within compound train.
	<b>ReversedOrientation</b>		0:1	Flag describing whether the component order of the TRAIN IN COMPOUND TRAIN is reversed compared to the order in the TRAIN.
	<b>Label</b>	<i>MultilingualString</i>	0:1	Label of TRAIN COMPONENT.

**TRAIN NUMBER**

(Transmodel v6, Part 3 - Timing Information & Vehicle Scheduling (TI). TI JourneyAndJourneyTimes MODEL . TI Vehicle Journey MODEL. TRAIN NUMBER)

Specification of codes assigned to particular VEHICLE JOURNEYS when operated by TRAINs or COMPOUND TRAINs according to a functional purpose (passenger information, operation follow-up, etc)

**TRAIN NUMBER – Relations**

Source	Target
<b>TRAIN NUMBER</b> <i>Role:</i> identifying <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY PART</b> <i>Role:</i> identified by <i>Cardinality:</i> 0..*
<b>TRAIN NUMBER</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TRAIN NUMBER</b> <i>Role:</i> identifying <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>JOURNEY PART COUPLE</b> <i>Role:</i> identified by <i>Cardinality:</i> 0..*
<b>TRAIN NUMBER</b> <i>Role:</i> identifying <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> identified by <i>Cardinality:</i> 0..*

**TRAIN NUMBER – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TrainNumberIdType</i>	1:1	Identifier of TRAIN NUMBER.
	<b>ForAdvertisement</b>	<i>normalizedString</i>	0:1	TRAIN NUMBER to use for advertisement to public if different from ID.
	<b>ForProduction</b>	<i>normalizedString</i>	0:1	TRAIN NUMBER to use for advertisement to public, if different from ID.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of TRAIN NUMBER.

**TRAIN STOP ASSIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Train Stop Assignment MODEL .TRAIN STOP ASSIGNMENT)

The association of a TRAIN COMPONENT at a SCHEDULED STOP POINT with a specific STOP PLACE and also possibly a QUAY and BOARDING POSITION.

**TRAIN STOP ASSIGNMENT – Relations**

Source	Target
<b>TRAIN STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>TRAIN COMPONENT</b> Role: subject to Cardinality: 1
<b>TRAIN STOP ASSIGNMENT</b> Role: Cardinality: Relation type: Generalization	<b>STOP ASSIGNMENT</b> Role: Cardinality:
<b>TRAIN STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>PASSENGER STOP ASSIGNMENT</b> Role: to Cardinality: 0..1
<b>TRAIN STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>BOARDING POSITION</b> Role: to Cardinality: 0..1
<b>TRAIN STOP ASSIGNMENT</b> Role: Cardinality: * Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**TRAIN STOP ASSIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>STOP ASSIGNMENT</i>	::>	<b>TRAIN STOP ASSIGNMENT</b> inherits from <b>STOP ASSIGNMENT</b>
«UID»	<b>Id</b>	<i>TrainStopAssignmentIdType</i>	1:1	Identifier of TRAIN STOP ASSIGNMENT.
	<b>PositionOfTrainElement</b>	<i>positiveInteger</i>	1:1	Relative position of TRAIN ELEMENT.
	<b>EntranceToVehicle</b>	<i>MultilingualString</i>	0:1	A specific ENTRANCE to the VEHICLE. E.g. Front, rear

**TRANSFER**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Place MODEL.TRANSFER)

A couple of POINTs located sufficiently near that it may represent for a passenger a possibility to reach one of these POINTs when starting at the other one in a timescale which is realistic when carrying out a trip, e.g. ACCESS.

**TRANSFER – Relations**

Source	Target
<b>ACCESS</b> Role: Cardinality: Relation type: Generalization	<b>TRANSFER</b> Role: Cardinality:
<b>VALIDITY CONDITION</b> Role: applicable for Cardinality: 0..* Relation type: Association	<b>TRANSFER</b> Role: for Cardinality: 0..*
<b>TRANSFER</b> Role: classified by Cardinality: 0..* Relation type: Association	<b>TYPE OF TRANSFER</b> Role: a classification for Cardinality: 0..1
<b>TRANSFER</b> Role: traversed with Cardinality: 0..* Relation type: Association	<b>NAVIGATION PATH</b> Role: for Cardinality: 0..*
<b>DEFAULT CONNECTION</b> Role: Cardinality: Relation type: Generalization	<b>TRANSFER</b> Role: Cardinality:
<b>CONNECTION</b> Role: Cardinality: Relation type: Generalization	<b>TRANSFER</b> Role: Cardinality:
<b>SITE CONNECTION</b> Role: Cardinality: Relation type: Generalization	<b>TRANSFER</b> Role: Cardinality:
<b>TRANSFER END</b> Role: start of Cardinality: 1 Relation type: Association	<b>TRANSFER</b> Role: from Cardinality: 0..*
<b>TRANSFER END</b> Role: end of Cardinality: 1 Relation type: Association	<b>TRANSFER</b> Role: to Cardinality: 0..*

**TRANSFER – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TransferIdType</i>	1:1	Identifier of TRANSFER.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of TRANSFER.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of TRANSFER.
	<b>Distance</b>	<i>LenthType</i>	0:1	Distance of TRANSFER link
	<b>BothWays</b>	<i>boolean</i>	0:1	Whether TRANSFER can be traversed in both directions
	<b>DefaultDuration</b>	<i>duration</i>	1:1	Default interval to make transfer.
	<b>FrequentTravellerDuration</b>	<i>duration</i>	0:1	Time for a traveller familiar with journey to make transfer.
	<b>OccasionalTravellerDuration</b>	<i>duration</i>	0:1	Time for a traveller unfamiliar with journey to make transfer.
	<b>MobilityRestrictedTravellerDuration</b>	<i>duration</i>	0:1	Time for a mobility impaired traveller to make transfer.

**TRANSFER END**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Place MODEL.TRANSFER END)

End point of a TRANSFER.

**TRANSFER END – Relations**

Source	Target
<b>TRANSFER END</b> Role: start of Cardinality: 1 Relation type: Association	<b>TRANSFER</b> Role: from Cardinality: 0..*
<b>TRANSFER END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>POINT</b> Role: viewed as Cardinality: 0..1
<b>TRANSFER END</b> Role: end of Cardinality: 1 Relation type: Association	<b>TRANSFER</b> Role: to Cardinality: 0..*
<b>TRANSFER END</b> Role: a view of Cardinality: 0..* Relation type: Association	<b>ZONE</b> Role: viewed as Cardinality: 0..1

**TRANSFER END – Attributes**

Classification	Name	Type	cardinality	Description

**TRANSFER RESTRICTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Routing Constraint MODEL.TRANSFER RESTRICTION)

A constraint that can be applied on a CONNECTION or INTERCHANGE between two SCHEDULED STOP POINT, preventing or forbidding the passenger to use it.

## TRANSFER RESTRICTION – Relations

Source	Target
<b>SCHEDULED STOP POINT</b> <i>Role:</i> end of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRANSFER RESTRICTION</b> <i>Role:</i> to <i>Cardinality:</i> 0..*
<b>SCHEDULED STOP POINT</b> <i>Role:</i> start of <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRANSFER RESTRICTION</b> <i>Role:</i> from <i>Cardinality:</i> 0..*
<b>TRANSFER RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>SERVICE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

## TRANSFER RESTRICTION – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TransferRestrictionIdType</i>	1:1	Identifier of TRANSFER RESTRICTION.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of SERVICE EXCLUSION.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of SERVICE EXCLUSION.
	<b>RestrictionType</b>	<i>TransferRestrictionTypeEnum</i>	0:1	Type of constraint applying to restriction.
	<b>BothWays</b>	<i>boolean</i>	0:1	Whether TRANSFER can be traversed in both directions

## TRAVEL AGENT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Additional Organisation MODEL.TRAVEL AGENT)

Specialisation of ORGANISATION for TRAVEL AGENT

## TRAVEL AGENT – Relations

Source	Target
<b>TRAVEL AGENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>OTHER ORGANISATION</b> <i>Role:</i> <i>Cardinality:</i>

## TRAVEL AGENT – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>OTHER ORGANISATION</i>	::>	<b>TRAVEL AGENT</b> inherits from <b>OTHER ORGANISATION</b>
«UID»	<b>Id</b>	<i>ServicedOrganisationIdType</i>	1:1	Identifier of SERVICED ORGANISATION.

**TRAVELATOR EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.NT Stair Equipment MODEL.TRAVELATOR EQUIPMENT)

Specialisation of PLACE ACCESS EQUIPMENT for travelators (provides travelator properties like speed, etc.).

**TRAVELATOR EQUIPMENT – Relations**

Source	Target
<b>TRAVELATOR EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>PLACE ACCESS EQUIPMENT</b> Role: Cardinality:

**TRAVELATOR EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE ACCESS EQUIPMENT	::>	<b>TRAVELATOR EQUIPMENT</b> inherits from <b>PLACE ACCESS EQUIPMENT</b>
«UID»	<b>id</b>		1:1	Identifier of TRAVELATOR.
	<b>TactileActuators</b>	boolean	0:1	Whether TRAVELATOR has tactile actuators.
	<b>EnergySaving</b>	boolean	0:1	Whether TRAVELATOR is energy saving.
	<b>DogsMustBeCarried</b>	boolean	0:1	Whether dogs must be carried.
	<b>Speed</b>	SpeedType	0:1	Speed of TRAVELATOR.

**TROLLEY STAND EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.TROLLEY STAND EQUIPMENT)

Specialisation of STOP PLACE EQUIPMENT for trolley stands.

**TROLLEY STAND EQUIPMENT – Relations**

Source	Target
<b>TROLLEY STAND EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>SITE EQUIPMENT</b> Role: Cardinality:

**TROLLEY STAND EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	SITE EQUIPMENT	::>	<b>TROLLEY STAND EQUIPMENT</b> inherits from <b>SITE EQUIPMENT</b>
«UID»	<b>Id</b>	TrolleyEquipmentIdType	1:1	Identifier of TROLLEY STAND EQUIPMENT.
	<b>FreeToUse</b>	boolean	0:1	Whether EQUIPMENT is free to use.
	<b>Charge</b>	Amount	0:1	Charge for using Equipment.
	<b>PaymentMethod</b>	PaymentMethodEnum	0:1	Method of paying for use of equipment.

**TURN STATION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.TURN STATION)

A place (often a terminus) where a vehicle can reverse its direction (from a ROUTE to another of opposite DIRECTION).

**TURN STATION – Relations**

Source	Target
<b>TURN STATION</b> <i>Role: from</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>POINT ON ROUTE</b> <i>Role: start of</i> <i>Cardinality: 1..*</i>
<b>TURN STATION</b> <i>Role: to</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>POINT ON ROUTE</b> <i>Role: end of</i> <i>Cardinality: 1..*</i>
<b>TURNAROUND TIME LIMIT</b> <i>Role: defined for</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TURN STATION</b> <i>Role: restricted to</i> <i>Cardinality: 0..1</i>

**TURN STATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TURN STATION.
	<b>TurnaroundDistance</b>	<i>Distance</i>	0:1	Distance available to turnaround in TURN STATION.

**TURNAROUND TIME LIMIT**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Pattern Times MODEL.TURNAROUND TIME LIMIT)

The maximum time for which a vehicle may be scheduled to wait at a particular TIMING POINT (often included in a TURN STATION) without being returned to a PARKING POINT. A minimum time for a vehicle to turn its direction may also be recorded. This may be superseded by a DEAD RUN.

**TURNAROUND TIME LIMIT – Relations**

Source	Target
<b>TIME DEMAND TYPE</b> <i>Role: used to define</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TURNAROUND TIME LIMIT</b> <i>Role: associated with</i> <i>Cardinality: *</i>
<b>TIMING POINT</b> <i>Role: start of</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TURNAROUND TIME LIMIT</b> <i>Role: from</i> <i>Cardinality: *</i>
<b>TURNAROUND TIME LIMIT</b> <i>Role: to</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TIMING POINT</b> <i>Role: end of</i> <i>Cardinality: 1</i>
<b>TURNAROUND TIME LIMIT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type: Generalization</i>	<b>JOURNEY TIMING</b> <i>Role:</i> <i>Cardinality:</i>
<b>TURNAROUND TIME LIMIT</b> <i>Role: defined for</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TURN STATION</b> <i>Role: restricted to</i> <i>Cardinality: 0..1</i>



**TURNAROUND TIME LIMIT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY TIMING	::>	<b>TURNAROUND TIME LIMIT</b> inherits from <b>JOURNEY TIMING</b>
«UID»	<b>Id</b>	TurnaroundTimeLimitIdType	0:1	Identifier of TURNAROUND TIME LIMIT
	<b>MinimumDuration</b>	duration	0:1	Minimum time needed for turnaround
	<b>MaximumDuration</b>	duration	1:1	Maximum time needed for turnaround

**TYPE OF ACCESS FEATURE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Check Constraint MODEL.TYPE OF ACCESS FEATURE)

A Classification of ACCESS FEATURE for CHECK CONSTRAINT (e.g. barrier, narrow entrance, confined space, queue management, etc.)

**TYPE OF ACCESS FEATURE – Relations**

Source	Target
<b>CHECK CONSTRAINT</b> Role: determined by Cardinality: 0..* Relation type: Association	<b>TYPE OF ACCESS FEATURE</b> Role: determining Cardinality: 0..1

**TYPE OF ACCESS FEATURE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF ACCESS FEATURE.

**TYPE OF ACCESSIBILITY LIMITATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.TYPE OF ACCESSIBILITY LIMITATION)

A classification for ACCESSIBILITY LIMITATIONS, e.g. audio, visual, step free, etc.

**TYPE OF ACCESSIBILITY LIMITATION – Relations**

Source	Target
<b>ACCESSIBILITY LIMITATION</b> Role: classified by Cardinality: 0..* Relation type: Association	<b>TYPE OF ACCESSIBILITY LIMITATION</b> Role: a classification for Cardinality: 1

**TYPE OF ACCESSIBILITY LIMITATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF ACCESSIBILITY LIMITATION.

**TYPE OF ACCESSIBILITY TOOLS**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .TYPE OF ACCESSIBILITY TOOLS)

A classification of *ACCESSIBILITY TOOLS* used by or available from *ASSISTANCE SERVICE* (e.g. wheelchair, walking stick, audio navigator, visual navigator, etc.)

#### TYPE OF ACCESSIBILITY TOOLS – Relations

Source	Target
<b>ASSISTANCE SERVICE</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF ACCESSIBILITY TOOLS</b> Role: description of Cardinality: 0..*

#### TYPE OF ACCESSIBILITY TOOLS – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF ACCESSIBILITY TOOLS.

#### TYPE OF ACTIVATION

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.TYPE OF ACTIVATION)

A classification of real-time processes that are activated when vehicles passes an *ACTIVATION POINT* or an *ACTIVATION LINK*.

#### TYPE OF ACTIVATION – Relations

Source	Target
<b>ACTIVATED EQUIPMENT</b> Role: used to trigger Cardinality: * Relation type: Association	<b>TYPE OF ACTIVATION</b> Role: triggered by Cardinality: 1..*
<b>ACTIVATION POINT</b> Role: used to trigger Cardinality: * Relation type: Association	<b>TYPE OF ACTIVATION</b> Role: triggered at Cardinality: 1..*
<b>ACTIVATION LINK</b> Role: used to trigger Cardinality: * Relation type: Association	<b>TYPE OF ACTIVATION</b> Role: triggered along Cardinality: 1..*

#### TYPE OF ACTIVATION – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfActivationIdType	1:1	Identifier of TYPE OF ACTIVATION.

#### TYPE OF ASSISTANCE SERVICE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .TYPE OF ASSISTANCE SERVICE)

A classification of *ASSISTANCE SERVICE* (e.g. boarding assistance, onboard assistance, portorage, foreign language, sign language translation, etc.).

**TYPE OF ASSISTANCE SERVICE – Relations**

Source	Target
<b>ASSISTANCE SERVICE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF ASSISTANCE SERVICE</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1

**TYPE OF ASSISTANCE SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF ASSISTANCE SERVICE;

**TYPE OF BOARDING POSITION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.TYPE OF BOARDING POSITION)

A classification for BOARDING POSITIONS.

**TYPE OF BOARDING POSITION – Relations**

Source	Target
<b>BOARDING POSITION</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF BOARDING POSITION</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1

**TYPE OF BOARDING POSITION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF BOARDING POSITION.

**TYPE OF CATERING SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.TYPE OF CATERING SERVICE)

A classification of CATERING SERVICE (e.g. beverage vending machine, buffet, food vending machine, restaurant, snacks, trolley service, no beverages available, no food available).

**TYPE OF CATERING SERVICE – Relations**

Source	Target
<b>TYPE OF CATERING SERVICE</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>CATERING SERVICE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..*

**TYPE OF CATERING SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF REFRESHMENT SERVICE.

**TYPE OF CHECK CONSTRAINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Check Constraint MODEL.TYPE OF CHECK CONSTRAINT)

A classification of CHECK CONSTRAINT (e.g. ticket collection, ticket purchase, baggage check-in, incoming customs, outgoing customs, tax refunds, etc.)

**TYPE OF CHECK CONSTRAINT – Relations**

Source	Target
<b>CHECK CONSTRAINT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF CHECK CONSTRAINT</b> Role: classification for Cardinality: 1

**TYPE OF CHECK CONSTRAINT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF CHECK CONSTRAINT

**TYPE OF COMMUNICATION SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.TYPE OF COMMUNICATION SERVICE)

A classification of COMMUNICATION SERVICE (e.g. free wifi, public wifi, phone, mobile coverage, internet, video entertainment, audio entertainment, post box, post office, business services).

**TYPE OF COMMUNICATION SERVICE – Relations**

Source	Target
<b>TYPE OF COMMUNICATION SERVICE</b> Role: classification for Cardinality: 1 Relation type: Association	<b>COMMUNICATION SERVICE</b> Role: classified as Cardinality: 0..*

**TYPE OF COMMUNICATION SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF COMMUNICATION SERVICE.

**TYPE OF CONGESTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Check Constraint MODEL.TYPE OF CONGESTION)

A typology of congestions resulting from CHECK CONSTRAINT (e.g. no waiting, queue, crowding, full).

**TYPE OF CONGESTION – Relations**

Source	Target
<b>CHECK CONSTRAINT</b> Role: determined by Cardinality: 0..* Relation type: Association	<b>TYPE OF CONGESTION</b> Role: determining Cardinality: 0..1

**TYPE OF CONGESTION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF CONGESTION.

**TYPE OF COUPLING**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Coupled Journey MODEL.TYPE OF COUPLING)

A classification for COUPLING of BLOCK PARTs.

**TYPE OF COUPLING – Relations**

Source	Target
<b>TYPE OF COUPLING</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>TYPE OF COUPLING</b> Role: classification for Cardinality: 0..1 Relation type: Association	<b>BLOCK PART</b> Role: classified by Cardinality: 0..*

**TYPE OF COUPLING – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF COUPLING.

**TYPE OF CYCLE STORAGE EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Parking Equipment MODEL.TYPE OF CYCLE STORAGE EQUIPMENT)

A classification of CYCLE STORAGE EQUIPMENT (e.g. racks, bars, railings, etc.)

**TYPE OF CYCLE STORAGE EQUIPMENT – Relations**

Source	Target
<b>CYCLE STORAGE EQUIPMENT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF CYCLE STORAGE EQUIPMENT</b> Role: a classification for Cardinality: 0..1

**TYPE OF CYCLE STORAGE EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF CYCLE PARKING EQUIPMENT.

**TYPE OF DELIVERY VARIANT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Notice MODEL.TYPE OF DELIVERY VARIANT)

A classification of a DELIVERY VARIANT. The way of delivering a NOTICE: by vocal announcement, by visual display, issuing printed material

**TYPE OF DELIVERY VARIANT – Relations**

Source	Target
<b>DELIVERY VARIANT</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF DELIVERY VARIANT</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1

**TYPE OF DELIVERY VARIANT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfDeliveryVariantId Type	1:1	Identifier of TYPE OF DELIVERY VARIANT.

**TYPE OF DIRECTION OF USE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.TYPE OF DIRECTION OF USE)

Direction in which EQUIPMENT. can be used. (e.g. up, down, level, one way, both way, etc.).

**TYPE OF DIRECTION OF USE – Relations**

Source	Target
<b>PLACE ACCESS EQUIPMENT</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF DIRECTION OF USE</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..1
<b>PATH LINK</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF DIRECTION OF USE</b> <i>Role:</i> <i>Cardinality:</i> 1
<b>PATH LINK IN SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF DIRECTION OF USE</b> <i>Role:</i> <i>Cardinality:</i> 1

**TYPE OF DIRECTION OF USE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF DIRECTION OF USE.

**TYPE OF EMERGENCY SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .TYPE OF EMERGENCY SERVICE)

A typology of emergency services (e.g police, first aid, sos point, cctv).

**TYPE OF EMERGENCY SERVICE – Relations**

Source	Target
<b>ASSISTANCE SERVICE</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF EMERGENCY SERVICE</b> <i>Role:</i> description of <i>Cardinality:</i> 0..*

**TYPE OF EMERGENCY SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF EMERGENCY SERVICE.

**TYPE OF ENTITY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Entity MODEL.TYPE OF ENTITY)

Classification of ENTITIES, for instance according to the domain in which they are defined or used.

**TYPE OF ENTITY – Relations**

Source	Target
<b>TYPE OF ENTITY</b> Role: a classification for Cardinality: 1..* Relation type: Association	<b>ENTITY</b> Role: classified as Cardinality: 1..*
<b>TYPE OF ENTITY</b> Role: allowed for Cardinality: 0..* Relation type: Association	<b>PURPOSE OF GROUPING</b> Role: restricted to Cardinality: 0..*

**TYPE OF ENTITY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	TypeOfEntityIdType	1:1	Identifier of TYPE OF ENTITY.

**TYPE OF EQUIPMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Generic Equipment MODEL.TYPE OF EQUIPMENT)

A classification of equipment items to be installed at stop points or onboard vehicles, for instance.

**TYPE OF EQUIPMENT – Relations**

Source	Target
<b>TYPE OF EQUIPMENT</b> Role: a classification for Cardinality: 1 Relation type: Association	<b>VEHICLE EQUIPMENT PROFILE</b> Role: classified as Cardinality: *
<b>TYPE OF EQUIPMENT</b> Role: a classification for Cardinality: 1 Relation type: Association	<b>EQUIPMENT</b> Role: classified as Cardinality: *
<b>TYPE OF LOCAL SERVICE</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF EQUIPMENT</b> Role: Cardinality:

**TYPE OF EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	TypeOfEquipmentIdType	1:1	Identifier of TYPE OF EQUIPMENT.

**TYPE OF FACILITY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Facility MODEL.TYPE OF FACILITY)

A classification of a FACILITY or a FACILITY SET.

**TYPE OF FACILITY – Relations**

Source	Target
<b>FACILITY SET</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF FACILITY</b> Role: a classification for Cardinality: 0..1

**TYPE OF FACILITY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfFacilityIdType	1:1	Identifier for Type of FACILITY.

**TYPE OF FARE CLASS**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Restriction MODEL.TYPE OF FARE CLASS)

A classification for fare classes (e.g. first class, second class, business class, etc).

**TYPE OF FARE CLASS – Relations**

Source	Target
<b>TYPE OF FARE CLASS</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE RESTRICTION</b> Role: Cardinality:
<b>WAITING ROOM EQUIPMENT</b> Role: available for Cardinality: 0..* Relation type: Association	<b>TYPE OF FARE CLASS</b> Role: characterising Cardinality: 0..1

**TYPE OF FARE CLASS – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	SERVICE RESTRICTION	::>	<b>TYPE OF FARE CLASS</b> inherits from <b>SERVICE RESTRICTION</b>
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF FARE CLASS.

**TYPE OF FLEXIBLE SERVICE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Flexible Service MODEL.TYPE OF FLEXIBLE SERVICE)

A typology of flexible services:

- Virtual line service
- Flexible service with main route
- Corridor service
- Fixed stop area-wide flexible service
- Free area-wide flexible service



- Mixed types of flexible service (not at POINT level)

The type of flexibility can be defined at JOURNEY PATTERN level or at POINT IN JOURNEY PATTERN level in case of mixed types of flexible service inside the same JOURNEY PATTERN.

#### TYPE OF FLEXIBLE SERVICE – Relations

Source	Target
<b>TYPE OF FLEXIBLE SERVICE</b> <i>Role: classifying</i> <i>Cardinality: 1</i> <i>Relation type: Aggregation</i>	<b>POINT IN JOURNEY PATTERN</b> <i>Role: classified by</i> <i>Cardinality: *</i>
<b>FLEXIBLE SERVICE PROPERTIES</b> <i>Role: classified as</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TYPE OF FLEXIBLE SERVICE</b> <i>Role: classification for</i> <i>Cardinality: 0..1</i>

#### TYPE OF FLEXIBLE SERVICE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF FLEXIBLE SERVICE.

#### TYPE OF FRAME

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Version Frame MODEL.TYPE OF FRAME)

A classification of VERSION FRAMEs according to a common purpose. E.g. line descriptions for line versions, vehicle schedules, operating costs. A TYPE OF FRAME is ruled by a unique TYPE OF VALIDITY.

#### TYPE OF FRAME – Relations

Source	Target
<b>TYPE OF VALIDITY</b> <i>Role: validating</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>TYPE OF FRAME</b> <i>Role: validated by</i> <i>Cardinality: *</i>
<b>TYPE OF FRAME</b> <i>Role: including</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>TYPE OF FRAME</b> <i>Role: included in</i> <i>Cardinality: *</i>
<b>TYPE OF FRAME</b> <i>Role: characterising</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VERSION FRAME</b> <i>Role: characterised by</i> <i>Cardinality: *</i>
<b>TYPE OF FRAME</b> <i>Role: a classification for</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>CLASS IN FRAME</b> <i>Role: classified as</i> <i>Cardinality: *</i>
<b>TYPE OF FRAME</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>

**TYPE OF FRAME – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>TypeOfFrameIdType</i>	1:1	Identifier of TYPE OF FRAME.
	<b>Periodicity</b>	<i>duration</i>	0:1	How long frames of this contents are valid for by default.
	<b>Nature</b>	<i>DataNatureEnum</i>	0:1	How long frames of this contents are valid for by default.
	<b>ModificationSet</b>	<i>ModificationSetEnum</i>	0:1	Whether all contained instances or just deltas must be present.
	<b>Versioning</b>	<i>VersioningEnum</i>	0:1	How version numbers should be used.

**TYPE OF GENDER LIMITATION**

(Transmodel v6, Part 2 - Public Transport Network Topology (NT). FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Passenger Service Equipment MODEL.TYPE OF GENDER LIMITATION)

A classification for GENDER LIMITATIONSs (mainly for SANITARY EQUIPMENT, e.g. male only, female only, both).

**TYPE OF GENDER LIMITATION – Relations**

Source	Target
<b>SANITARY EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF GENDER LIMITATION</b> Role: characterisation of Cardinality: 0..1

**TYPE OF GENDER LIMITATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF GENDER LIMITATION.

**TYPE OF HANDRAIL**

(Transmodel v6, Part 2 - Public Transport Network Topology (NT). FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.NT Stair Equipment MODEL.TYPE OF HANDRAIL)

A classification of HANDRAIL (one side, both sides).

**TYPE OF HANDRAIL – Relations**

Source	Target
<b>STAIRCASE EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF HANDRAIL</b> Role: a characterisation for Cardinality: 0..1
<b>RAMP EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF HANDRAIL</b> Role: a characteriation for Cardinality: 0..1
<b>LIFT EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF HANDRAIL</b> Role: a characterisation for Cardinality: 0..1

**TYPE OF HANDRAIL – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF HANDRAIL.

**TYPE OF HIRE SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Local Commercial Service MODEL.TYPE OF HIRE SERVICE)

A classification of HIRE SERVICES (e.g. car hire, motor cycle hire, cycle hire, recreational device hire).

**TYPE OF HIRE SERVICE – Relations**

Source	Target
<b>TYPE OF HIRE SERVICE</b> Role: classification for Cardinality: 1 Relation type: Association	<b>HIRE SERVICE</b> Role: classified as Cardinality: 0..*

**TYPE OF HIRE SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF HIRE SERVICE.

**TYPE OF JOURNEY PATTERN**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Journey Pattern MODEL.TYPE OF JOURNEY PATTERN)

A classification of JOURNEY PATTERNS used to distinguish other categories of JOURNEY PATTERN than SERVICE JOURNEY PATTERN and DEAD RUN PATTERN.

**TYPE OF JOURNEY PATTERN – Relations**

Source	Target
<b>PURPOSE OF GROUPING</b> Role: restricted to Cardinality: 0..1 Relation type: Association	<b>TYPE OF JOURNEY PATTERN</b> Role: allowed for Cardinality: *
<b>TYPE OF JOURNEY PATTERN</b> Role: classification for Cardinality: 0..1 Relation type: Association	<b>JOURNEY PATTERN</b> Role: classified as Cardinality: *

**TYPE OF JOURNEY PATTERN – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfJourneyPatternId Type	1:1	Identifier of TYPE OF JOURNEY PATTERN.
	<b>Name</b>		0:1	Name of TYPE OF JOURNEY PATTERN.

**TYPE OF LINE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.TYPE OF LINE)

A classification for LINES.

**TYPE OF LINE – Relations**

Source	Target
<b>LINE</b> <i>Role:</i> classified by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF LINE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1

**TYPE OF LINE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfLineIdType	1:1	Identifier of TYPE OF LINE.

**TYPE OF LINK**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link MODEL.TYPE OF LINK)

A classification of LINKs to express the different functional roles of a LINK.

**TYPE OF LINK – Relations**

Source	Target
<b>TYPE OF POINT</b> <i>Role:</i> limiting <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>TYPE OF LINK</b> <i>Role:</i> between <i>Cardinality:</i> *
<b>TYPE OF LINK</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>LINK</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF LINK</b> <i>Role:</i> allowed for <i>Cardinality:</i> *
<b>TYPE OF LINK</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>TYPE OF LINK</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>LAYER</b> <i>Role:</i> <i>Cardinality:</i>

**TYPE OF LINK – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfLinkIdType	1:1	Identifier of TYPE OF LINK.
	<b>Name</b>		0:1	Name of TYPE OF LINK.

**TYPE OF LINK SEQUENCE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link Sequence MODEL.TYPE OF LINK SEQUENCE)

A classification of LINK SEQUENCES used to define the different functions a LINK SEQUENCE may be used for. E.g. ROUTE, road, border line etc.

## TYPE OF LINK SEQUENCE – Relations

Source	Target
<b>TYPE OF LINK SEQUENCE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>LINK SEQUENCE</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF LINK SEQUENCE</b> <i>Role:</i> allowed for <i>Cardinality:</i> *
<b>TYPE OF LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>TYPE OF LINK SEQUENCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>LAYER</b> <i>Role:</i> <i>Cardinality:</i>

## TYPE OF LINK SEQUENCE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	Type of Link Sequence Id Type	1:1	Identifier of TYPE OF LINK SEQUENCE.
	<b>Name</b>		0:1	Name of TYPE OF LINK SEQUENCE.

## TYPE OF LOCAL SERVICE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL.TYPE OF LOCAL SERVICE)

A generic (abstract) classification of LOCAL SERVICES.

## TYPE OF LOCAL SERVICE – Relations

Source	Target
<b>LOCAL SERVICE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF LOCAL SERVICE</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1
<b>TYPE OF LOCAL SERVICE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>TYPE OF EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

## TYPE OF LOCAL SERVICE – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	TYPE OF EQUIPMENT	::>	<b>TYPE OF LOCAL SERVICE</b> inherits from <b>TYPE OF EQUIPMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF LOCAL SERVICE.

## TYPE OF LUGGAGE LOCKER

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.TYPE OF LUGGAGE LOCKER)

A classification for *LUGGAGE LOCKER EQUIPMENT* (e.g. left luggage, lockers, bike carriage, portorage, free trolleys, paid trolleys)

#### TYPE OF LUGGAGE LOCKER – Relations

Source	Target
<b>LUGGAGE LOCKER EQUIPMENT</b> Role: classified as Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF LUGGAGE LOCKER</b> Role: a classification for Cardinality: <b>0..1</b>

#### TYPE OF LUGGAGE LOCKER – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF LUGGAGE LOCKER.

#### TYPE OF MONEY SERVICE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.TYPE OF MONEY SERVICE)

A classification of *MONEY SERVICE* (e.g. cash machine, bank, insurance, bureau de change)

#### TYPE OF MONEY SERVICE – Relations

Source	Target
<b>TYPE OF MONEY SERVICE</b> Role: classification for Cardinality: <b>1</b> Relation type: Association	<b>MONEY SERVICE</b> Role: classified as Cardinality: <b>0..*</b>

#### TYPE OF MONEY SERVICE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF MONEY SERVICE.

#### TYPE OF NOTICE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Notice MODEL.TYPE OF NOTICE)

A classification for a *NOTICE*.

#### TYPE OF NOTICE – Relations

Source	Target
<b>NOTICE</b> Role: classified as Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF NOTICE</b> Role: a classification for Cardinality: <b>0..1</b>

#### TYPE OF NOTICE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeONoticeIdType	1:1	Identifier of TYPE OF NOTICE.

**TYPE OF OPERATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.TYPE OF OPERATION)

A classification of OPERATIONS to express the different functional roles of a DEPARTMENT.

**TYPE OF OPERATION – Relations**

Source	Target
<b>TYPE OF OPERATION</b> Role: a classification for Cardinality: <b>0..1</b> Relation type: Association	<b>DEPARTMENT</b> Role: classified as Cardinality: <b>0..*</b>

**TYPE OF OPERATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfOperationIdType	1:1	Identifier of TYPE OF OPERATION.

**TYPE OF ORGANISATION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Generic Organisation MODEL.TYPE OF ORGANISATION)

A classification for the ORGANISATIONS according to their activity, e.g. a public transport company, an IT company, etc).

**TYPE OF ORGANISATION – Relations**

Source	Target
<b>ORGANISATION</b> Role: classified as Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF ORGANISATION</b> Role: a classification for Cardinality: <b>0..1</b>

**TYPE OF ORGANISATION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfOrganisationIdType	1:1	Identifier of TYPE OF ORGANISATION.

**TYPE OF PASSAGE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.TYPE OF PASSAGE)

A classification for spaces to express how the space can be used as a passage (e.g. pathway, corridor, overpass, underpass, tunnel, etc.).

**TYPE OF PASSAGE – Relations**

Source	Target
<b>POINT OF INTEREST SPACE</b> Role: characterised by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF PASSAGE</b> Role: a characterisation of Cardinality: <b>0..1</b>
<b>ACCESS SPACE</b> Role: classified as Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF PASSAGE</b> Role: a classification for Cardinality: <b>0..1</b>

**TYPE OF PASSAGE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF PASSAGE.

**TYPE OF PASSENGER INFORMATION EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Passenger Information Display Assignment MODEL.TYPE OF PASSENGER INFORMATION EQUIPMENT)

A classification for PASSENGER INFORMATION EQUIPMENT (e.g. next stop indicator, stop announcements, passenger information facility).

**TYPE OF PASSENGER INFORMATION EQUIPMENT – Relations**

Source	Target
<b>PASSENGER INFORMATION EQUIPMENT</b> Role: classified as Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF PASSENGER INFORMATION EQUIPMENT</b> Role: a classification for Cardinality: <b>0..1</b>
<b>TYPE OF PASSENGER INFORMATION EQUIPMENT</b> Role: Cardinality: <b>*</b> Relation type: Aggregation	<b>SERVICE FRAME</b> Role: Cardinality:

**TYPE OF PASSENGER INFORMATION EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfPassengerInformationFacilityIdType	1:1	Identifier of TYPE OF PASSENGER INFORMATION EQUIPMENT.
	<b>BroadType</b>	normalizedString	0:1	Classification of PASSENGER INFORMATION EQUIPMENT.

**TYPE OF PAYMENT METHOD**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Restriction MODEL.TYPE OF PAYMENT METHOD)

A classification for payment method (e.g. cash, credit card, debit card, travel card, contactless travel card, mobile phone, token, etc.).

**TYPE OF PAYMENT METHOD – Relations**

Source	Target
<b>TYPE OF PAYMENT METHOD</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE RESTRICTION</b> Role: Cardinality:
<b>PARKING</b> Role: characterised by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF PAYMENT METHOD</b> Role: available for Cardinality: <b>0..*</b>
<b>TICKETING SERVICE</b> Role: restricted by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF PAYMENT METHOD</b> Role: restricting Cardinality: <b>0..*</b>



<b>TYPE OF PAYMENT METHOD</b> <i>Role:</i> a characterisation of <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TICKETING EQUIPMENT</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..*
<b>SANITARY EQUIPMENT</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF PAYMENT METHOD</b> <i>Role:</i> a characterisation of <i>Cardinality:</i> 0..*

#### TYPE OF PAYMENT METHOD – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	SERVICE RESTRICTION	::>	<b>TYPE OF PAYMENT METHOD</b> inherits from <b>SERVICE RESTRICTION</b>
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF PAYMENT METHOD;

#### TYPE OF PLACE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Place MODEL.TYPE OF PLACE)

A classification for PLACES.

#### TYPE OF PLACE – Relations

Source	Target
<b>TYPE OF PLACE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>PLACE</b> <i>Role:</i> classified by <i>Cardinality:</i> 0..*

#### TYPE OF PLACE – Attributes

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfPlaceIdType	1:1	Identifier of TYPE OF PLACE.

#### TYPE OF POINT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Point & Link MODEL.TYPE OF POINT)

A classification of POINTs according to their functional purpose.

**TYPE OF POINT – Relations**

Source	Target
<b>TYPE OF POINT</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>TYPE OF POINT</b> <i>Role:</i> limiting <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>TYPE OF LINK</b> <i>Role:</i> between <i>Cardinality:</i> *
<b>PURPOSE OF GROUPING</b> <i>Role:</i> restricted to <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF POINT</b> <i>Role:</i> allowed for <i>Cardinality:</i> *
<b>TYPE OF POINT</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>TYPE OF POINT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Aggregation	<b>LAYER</b> <i>Role:</i> <i>Cardinality:</i>

**TYPE OF POINT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfPointIdType	1:1	Identifier of TYPE OF POINT..
	<b>Name</b>		0:1	Name of TYPE OF POINT.

**TYPE OF POINT OF INTEREST SPACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Point Of Interest MODEL.TYPE OF POINT OF INTEREST SPACE)

A classification for POINT OF INTEREST SPACES.

**TYPE OF POINT OF INTEREST SPACE – Relations**

Source	Target
<b>POINT OF INTEREST SPACE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF POINT OF INTEREST SPACE</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1

**TYPE OF POINT OF INTEREST SPACE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF POINT OF INTEREST SPACE.

**TYPE OF PRODUCT CATEGORY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey MODEL.TYPE OF PRODUCT CATEGORY)

A classification for VEHICLE JOURNEYS to express some common properties of journeys for marketing and fare products

**TYPE OF PRODUCT CATEGORY – Relations**

Source	Target
<b>JOURNEY</b> <i>Role: classified as</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF PRODUCT CATEGORY</b> <i>Role: a classification for</i> <i>Cardinality: 0..1</i>

**TYPE OF PRODUCT CATEGORY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfProductCategoryIdType	1:1	Identifier of TYPE OF PRODUCT CATEGORY.

**TYPE OF PROJECTION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Projection MODEL.TYPE OF PROJECTION)

A classification of the projections according to their functional purpose, the source and target layers.

**TYPE OF PROJECTION – Relations**

Source	Target
<b>LINK PROJECTION</b> <i>Role: concerning</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TYPE OF PROJECTION</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>COMPLEX FEATURE PROJECTION</b> <i>Role: concerning</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TYPE OF PROJECTION</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>ZONE PROJECTION</b> <i>Role: concerning</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TYPE OF PROJECTION</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>POINT PROJECTION</b> <i>Role: concerning</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>TYPE OF PROJECTION</b> <i>Role: comprising</i> <i>Cardinality: 1</i>
<b>TYPE OF PROJECTION</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>

**TYPE OF PROJECTION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfProjectionIdType	1:1	Identifier of TYPE OF PROJECTION.
	<b>Name</b>		0:1	Name of TYPE OF PROJECTION (e.g. Point Projection, Link Projection, etc).

**TYPE OF QUAY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL.TYPE OF QUAY)

A classification for QUAYs.

**TYPE OF QUAY – Relations**

Source	Target
<b>QUAY</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF QUAY</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1

**TYPE OF QUAY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF QUAY.

**TYPE OF RELATION TO VEHICLE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Vehicle Stopping MODEL.TYPE OF RELATION TO VEHICLE)

A classification of the way a VEHICLE STOPPING POSITION is used (e.g. front left, front right, back left, back right, driver left, driver right).

**TYPE OF RELATION TO VEHICLE – Relations**

Source	Target
<b>VEHICLE STOPPING POSITION</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF RELATION TO VEHICLE</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1

**TYPE OF RELATION TO VEHICLE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF RELATION TO VEHICLE.

**TYPE OF RESPONSIBILITY ROLE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Responsibility MODEL .CC Responsibility Role MODEL.TYPE OF RESPONSIBILITY ROLE)

A classification of RESPONSIBILITY ROLES, e.g. data ownership.

**TYPE OF RESPONSIBILITY ROLE – Relations**

Source	Target
<b>TYPE OF RESPONSIBILITY ROLE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>RESPONSIBILITY ROLE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..*

**TYPE OF RESPONSIBILITY ROLE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	TypeOfResponsibilityRoleIdType	1:1	Identifier of TYPE OF RESPONSIBILITY ROLE.

**TYPE OF RETAIL SERVICE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Commercial Service MODEL.TYPE OF RETAIL SERVICE)

A classification of RETAIL SERVICE (e.g. food, newspaper tobacco, health hygiene beauty, fashion accessories, bank finance insurance, tourism, photo booth)

**TYPE OF RETAIL SERVICE – Relations**

Source	Target
<b>TYPE OF RETAIL SERVICE</b> Role: classification for Cardinality: 1 Relation type: Association	<b>RETAIL SERVICE</b> Role: classified as Cardinality: 0..*

**TYPE OF RETAIL SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF RETAIL SERVICE.

**TYPE OF SANITARY FACILITY**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Passenger Service Equipment MODEL.TYPE OF SANITARY FACILITY)

A classification for SANITARY EQUIPMENT (e.g. toilet, wheelchair access toilet, shower, baby change, wheelchair baby change)

**TYPE OF SANITARY FACILITY – Relations**

Source	Target
<b>SANITARY EQUIPMENT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF SANITARY FACILITY</b> Role: a classification for Cardinality: 0..1

**TYPE OF SANITARY FACILITY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF SANITARY FACILITY.

**TYPE OF SEATING EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.TYPE OF SEATING EQUIPMENT)

A classification for SEATING EQUIPMENT.

**TYPE OF SEATING EQUIPMENT – Relations**

Source	Target
<b>SEATING EQUIPMENT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF SEATING EQUIPMENT</b> Role: a classification for Cardinality: 0..1

**TYPE OF SEATING EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF SEATING EQUIPMENT.

**TYPE OF SERVICE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey MODEL.TYPE OF SERVICE)

A classification for VEHICLE JOURNEYS and SPECIAL SERVICES to express some common properties of journeys to be taken into account in the scheduling and/or operations control process.

**TYPE OF SERVICE – Relations**

Source	Target
<b>TYPE OF SERVICE</b> Role: Cardinality: * Relation type: Aggregation	<b>TIMETABLE FRAME</b> Role: Cardinality:
<b>TYPE OF SERVICE</b> Role: the classification for Cardinality: 0..1 Relation type: Association	<b>JOURNEY</b> Role: classified as Cardinality: *

**TYPE OF SERVICE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	TypeOfServiceIdType	1:1	Identifier of TYPE OF SERVICE.

**TYPE OF SERVICE NATURE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Check Constraint MODEL.TYPE OF SERVICE NATURE)

A classification for service available for a CHECK CONSTRAINT (e.g. self-service machine, counter service).

**TYPE OF SERVICE NATURE – Relations**

Source	Target
<b>CHECK CONSTRAINT</b> Role: determined by Cardinality: 0..* Relation type: Association	<b>TYPE OF SERVICE NATURE</b> Role: determining Cardinality: 0..1

**TYPE OF SERVICE NATURE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF SERVICE NATURE.

**TYPE OF SHELTER**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.TYPE OF SHELTER)

A classification for SHELTERS

**TYPE OF SHELTER – Relations**

Source	Target
<b>SHELTER EQUIPMENT</b> <i>Role: classified as</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF SHELTER</b> <i>Role: a classification for</i> <i>Cardinality: 0..1</i>

**TYPE OF SHELTER – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF SHELTER.

**TYPE OF STAFFING**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Local Service Equipment MODEL .TYPE OF STAFFING)

A classification for the availability of the STAFF associated with an ASSISTANCE SERVICE (e.g. full time, part time)

**TYPE OF STAFFING – Relations**

Source	Target
<b>ASSISTANCE SERVICE</b> <i>Role: characterised by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TYPE OF STAFFING</b> <i>Role: description of</i> <i>Cardinality: 0..*</i>

**TYPE OF STAFFING – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF STAFFING.

**TYPE OF STOP PLACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Stop Place MODEL .TYPE OF STOP PLACE)

A classification for STOP PLACES (e.g. complex, simple, multimodal, etc).

**TYPE OF STOP PLACE – Relations**

Source	Target
<b>TYPE OF STOP PLACE</b> <i>Role: a classification for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>STOP PLACE</b> <i>Role: classified as</i> <i>Cardinality: 0..*</i>

**TYPE OF STOP PLACE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF STOP PLACE.

**TYPE OF STOP POINT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).TP Tactical Planning Components MODEL.NT Service Pattern MODEL .TYPE OF STOP POINT)

A classification of *SCHEDULED STOP POINTS*, used for instance to characterize the equipment to be installed at stops (post, shelter, seats, etc.).

#### TYPE OF STOP POINT – Relations

Source	Target
<b>TYPE OF STOP POINT</b> <i>Role:</i> the classification for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>SCHEDULED STOP POINT</b> <i>Role:</i> classified as <i>Cardinality:</i> *

#### TYPE OF STOP POINT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfStopPointIdType	1:1	Identifier of TYPE OF STOP POINT.

#### TYPE OF SUITABILITY

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.TYPE OF SUITABILITY)

A classification for *SUITABILITY*, i.e. assessments as regards a possible *SUITABILITY* of access according to *USER NEEDS*.

#### TYPE OF SUITABILITY – Relations

Source	Target
<b>SUITABILITY</b> <i>Role:</i> classified by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF SUITABILITY</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1

#### TYPE OF SUITABILITY – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF SUITABILITY.

#### TYPE OF SURFACE

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT Site Access Equipment MODEL.NT Access Equipment MODEL.TYPE OF SURFACE)

A classification for *ROUGH SURFACE* types.

#### TYPE OF SURFACE – Relations

Source	Target
<b>ROUGH SURFACE</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF SURFACE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1



**TYPE OF SURFACE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	

**TYPE OF TICKET**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Restriction MODEL.TYPE OF TICKET)

A classification for tickets available at a TICKETING EQUIPMENT (e.g. standard, concession, promotion, group, season, travel card, etc.)

**TYPE OF TICKET – Relations**

Source	Target
<b>TYPE OF TICKET</b> Role: Cardinality: Relation type: Generalization	<b>SERVICE RESTRICTION</b> Role: Cardinality:
<b>TICKETING SERVICE</b> Role: restricted by Cardinality: 0..* Relation type: Association	<b>TYPE OF TICKET</b> Role: restricting Cardinality: 0..*
<b>TICKET VALIDATOR EQUIPMENT</b> Role: characterised by Cardinality: 0..* Relation type: Association	<b>TYPE OF TICKET</b> Role: a characterisation of Cardinality: 0..*
<b>TYPE OF TICKET</b> Role: a characterisation of Cardinality: 0..* Relation type: Association	<b>TICKETING EQUIPMENT</b> Role: characterised by Cardinality: 0..*

**TYPE OF TICKET – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<b>SERVICE RESTRICTION</b>	::>	<b>TYPE OF TICKET</b> inherits from <b>SERVICE RESTRICTION</b>
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF TICKET.

**TYPE OF TICKETING**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Service Restriction MODEL.TYPE OF TICKETING)

A classification for ticketing available at a TICKETING EQUIPMENT (e.g. purchase, collection, card top up, reservations).

## TYPE OF TICKETING – Relations

Source	Target
<b>TYPE OF TICKETING</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>SERVICE RESTRICTION</b> <i>Role:</i> <i>Cardinality:</i>
<b>TICKETING SERVICE</b> <i>Role:</i> restricted by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF TICKETING</b> <i>Role:</i> restricting <i>Cardinality:</i> 0..*
<b>TICKETING EQUIPMENT</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF TICKETING</b> <i>Role:</i> a characterisation of <i>Cardinality:</i> 0..*

## TYPE OF TICKETING – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	<i>SERVICE RESTRICTION</i>	::>	<b>TYPE OF TICKETING</b> inherits from <b>SERVICE RESTRICTION</b>
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF TICKETING.

## TYPE OF TRAFFIC CONTROL POINT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Activation MODEL.TYPE OF TRAFFIC CONTROL POINT)

A classification of TRAFFIC CONTROL POINTs.

## TYPE OF TRAFFIC CONTROL POINT – Relations

Source	Target
<b>TYPE OF TRAFFIC CONTROL POINT</b> <i>Role:</i> classifying <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRAFFIC CONTROL POINT</b> <i>Role:</i> classified as <i>Cardinality:</i> *

## TYPE OF TRAFFIC CONTROL POINT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF TRAFFIC CONTROL POINT.

## TYPE OF TRAIN ELEMENT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Train MODEL.TYPE OF TRAIN ELEMENT)

A classification of TRAIN ELEMENTs.

## TYPE OF TRAIN ELEMENT – Relations

Source	Target
<b>TYPE OF TRAIN ELEMENT</b> <i>Role:</i> classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TRAIN ELEMENT</b> <i>Role:</i> classified as <i>Cardinality:</i> *

**TYPE OF TRAIN ELEMENT – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfTrainElementIdType	1:1	Identifier of TYPE of TRAIN.

**TYPE OF TRANSFER**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Place MODEL.TYPE OF TRANSFER)

A classification for TRANSFER.

**TYPE OF TRANSFER – Relations**

Source	Target
<b>TRANSFER</b> Role: classified by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF TRANSFER</b> Role: a classification for Cardinality: <b>0..1</b>

**TYPE OF TRANSFER – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfTransferIdType	1:1	Identifier of TYPE OF TRANSFER.

**TYPE OF USER NEED**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.TYPE OF USER NEED)

A classification of USER NEEDS.

**TYPE OF USER NEED – Relations**

Source	Target
<b>PSYCHOSENSORY NEED</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF USER NEED</b> Role: Cardinality:
<b>ENCUMBRANCE NEED</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF USER NEED</b> Role: Cardinality:
<b>MEDICAL NEED</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF USER NEED</b> Role: Cardinality:
<b>USER NEED</b> Role: classified by Cardinality: <b>0..*</b> Relation type: Association	<b>TYPE OF USER NEED</b> Role: a classification for Cardinality: <b>1</b>
<b>MOBILITY NEED</b> Role: Cardinality: Relation type: Generalization	<b>TYPE OF USER NEED</b> Role: Cardinality:

**TYPE OF USER NEED – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>		1:1	Identifier of TYPE OF USER NEED.

**TYPE OF VALIDITY**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Version Frame MODEL.TYPE OF VALIDITY)

A classification of the validity of TYPEs OF FRAME. E.g. frames for schedules designed for DAY TYPEs, for specific OPERATING DAYS.

**TYPE OF VALIDITY – Relations**

Source	Target
<b>TYPE OF VALIDITY</b> <i>Role:</i> validating <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>TYPE OF FRAME</b> <i>Role:</i> validated by <i>Cardinality:</i> *
<b>CLASS IN REPOSITORY</b> <i>Role:</i> defining <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF VALIDITY</b> <i>Role:</i> defined by <i>Cardinality:</i> *

**TYPE OF VALIDITY – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	<i>TypeOfValidityIdType</i>	1:1	Identifier of TYPE OF VALIDITY.

**TYPE OF VERSION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Version MODEL.TYPE OF VERSION)

A classification of VERSIONs. E.g shareability of ENTITies between several versions.

**TYPE OF VERSION – Relations**

Source	Target
<b>TYPE OF VERSION</b> <i>Role:</i> classification for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>VERSION</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>TYPE OF VERSION</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1

**TYPE OF VERSION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	<i>TypeOfVersionIdType</i>	1:1	Identifier of TYPE OF VERSION.

**TYPE OF WAITING ROOM**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.TYPE OF WAITING ROOM)

A classification for WAITING ROOM EQUIPMENT.

#### TYPE OF WAITING ROOM – Relations

Source	Target
<b>WAITING ROOM EQUIPMENT</b> <i>Role:</i> classified as <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF WAITING ROOM</b> <i>Role:</i> a classification for <i>Cardinality:</i> 0..1

#### TYPE OF WAITING ROOM – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identifier of TYPE OF WAITING ROOM.

#### TYPE OF ZONE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Zone and Feature MODEL.TYPE OF ZONE)

A classification of ZONES. E.g. TARIFF ZONE, ADMINISTRATIVE ZONE.

#### TYPE OF ZONE – Relations

Source	Target
<b>TYPE OF ZONE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ZONE</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>TYPE OF ZONE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1

#### TYPE OF ZONE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	TypeOfZoneIdType	1:1	Identifier of TYPE OF ZONE.

#### USER NEED

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Accessibility MODEL.USER NEED)

A user's need for a particular SUITABILITY.

**USER NEED – Relations**

Source	Target
<b>USER NEED</b> <i>Role:</i> classified by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TYPE OF USER NEED</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1
<b>SUITABILITY</b> <i>Role:</i> determined for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>USER NEED</b> <i>Role:</i> determining <i>Cardinality:</i> 1..*
<b>USER NEED</b> <i>Role:</i> determining <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>PASSENGER ACCESSIBILITY NEED</b> <i>Role:</i> determined by <i>Cardinality:</i> 1

**USER NEED – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>		1:1	Identified of USER NEED.
	<b>Excluded</b>	Boolean	1:1	Whether USER NEED is to be include or excluded.
	<b>NeedRanking</b>	Integer	0:1	A relative ranking of the need that can be specified in some applications.

**VALIDITY CONDITION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Validity MODEL.VALIDITY CONDITION)

Condition used in order to characterise a given VERSION of a VERSION FRAME. A VALIDITY CONDITION consists of a parameter (e.g. date, triggering event, etc.) and its type of application (e.g. for, from, until, etc.).

**VALIDITY CONDITION – Relations**

Source	Target
<b>AVAILABILITY CONDITION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VALIDITY CONDITION</b> <i>Role:</i> <i>Cardinality:</i>
<b>VALIDITY CONDITION</b> <i>Role:</i> determining <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>ACCESSIBILITY ASSESSMENT</b> <i>Role:</i> determined by <i>Cardinality:</i> 0..*
<b>FACILITY SET</b> <i>Role:</i> available if <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>VALIDITY CONDITION</b> <i>Role:</i> determining availability of <i>Cardinality:</i> 0..*
<b>VERSION FRAME</b> <i>Role:</i> restricted to <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VALIDITY CONDITION</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>VALIDITY CONDITION</b> <i>Role:</i> defined for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VERSION</b> <i>Role:</i> characterised by <i>Cardinality:</i> 1

<b>VALIDITY TRIGGER</b> <i>Role: defining</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: defined by</i> <i>Cardinality: *</i>
<b>VALIDITY RULE PARAMETER</b> <i>Role: defining</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: defined by</i> <i>Cardinality: *</i>
<b>ENTITY</b> <i>Role: characterised by</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: defined for</i> <i>Cardinality: *</i>
<b>VALIDITY CONDITION</b> <i>Role: applicable for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>NOTICE ASSIGNMENT</b> <i>Role: defined for</i> <i>Cardinality: *</i>
<b>VALIDITY CONDITION</b> <i>Role: applicable for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>STOP ASSIGNMENT</b> <i>Role: for</i> <i>Cardinality: 0..*</i>
<b>VALIDITY CONDITION</b> <i>Role: determining</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>CHECK CONSTRAINT</b> <i>Role: determined by</i> <i>Cardinality: 0..1</i>
<b>VALIDITY CONDITION</b> <i>Role: determining</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>CHECK CONSTRAINT DELAY</b> <i>Role: applicable for</i> <i>Cardinality: 0..1</i>
<b>VALIDITY CONDITION</b> <i>Role: determining</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>CHECK CONSTRAINT THROUGHPUT</b> <i>Role: applicable for</i> <i>Cardinality: 0..1</i>
<b>SITE ELEMENT</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: applicable for</i> <i>Cardinality: 0..*</i>
<b>VALIDITY CONDITION</b> <i>Role: applicable for</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>INTERCHANGE</b> <i>Role: defined for</i> <i>Cardinality: *</i>
<b>VALIDITY CONDITION</b> <i>Role: applicable for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>JOURNEY</b> <i>Role: characterised by</i> <i>Cardinality: 0..1</i>
<b>ENTITY</b> <i>Role: defining</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: defined by</i> <i>Cardinality: *</i>
<b>VALIDITY CONDITION</b> <i>Role: applicable for</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TRANSFER</b> <i>Role: for</i> <i>Cardinality: 0..*</i>
<b>VALIDITY CONDITION</b> <i>Role: part of</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: including</i> <i>Cardinality: 0..*</i>

**VALIDITY CONDITION – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ValidityConditionIdType</i>	1:1	Identifier of VALIDITY CONDITION.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of VALIDITY CONDITION.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of VALIDITY CONDITION.

**VALIDITY RULE PARAMETER**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Validity MODEL.VALIDITY RULE PARAMETER)

A user defined VALIDITY CONDITION used by a rule for selecting versions. E.g. river level > 1,5 m and bad weather.

**VALIDITY RULE PARAMETER – Relations**

Source	Target
<b>VALIDITY RULE PARAMETER</b> <i>Role: defining</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: defined by</i> <i>Cardinality: *</i>
<b>ENTITY</b> <i>Role: providing value for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>VALIDITY RULE PARAMETER</b> <i>Role: using value of</i> <i>Cardinality: 0..*</i>

**VALIDITY RULE PARAMETER – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ValidityRuleParameterIdType</i>	1:1	Identifier of VALIDITY RULE PARAMETER.
	<b>AttributeName</b>	<i>normalisedString</i>	0:1	ENTITY attribute used as input for VALIDITY PARAMETER.
	<b>AttributeValue</b>	<i>any</i>	0:1	A fixed Value from comparison with for VALIDITY PARAMETER using operator
	<b>ComparisonOperator</b>	<i>OperatorEnum</i>	0:1	Operator (GT EQ GE etc) to use to compare attribute with value.
	<b>IsValid</b>	<i>boolean</i>	0:1	Use object status to determine whether ENTITY is valid (Mutually Exclusive with operator and method)
	<b>Method</b>	<i>normalizedString</i>	0:1	Method to use to evaluate whether ENTITY is valid (Mutually Exclusive with operator).

**VALIDITY TRIGGER**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Validity MODEL.VALIDITY TRIGGER)

External event defining a VALIDITY CONDITION. E.g exceptional flow of a river, bad weather, road closure for works.



## VALIDITY TRIGGER – Relations

Source	Target
<b>VALIDITY TRIGGER</b> <i>Role: defining</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VALIDITY CONDITION</b> <i>Role: defined by</i> <i>Cardinality: *</i>

## VALIDITY TRIGGER – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ValidityTriggerIdType</i>	1:1	Identifier of VALIDITY TRIGGER.
	<b>PrivateCode</b>	<i>PrivateCodeType</i>	0:1	Identifier of type of event or other data associated with VALIDITY TRIGGER.

## VEHICLE

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.VEHICLE)

*A public transport vehicle used for carrying passengers.*

## VEHICLE – Relations

Source	Target
<b>VEHICLE MODEL</b> <i>Role: classifying</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>VEHICLE</b> <i>Role: classified as</i> <i>Cardinality: *</i>
<b>VEHICLE TYPE</b> <i>Role: a classification for</i> <i>Cardinality: 1</i> <i>Relation type: Association</i>	<b>VEHICLE</b> <i>Role: classified as</i> <i>Cardinality: *</i>
<b>ACTUAL VEHICLE EQUIPMENT</b> <i>Role: in</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>VEHICLE</b> <i>Role: equipped with</i> <i>Cardinality: 1</i>
<b>PASSENGER EQUIPMENT</b> <i>Role: located at</i> <i>Cardinality: 0..*</i> <i>Relation type: Aggregation</i>	<b>VEHICLE</b> <i>Role: equipped with</i> <i>Cardinality: 0..1</i>
<b>ORGANISATIONAL UNIT</b> <i>Role: responsible for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>VEHICLE</b> <i>Role: managed by</i> <i>Cardinality: *</i>
<b>VEHICLE</b> <i>Role: by default parked at</i> <i>Cardinality: *</i> <i>Relation type: Association</i>	<b>GARAGE</b> <i>Role: a default parking place for</i> <i>Cardinality: 0..1</i>
<b>VEHICLE</b> <i>Role:</i> <i>Cardinality: *</i> <i>Relation type: Aggregation</i>	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality: 0..1</i>

**VEHICLE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VehicleIdType</i>	1:1	Identifier of VEHICLE.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of VEHICLE.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of VEHICLE.

**VEHICLE ACCESS EQUIPMENT**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Passenger Equipment MODEL.VEHICLE ACCESS EQUIPMENT)

Specialisation of VEHICLE EQUIPMENT dedicated to access vehicles providing information such as low floor, ramp, access area dimensions, etc.

**VEHICLE ACCESS EQUIPMENT – Relations**

Source	Target
<b>VEHICLE ACCESS EQUIPMENT</b>	<b>ACTUAL VEHICLE EQUIPMENT</b>
Role:	Role:
Cardinality:	Cardinality:
Relation type: Generalization	

**VEHICLE ACCESS EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ACTUAL VEHICLE EQUIPMENT	::>	<b>VEHICLE ACCESS EQUIPMENT</b> inherits from <b>ACTUAL VEHICLE EQUIPMENT</b>
«UID»	<b>Id</b>	<i>VehicleAccessIdType</i>	1:1	Identifier of ACCESS VEHICLE EQUIPMENT.
	<b>LowFloor</b>	<i>boolean</i>	0:1	Whether there is a low floor
	<b>Ramp</b>	<i>boolean</i>	0:1	Whether there is a ramp
	<b>RampBearingCapacity</b>	<i>Weight</i>	0:1	Bearing capacity of Ramp
	<b>NumberOfSteps</b>	<i>integer</i>	0:1	Number of steps for access
	<b>BoardingHeight</b>	<i>LengthType</i>	0:1	Boarding height
	<b>GapToPlatform</b>	<i>LengthType</i>	0:1	Normal gap to platform at most stations
	<b>WidthOfAccessArea</b>	<i>LengthType</i>	0:1	Width of Wheelchair access
	<b>HeightOfAccessArea</b>	<i>LengthType</i>	0:1	Height of Wheelchair access
	<b>AutomaticDoors</b>	<i>boolean</i>	0:1	Whether there are automatic doors
	<b>SuitableFor</b>	<i>MobilityNeed</i>	0:*	Types of wheelchair for which are is suitable
	<b>AssistanceNeeded</b>	<i>AssistanceNeededEnum</i>	0:1	Classification of wheelchair access.
	<b>AssistedBoardingLocation</b>	<i>AssistedBoardingLocationEnum</i>	0:1	Classification of wheelchair boarding points.
	<b>GuideDogsAllowed</b>	<i>boolean</i>	0:1	Whether Guide dogs are allowed.

**VEHICLE CHARGING EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL.NT Equipment Description MODEL.NT Parking Equipment MODEL.VEHICLE CHARGING EQUIPMENT)

Specialisation of PLACE EQUIPMENT for vehicle charging.

**VEHICLE CHARGING EQUIPMENT – Relations**

Source	Target
<b>VEHICLE CHARGING EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>PLACE EQUIPMENT</b> <i>Role:</i> <i>Cardinality:</i>

**VEHICLE CHARGING EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	PLACE EQUIPMENT	::>	<b>VEHICLE CHARGING EQUIPMENT</b> inherits from <b>PLACE EQUIPMENT</b>
«UID»	<b>Id</b>	CarChargingEquipmentId	1:1	Identifier of CYCLE PARKING EQUIPMENT.
	<b>FreeRecharging</b>	boolean	0:1	Whether Charging is free
	<b>Reservation</b>	boolean	0:1	Whether Reservation is needed
	<b>ReservationUrl</b>	anuUrl	0:1	ReservayionUrl

**VEHICLE ENTRANCE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Site MODEL.VEHICLE ENTRANCE)

A physical entrance or exit to/from a STOP PLACE for a VEHICLE. May be a door, barrier, gate or other recognizable point of access.

**VEHICLE ENTRANCE – Relations**

Source	Target
<b>PARKING ENTRANCE FOR VEHICLES</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>POINT OF INTEREST VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>STOP PLACE VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ENTRANCE</b> <i>Role:</i> <i>Cardinality:</i>

**VEHICLE ENTRANCE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ENTRANCE	::>	<b>VEHICLE ENTRANCE</b> inherits from <b>ENTRANCE</b>
«UID»	<b>Id</b>	VehicleEntranceId	1:1	Identifier of VEHICLE ENTRANCE.
	<b>Public</b>	boolean	0:1	Whether VEHICLE ENTRANCE can be used by Private VEHICLES.

**VEHICLE EQUIPMENT PROFILE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.VEHICLE EQUIPMENT PROFILE)

Each instantiation of this entity gives the number of items of one TYPE OF EQUIPMENT a VEHICLE MODEL should contain for a given PURPOSE OF EQUIPMENT PROFILE. The set of instantiations for one VEHICLE MODEL and one purpose gives one complete 'profile'.

**VEHICLE EQUIPMENT PROFILE – Relations**

Source	Target
<b>VEHICLE EQUIPMENT PROFILE</b> Role: in Cardinality: 1..* Relation type: Association	<b>VEHICLE MODEL</b> Role: equipped with Cardinality: 1
<b>PURPOSE OF EQUIPMENT PROFILE</b> Role: defining Cardinality: 1 Relation type: Association	<b>VEHICLE EQUIPMENT PROFILE</b> Role: defined for Cardinality: *
<b>TYPE OF EQUIPMENT</b> Role: a classification for Cardinality: 1 Relation type: Association	<b>VEHICLE EQUIPMENT PROFILE</b> Role: classified as Cardinality: *
<b>VEHICLE EQUIPMENT PROFILE</b> Role: Cardinality: * Relation type: Aggregation	<b>RESOURCE FRAME</b> Role: Cardinality: 0..1

**VEHICLE EQUIPMENT PROFILE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	VehicleEquipmentProfileIdType	1:1	Identifier of VEHICLE EQUIPMENT PROFILE.
	<b>Name</b>	MultilingualString	0:1	Text for VEHICLE EQUIPMENT PROFILE.
	<b>Units</b>	nonNegativeInteger	0:1	Units (number of instances of equipment), for VEHICLE EQUIPMENT PROFILE.

**VEHICLE JOURNEY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL.TI Vehicle Journey MODEL.VEHICLE JOURNEY)

The planned movement of a public transport vehicle on a DAY TYPE from the start point to the end point of a JOURNEY PATTERN on a specified ROUTE.

**VEHICLE JOURNEY – Relations**

Source	Target
<b>TIME DEMAND TYPE</b> Role: used by default by Cardinality: * Relation type: Association	<b>VEHICLE JOURNEY</b> Role: made using Cardinality: *
<b>SERVICE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE JOURNEY</b> Role: Cardinality:
<b>TEMPLATE VEHICLE JOURNEY</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE JOURNEY</b> Role: Cardinality:

<b>DEAD RUN</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VEHICLE JOURNEY</b> <i>Role:</i> <i>Cardinality:</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role:</i> using <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> used as <i>Cardinality:</i> 0..1
<b>TRAIN NUMBER</b> <i>Role:</i> identifying <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> identified by <i>Cardinality:</i> 0..*
<b>JOURNEY MEETING</b> <i>Role:</i> combining <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> combined in <i>Cardinality:</i> *
<b>TIMETABLED PASSING TIME</b> <i>Role:</i> for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> at <i>Cardinality:</i> 1
<b>BLOCK</b> <i>Role:</i> including <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> in <i>Cardinality:</i> *
<b>NORMAL DATED VEHICLE JOURNEY</b> <i>Role:</i> using <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> used by <i>Cardinality:</i> 1
<b>NOTICE ASSIGNMENT</b> <i>Role:</i> assigned to <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>VEHICLE JOURNEY</b> <i>Role:</i> marked by <i>Cardinality:</i> 0..1
<b>COUPLED JOURNEY</b> <i>Role:</i> viewed as <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> a view of <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> characterized by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>SUBMODE</b> <i>Role:</i> characterizing <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> subdivided in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>JOURNEY PART</b> <i>Role:</i> part of <i>Cardinality:</i> *
<b>VEHICLE JOURNEY</b> <i>Role:</i> composed of <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>JOURNEY FREQUENCY GROUP</b> <i>Role:</i> runs on <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> made using <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>JOURNEY PATTERN</b> <i>Role:</i> for <i>Cardinality:</i> 1
<b>VEHICLE JOURNEY</b> <i>Role:</i> worked on <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>DAY TYPE</b> <i>Role:</i> for <i>Cardinality:</i> 1..*

<b>VEHICLE JOURNEY</b> <i>Role:</i> timed from <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>TIMING POINT IN JOURNEY PATTERN</b> <i>Role:</i> the timing reference for <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> characterised by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>OPERATIONAL CONTEXT</b> <i>Role:</i> characterising <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> operated by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> requested for <i>Cardinality:</i> 0..*
<b>VEHICLE JOURNEY</b> <i>Role:</i> worked using <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE JOURNEY RUN TIME</b> <i>Role:</i> valid on <i>Cardinality:</i> *
<b>VEHICLE JOURNEY</b> <i>Role:</i> part of <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>COUPLED JOURNEY</b> <i>Role:</i> composed of <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> worked using <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE JOURNEY WAIT TIME</b> <i>Role:</i> valid on <i>Cardinality:</i> *
<b>VEHICLE JOURNEY</b> <i>Role:</i> allowing <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE JOURNEY LAYOVER</b> <i>Role:</i> allowed on <i>Cardinality:</i> 0..1
<b>VEHICLE JOURNEY</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>JOURNEY</b> <i>Role:</i> <i>Cardinality:</i>
<b>TRAIN COMPONENT LABEL ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> determining <i>Cardinality:</i> 1
<b>VEHICLE TYPE STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE JOURNEY</b> <i>Role:</i> determining <i>Cardinality:</i> 1..

**VEHICLE JOURNEY – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY	::>	<b>VEHICLE JOURNEY</b> inherits from <b>JOURNEY</b>
«UID»	<b>Id</b>	VehicleJourneyIdType	1:1	Identifier of VEHICLE JOURNEY.
	<b>DepartureTime</b>	time	0:1	Departure time of VEHICLE JOURNEY.
	<b>JourneyDuration</b>	duration	0:1	Duration of VEHICLE JOURNEY.

**VEHICLE JOURNEY HEADWAY**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey Times MODEL.VEHICLE JOURNEY HEADWAY)

Headway interval information that is available for a **VEHICLE JOURNEY** (to be understood as the delay between the previous and the next **VEHICLE JOURNEY**). This information must be consistent with **HEADWAY JOURNEY GROUP** if available (**HEADWAY JOURNEY GROUP** being a more detailed way of describing headway services).

#### VEHICLE JOURNEY HEADWAY – Relations

Source	Target
<b>TIMING POINT IN JOURNEY PATTERN</b> Role: the timing reference for Cardinality: 1.. Relation type: Association	<b>VEHICLE JOURNEY HEADWAY</b> Role: for Cardinality: 0..*
<b>VEHICLE JOURNEY HEADWAY</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY HEADWAY</b> Role: Cardinality:

#### VEHICLE JOURNEY HEADWAY – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY HEADWAY	::>	<b>VEHICLE JOURNEY HEADWAY</b> inherits from <b>JOURNEY HEADWAY</b>
«UID»	<b>Id</b>	VehicleJourneyHeadwayIdType	1:1	Identifier of VEHICLE JOURNEY HEADWAY.

#### VEHICLE JOURNEY LAYOVER

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey Times MODEL.VEHICLE JOURNEY LAYOVER)

A time allowance at the end of a specified **VEHICLE JOURNEY**. This time supersedes any global layover or **JOURNEY PATTERN LAYOVER**.

#### VEHICLE JOURNEY LAYOVER – Relations

Source	Target
<b>VEHICLE JOURNEY LAYOVER</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY LAYOVER</b> Role: Cardinality:
<b>VEHICLE JOURNEY</b> Role: allowing Cardinality: 1 Relation type: Association	<b>VEHICLE JOURNEY LAYOVER</b> Role: allowed on Cardinality: 0..1

#### VEHICLE JOURNEY LAYOVER – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY LAYOVER	::>	<b>VEHICLE JOURNEY LAYOVER</b> inherits from <b>JOURNEY LAYOVER</b>
«UID»	<b>Id</b>	VehicleJourneyLayoverIdType	1:1	Identifier of VEHICLE JOURNEY LAYOVER.

#### VEHICLE JOURNEY RUN TIME

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey Times MODEL.VEHICLE JOURNEY RUN TIME)

The time taken to traverse a specified **TIMING LINK IN JOURNEY PATTERN** on a specified **VEHICLE JOURNEY**. This gives the most detailed control over times and overrides the **DEFAULT SERVICE JOURNEY RUN TIME** and **JOURNEY PATTERN RUN TIME** and the **DEFAULT DEAD RUN RUN TIME**.

#### VEHICLE JOURNEY RUN TIME – Relations

Source	Target
<b>VEHICLE JOURNEY RUN TIME</b> Role: for Cardinality: * Relation type: Association	<b>TIMING LINK IN JOURNEY PATTERN</b> Role: covered in Cardinality: 1
<b>VEHICLE JOURNEY RUN TIME</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY RUN TIME</b> Role: Cardinality:
<b>VEHICLE JOURNEY</b> Role: worked using Cardinality: 1 Relation type: Association	<b>VEHICLE JOURNEY RUN TIME</b> Role: valid on Cardinality: *

#### VEHICLE JOURNEY RUN TIME – Attributes

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY RUN TIME	::>	<b>VEHICLE JOURNEY RUN TIME</b> inherits from <b>JOURNEY RUN TIME</b>
«UID»	<b>Id</b>	VehicleJourneyRunTimeIdType	1:1	Identifier of VEHICLE JOURNEY RUN TIME.

#### VEHICLE JOURNEY WAIT TIME

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Vehicle Journey Times MODEL.VEHICLE JOURNEY WAIT TIME)

The time for a vehicle to wait at a particular **TIMING POINT IN JOURNEY PATTERN** on a specified **VEHICLE JOURNEY**. This wait time will override the **JOURNEY PATTERN WAIT TIME**.

#### VEHICLE JOURNEY WAIT TIME – Relations

Source	Target
<b>TIMING POINT IN JOURNEY PATTERN</b> Role: associated with Cardinality: 1 Relation type: Association	<b>VEHICLE JOURNEY WAIT TIME</b> Role: applied at Cardinality: *
<b>VEHICLE JOURNEY WAIT TIME</b> Role: Cardinality: Relation type: Generalization	<b>JOURNEY WAIT TIME</b> Role: Cardinality:
<b>VEHICLE JOURNEY</b> Role: worked using Cardinality: 1 Relation type: Association	<b>VEHICLE JOURNEY WAIT TIME</b> Role: valid on Cardinality: *



**VEHICLE JOURNEY WAIT TIME – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	JOURNEY WAIT TIME	::>	<b>VEHICLE JOURNEY WAIT TIME</b> inherits from <b>JOURNEY WAIT TIME</b>
«UID»	<b>Id</b>	<i>VehicleJourneyWaitTime</i> <i>IdType</i>	1:1	Identifier of VEHICLE JOURNEY WAIT TIME.

**VEHICLE MODE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Transport Mode MODEL.VEHICLE MODE)

A characterisation of the public transport operation according to the means of transport (bus, tram, metro, train, ferry, ship).

**VEHICLE MODE – Relations**

Source	Target
<b>VEHICLE MODE</b> Role: determining Cardinality: 1 Relation type: Association	<b>OPERATIONAL CONTEXT</b> Role: determined by Cardinality: 0..*
<b>VEHICLE MODE</b> Role: comprising Cardinality: 1 Relation type: Association	<b>VEHICLE TYPE</b> Role: belonging to Cardinality: *
<b>VEHICLE MODE</b> Role: Cardinality: Relation type: Generalization	<b>MODE</b> Role: Cardinality:
<b>CONNECTION END</b> Role: serviced by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: servicing Cardinality: 0..1
<b>VEHICLE MODE</b> Role: servicing Cardinality: 0..* Relation type: Association	<b>SCHEDULED STOP POINT</b> Role: serviced by Cardinality: 0..*
<b>SERVICE LINK</b> Role: operated by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: operating Cardinality: 0..*
<b>SERVICE LINK</b> Role: primarily operated by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: used as primary on Cardinality: 0..1
<b>DEFAULT CONNECTION END</b> Role: serviced by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: servicing Cardinality: 0..1
<b>JOURNEY PATTERN</b> Role: operated by Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: operating Cardinality: 0..*
<b>TICKETING SERVICE</b> Role: for Cardinality: 0..* Relation type: Association	<b>VEHICLE MODE</b> Role: concerned by Cardinality: 0..*

<b>VEHICLE MODE</b> <i>Role: concerned by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>TICKETING EQUIPMENT</b> <i>Role: for</i> <i>Cardinality: 0..*</i>
<b>VEHICLE MODE</b> <i>Role: primary for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>STOP PLACE COMPONENT</b> <i>Role: characterised by</i> <i>Cardinality: 0..*</i>
<b>VEHICLE MODE</b> <i>Role: primary for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>STOP PLACE</b> <i>Role: characterised by</i> <i>Cardinality: 0..*</i>
<b>TIMING LINK</b> <i>Role: primarily operated by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE MODE</b> <i>Role: used as primary on</i> <i>Cardinality: 0..1</i>
<b>TIMING LINK</b> <i>Role: operated by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE MODE</b> <i>Role: operating</i> <i>Cardinality: 0..*</i>
<b>ROUTE LINK</b> <i>Role: operated by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE MODE</b> <i>Role: operating</i> <i>Cardinality: 0..*</i>
<b>VEHICLE MODE</b> <i>Role: used as primary for</i> <i>Cardinality: 0..1</i> <i>Relation type: Association</i>	<b>LINE</b> <i>Role: primarily run by</i> <i>Cardinality: *</i>
<b>LINE</b> <i>Role: operated by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE MODE</b> <i>Role: operating</i> <i>Cardinality: 0..*</i>
<b>JOURNEY TIMING</b> <i>Role: determined by</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE MODE</b> <i>Role: determing</i> <i>Cardinality: 0..1</i>
<b>INTERCHANGE RULE PARAMETER</b> <i>Role: using</i> <i>Cardinality: 0..*</i> <i>Relation type: Association</i>	<b>VEHICLE MODE</b> <i>Role: used as</i> <i>Cardinality: 0..1</i>

#### VEHICLE MODE – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	MODE	::>	<b>VEHICLE MODE</b> inherits from <b>MODE</b>
«UID»	<b>Id</b>		1:1	Identifier of VEHICLE MODE.

#### VEHICLE MODEL

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.VEHICLE MODEL)

A classification of public transport vehicles of the same VEHICLE TYPE, e.g. according to equipment specifications or model generation.

**VEHICLE MODEL – Relations**

Source	Target
<b>VEHICLE MODEL</b> <i>Role:</i> classifying <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>VEHICLE</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>VEHICLE EQUIPMENT PROFILE</b> <i>Role:</i> in <i>Cardinality:</i> 1..* <i>Relation type:</i> Association	<b>VEHICLE MODEL</b> <i>Role:</i> equipped with <i>Cardinality:</i> 1
<b>VEHICLE TYPE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE MODEL</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>VEHICLE MODEL</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1

**VEHICLE MODEL – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VehicleModelIdType</i>	1:1	Identifier of VEHICLE MODEL.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of VEHICLE MODEL.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of VEHICLE MODEL.
	<b>Manufacturer</b>	<i>normalizedString</i>	0:1	Manufacturer of VEHICLE MODEL.

**VEHICLE POSITION ALIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Vehicle Stopping MODEL.VEHICLE POSITION ALIGNMENT)

The alignment of a particular BOARDING POSITION with the entrance of a VEHICLE as the result of positioning the VEHICLE at a particular VEHICLE STOPPING PLACE.

**VEHICLE POSITION ALIGNMENT – Relations**

Source	Target
<b>VEHICLE POSITION ALIGNMENT</b> <i>Role:</i> determined by <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>VEHICLE STOPPING POSITION</b> <i>Role:</i> determining <i>Cardinality:</i>
<b>VEHICLE POSITION ALIGNMENT</b> <i>Role:</i> serving <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>BOARDING POSITION</b> <i>Role:</i> linked to <i>Cardinality:</i> 1

**VEHICLE POSITION ALIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>PositionAlignmentIdType</i>	1:1	Identifier of VEHICLE POSITION ALIGNMENT.

**VEHICLE QUAY ALIGNMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Vehicle Stopping MODEL.VEHICLE QUAY ALIGNMENT)

The alignment of a particular QUAY with a vehicle as the result of positioning a VEHICLE at a particular VEHICLE STOPPING PLACE.

#### VEHICLE QUAY ALIGNMENT – Relations

Source	Target
<b>VEHICLE QUAY ALIGNMENT</b> Role: determined by Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE STOPPING PLACE</b> Role: determining Cardinality: 1
<b>VEHICLE QUAY ALIGNMENT</b> Role: serving Cardinality: 0..* Relation type: Association	<b>QUAY</b> Role: linked to Cardinality: 1

#### VEHICLE QUAY ALIGNMENT – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<i>Id</i>	<i>AlignmentIdType</i>	1:1	Identifier of VEHICLE QUAY ALIGNMENT.

#### VEHICLE SCHEDULE FRAME

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Explicit Frames MODEL .Vehicle Schedule Frame MODEL.VEHICLE SCHEDULE FRAME)

A coherent set of BLOCKS, COMPOUND BLOCKs, COURSEs of JOURNEY and VEHICLE SCHEDULEs to which the same set of VALIDITY CONDITIONs has been assigned.

#### VEHICLE SCHEDULE FRAME – Relations

Source	Target
<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality: Relation type: Aggregation	<b>COMPOSITE FRAME</b> Role: Cardinality:
<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>TIMETABLE FRAME</b> Role: comprising Cardinality: 0..1 Relation type: Association	<b>VEHICLE SCHEDULE FRAME</b> Role: valid for Cardinality: 0..*
<b>VEHICLE SERVICE</b> Role: Cardinality: * Relation type: Aggregation	<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality:
<b>COURSE OF JOURNEYS</b> Role: Cardinality: * Relation type: Aggregation	<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality:
<b>COMPOUND BLOCK</b> Role: Cardinality: * Relation type: Aggregation	<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality:
<b>BLOCK</b> Role: Cardinality: * Relation type: Aggregation	<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality:

**VEHICLE SCHEDULE FRAME – Attributes**

Classifi- cation	Name	Type	cardinality	Description
::>	::>	VERSION FRAME	::>	<b>VEHICLE SCHEDULE FRAME</b> inherits from <b>VERSION FRAME</b>
«UID»	<b>Id</b>		1:1	Identifier of VEHICLE SCHEDULE FRAME.

**VEHICLE SERVICE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.VEHICLE SERVICE)

A workplan for a vehicle for a whole day, planned for a specific DAY TYPE.

**VEHICLE SERVICE – Relations**

Source	Target
<b>VEHICLE SERVICE PART</b> Role: part of Cardinality: * Relation type: Association	<b>VEHICLE SERVICE</b> Role: including Cardinality: 0..1
<b>VEHICLE SERVICE</b> Role: Cardinality: * Relation type: Aggregation	<b>VEHICLE SCHEDULE FRAME</b> Role: Cardinality:

**VEHICLE SERVICE – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	VehicleServiceIdType	1:1	Identifier of VEHICLE SERVICE.
	<b>Name</b>	MultilingualString	0:1	Name of VEHICLE SERVICE.
	<b>Description</b>	MultilingualString	0:1	Description of VEHICLE SERVICE.

**VEHICLE SERVICE PART**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Service MODEL.VEHICLE SERVICE PART)

A part of a VEHICLE SERVICE composed of one or more BLOCKs and limited by periods spent at the GARAGE managing the vehicle in question.

**VEHICLE SERVICE PART – Relations**

Source	Target
<b>VEHICLE SERVICE PART</b> Role: ending at Cardinality: * Relation type: Association	<b>GARAGE POINT</b> Role: end of Cardinality: 1
<b>VEHICLE SERVICE PART</b> Role: starting at Cardinality: * Relation type: Association	<b>GARAGE POINT</b> Role: start of Cardinality: 1

<b>VEHICLE SERVICE PART</b> <i>Role:</i> part of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE SERVICE</b> <i>Role:</i> including <i>Cardinality:</i> 0..1
<b>BLOCK</b> <i>Role:</i> part of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE SERVICE PART</b> <i>Role:</i> including <i>Cardinality:</i> 0..1

**VEHICLE SERVICE PART – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VehicleServicePartIdType</i>	1:1	Identifier of VEHICLE SERVICE PART.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of VEHICLE SERVICE PART.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of VEHICLE SERVICE PART.

**VEHICLE STOPPING PLACE**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Vehicle Stopping MODEL.VEHICLE STOPPING PLACE)

A place on the vehicle track where vehicles stop in order for passengers to board or alight from a vehicle. A vehicle track is located on the respective INFRASTRUCTURE LINK for the MODE (RAILWAY ELEMENT of rail network, ROAD ELEMENT of road network, etc). A VEHICLE STOPPING PLACE may be served by one or more QUAYS.

**VEHICLE STOPPING PLACE – Relations**

Source	Target
<b>VEHICLE QUAY ALIGNMENT</b> <i>Role:</i> determined by <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>VEHICLE STOPPING PLACE</b> <i>Role:</i> determining <i>Cardinality:</i> 1
<b>VEHICLE STOPPING POSITION</b> <i>Role:</i> a part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>VEHICLE STOPPING PLACE</b> <i>Role:</i> comprising <i>Cardinality:</i> 1
<b>VEHICLE STOPPING PLACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>STOP PLACE COMPONENT</b> <i>Role:</i> <i>Cardinality:</i>
<b>VEHICLE STOPPING PLACE</b> <i>Role:</i> a part of <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>STOP PLACE</b> <i>Role:</i> containing <i>Cardinality:</i> 1

**VEHICLE STOPPING PLACE – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	<i>STOP PLACE COMPONENT</i>	::>	<b>VEHICLE STOPPING PLACE</b> inherits from <b>STOP PLACE COMPONENT</b>
«UID»	<b>Id</b>	<i>VehicleStoppingPlaceIdType</i>	1:1	Identifier of VEHICLE STOPPING PLACE.

**VEHICLE STOPPING POSITION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Vehicle Stopping MODEL.VEHICLE STOPPING POSITION)

The stopping position of a vehicle or one of its components as a location. May be specified as a ZONE corresponding to the bounding polygon of the vehicle, or one or more POINTs corresponding to parts of the vehicle such as a door.

If given as a single point, indicates the position for the door relative to an indicated side of the vehicle.

**VEHICLE STOPPING POSITION – Relations**

Source	Target
<b>VEHICLE STOPPING POSITION</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF RELATION TO VEHICLE</b> Role: classification for Cardinality: 0..1
<b>VEHICLE POSITION ALIGNMENT</b> Role: determined by Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE STOPPING POSITION</b> Role: determining Cardinality:
<b>VEHICLE STOPPING POSITION</b> Role: a part of Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE STOPPING PLACE</b> Role: comprising Cardinality: 1
<b>VEHICLE STOPPING POSITION</b> Role: Cardinality: Relation type: Generalization	<b>STOP PLACE COMPONENT</b> Role: Cardinality:
<b>VEHICLE TYPE STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>VEHICLE STOPPING POSITION</b> Role: assigned to Cardinality: 1

**VEHICLE STOPPING POSITION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	STOP PLACE COMPONENT	::>	<b>VEHICLE STOPPING POSITION</b> inherits from <b>STOP PLACE COMPONENT</b>
«UID»	<b>Id</b>	VehicleStoppingPositionIdType	1:1	Identifier of VEHICLE STOPPING POSITION.
	<b>Bearing</b>	degrees	0:1	Bearing of Position relative to North.

**VEHICLE TYPE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Type MODEL.VEHICLE TYPE)

A classification of public transport vehicles according to the vehicle scheduling requirements in mode and capacity (e.g. standard bus, double-deck, ...).

## VEHICLE TYPE – Relations

Source	Target
<b>TRAIN</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE TYPE</b> Role: Cardinality:
<b>SERVICE FACILITY SET</b> Role: present at Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE TYPE</b> Role: comprising Cardinality: 0..1
<b>COMPOUND TRAIN</b> Role: Cardinality: Relation type: Generalization	<b>VEHICLE TYPE</b> Role: Cardinality:
<b>VEHICLE TYPE</b> Role: a classification for Cardinality: 1 Relation type: Association	<b>VEHICLE</b> Role: classified as Cardinality: *
<b>VEHICLE TYPE</b> Role: a classification for Cardinality: 1 Relation type: Association	<b>VEHICLE MODEL</b> Role: classified as Cardinality: *
<b>VEHICLE TYPE</b> Role: made up of Cardinality: 0..1 Relation type: Association	<b>VEHICLE TYPE</b> Role: included in Cardinality: *
<b>PASSENGER REQUIREMENT</b> <b>CARRYING</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE TYPE</b> Role: satisfying Cardinality: 0..*
<b>FACILITY REQUIREMENT</b> Role: requirement for Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE TYPE</b> Role: satisfying Cardinality:
<b>MANOEUVRING REQUIREMENT</b> Role: for Cardinality: 0..* Relation type: Aggregation	<b>VEHICLE TYPE</b> Role: satisfying Cardinality: 0..*
<b>VEHICLE MODE</b> Role: comprising Cardinality: 1 Relation type: Association	<b>VEHICLE TYPE</b> Role: belonging to Cardinality: *
<b>ROUTE LINK</b> Role: safely traversed by Cardinality: * Relation type: Association	<b>VEHICLE TYPE</b> Role: safe to traverse Cardinality: *
<b>VEHICLE TYPE</b> Role: subject to Cardinality: 1 Relation type: Association	<b>MEETING RESTRICTION</b> Role: for Cardinality: *
<b>VEHICLE TYPE</b> Role: subject of Cardinality: 1 Relation type: Association	<b>MEETING RESTRICTION</b> Role: against Cardinality: *



<b>VEHICLE TYPE AT POINT</b> <i>Role:</i> providing space for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> allowed to be located at <i>Cardinality:</i> 1
<b>VEHICLE TYPE</b> <i>Role:</i> overtaken at <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>OVERTAKING POSSIBILITY</b> <i>Role:</i> against <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> overtaking at <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>OVERTAKING POSSIBILITY</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>IMPOSSIBLE MANOEUVRE</b> <i>Role:</i> defined for <i>Cardinality:</i> *
<b>INFRASTRUCTURE LINK</b> <i>Role:</i> safely traversed by <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> safe to traverse <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> assigned to <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>COMPOUND BLOCK</b> <i>Role:</i> using <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> assigned to <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>BLOCK PART</b> <i>Role:</i> using <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> proposed for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>JOURNEY PART</b> <i>Role:</i> made using <i>Cardinality:</i> 0..*
<b>VEHICLE TYPE</b> <i>Role:</i> specified by <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE TYPE PREFERENCE</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> proposed for <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>SERVICE JOURNEY</b> <i>Role:</i> made using <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> <i>Cardinality:</i> * <i>Relation type:</i> Aggregation	<b>RESOURCE FRAME</b> <i>Role:</i> <i>Cardinality:</i> 0..1
<b>BLOCK</b> <i>Role:</i> using <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> assigned to <i>Cardinality:</i> 1
<b>SPECIAL SERVICE</b> <i>Role:</i> using <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> proposed for <i>Cardinality:</i> 0..1

<b>VEHICLE JOURNEY</b> <i>Role:</i> operated by <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> requested for <i>Cardinality:</i> 0..*
<b>VEHICLE TYPE STOP ASSIGNMENT</b> <i>Role:</i> for <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> assigned to <i>Cardinality:</i> 0..1

#### VEHICLE TYPE – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VehicleTypeIdType</i>	1:1	Identifier of VEHICLE TYPE.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of VEHICLE TYPE.
	<b>ShortName</b>	<i>MultilingualString</i>	0:1	Short Name of DAY TYPE.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of VEHICLE TYPE.
	<b>ReversingDirection</b>	<i>boolean</i>	0:1	Whether VEHICLE TYPE has a reversing direction.
	<b>SelfPropelled</b>	<i>boolean</i>	0:1	Whether VEHICLE TYPE is self-propelled.
	<b>Length</b>	<i>LengthType</i>	0:1	Length of VEHICLE TYPE.
	<b>TypeOfFuel</b>	<i>TypeOfFuelEnum</i>	0:1	Type of Fuel of VEHICLE TYPE.
	<b>SeatingCapacity</b>	<i>NumberOfPassengers</i>	0:1	Maximum number of seated passengers that can be carried by a Vehicle of this type
	<b>StandingCapacity</b>	<i>NumberOfPassengers</i>	0:1	Maximum number of standing passengers that can be carried by a Vehicle of this type
	<b>SpecialPlaceCapacity</b>	<i>NumberOfPassengers</i>	0:1	Maximum number of passengers needing special places that can be carried by a Vehicle of this type
	<b>WheelchairPlaceCapacity</b>	<i>NumberOfPassengers</i>	0:1	Maximum number of passengers needing special places that can be carried by a Vehicle of this type
	<b>LowFloor</b>	<i>boolean</i>	0:1	Whether VEHICLE TYPE is low floor
	<b>HasLiftOrRamp</b>	<i>boolean</i>	0:1	Whether VEHICLE TYPE has lift or ramp for wheelchair access.

#### VEHICLE TYPE AT POINT

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Network Restriction MODEL.VEHICLE TYPE AT POINT)

The number of vehicles of a specified VEHICLE TYPE which may wait at a specified POINT at any one time. If the capacity is 0, then that type of vehicle may not stop there.

**VEHICLE TYPE AT POINT – Relations**

Source	Target
<b>VEHICLE TYPE AT POINT</b> <i>Role:</i> providing space for <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>VEHICLE TYPE</b> <i>Role:</i> allowed to be located at <i>Cardinality:</i> 1
<b>VEHICLE TYPE AT POINT</b> <i>Role:</i> specifying the capacity of <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>INFRASTRUCTURE POINT</b> <i>Role:</i> location of <i>Cardinality:</i> 1
<b>VEHICLE TYPE AT POINT</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**VEHICLE TYPE AT POINT – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VehicleTypeAtPointIdType</i>	1:1	Identifier of VEHICLE TYPE AT POINT restriction.
	<b>Capacity</b>	<i>NumberOfVehicles</i>	0:1	Number of vehicles allowed at a given time at VEHICLE TYPE AT POINT.

**VEHICLE TYPE PREFERENCE**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI JourneyAndJourneyTimes MODEL .TI Journey Pattern Times MODEL.VEHICLE TYPE PREFERENCE)

The preference for the use of a particular VEHICLE TYPE for a SERVICE JOURNEY PATTERN, depending on the DAY TYPE and TIME DEMAND TYPE. The rank of preferences must be recorded. Different VEHICLE TYPEs may be given the same rank.

**VEHICLE TYPE PREFERENCE – Relations**

Source	Target
<b>TIME DEMAND TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE TYPE PREFERENCE</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>DAY TYPE</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE TYPE PREFERENCE</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>SERVICE JOURNEY PATTERN</b> <i>Role:</i> used to define <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE TYPE PREFERENCE</b> <i>Role:</i> for <i>Cardinality:</i> *
<b>VEHICLE TYPE</b> <i>Role:</i> specified by <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>VEHICLE TYPE PREFERENCE</b> <i>Role:</i> for <i>Cardinality:</i> *

**VEHICLE TYPE PREFERENCE – Attributes**

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VehicleTypePreferenceId</i> <i>Type</i>	1:1	Identifier of VEHICLE TYPE PREFERENCE.
	<b>Rank</b>	<i>positiveInteger</i>	1:1	Ranking of VEHICLE TYPE PREFERENCE.

**VEHICLE TYPE STOP ASSIGNMENT**

(Transmodel v6.Part 3 - Timing Information & Vehicle Scheduling (TI).TI Vehicle Journey Assignment MODEL.TI Stopping Position Assignment MODEL.VEHICLE TYPE STOP ASSIGNMENT)

The allocation of a VEHICLE STOPPING POSITION of a VEHICLE TYPE for a particular VEHICLE JOURNEY.

**VEHICLE TYPE STOP ASSIGNMENT – Relations**

Source	Target
<b>VEHICLE TYPE STOP ASSIGNMENT</b> Role: Cardinality: Relation type: Generalization	<b>STOP ASSIGNMENT</b> Role: Cardinality:
<b>VEHICLE TYPE STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>VEHICLE TYPE</b> Role: assigned to Cardinality: 0..1
<b>VEHICLE TYPE STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>VEHICLE STOPPING POSITION</b> Role: assigned to Cardinality: 1
<b>VEHICLE TYPE STOP ASSIGNMENT</b> Role: for Cardinality: 0..* Relation type: Association	<b>VEHICLE JOURNEY</b> Role: determining Cardinality: 1..

**VEHICLE TYPE STOP ASSIGNMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	STOP ASSIGNMENT	::>	<b>VEHICLE TYPE STOP ASSIGNMENT</b> inherits from <b>STOP ASSIGNMENT</b>
«UID»	<b>Id</b>		1:1	Identifier of VEHICLE TYPE STOP ASSIGNMENT.
	<b>OperationalOrientation</b>		1:1	Orientation of a certain VEHICLE TYPE at a stopping location when carrying out a particular VEHICLE JOURNEY (relatively to the original orientation of the vehicle).

**VERSION**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Version MODEL.VERSION)

A group of operational data instances which share the same VALIDITY CONDITIONS. A version belongs to a unique VERSION FRAME and is characterised by a unique TYPE OF VERSION.

## VERSION – Relations

Source	Target
<b>VERSION</b> Role: parent of Cardinality: <b>0..1</b> Relation type: Association	<b>VERSION</b> Role: deriving from Cardinality: *
<b>VERSION</b> Role: representing Cardinality: <b>0..1</b> Relation type: Association	<b>VERSION FRAME</b> Role: represented by Cardinality: <b>1</b>
<b>VERSION FRAME</b> Role: comprising Cardinality: <b>1</b> Relation type: Association	<b>VERSION</b> Role: belonging to Cardinality: *
<b>VERSION</b> Role: governing Cardinality: <b>1</b> Relation type: Association	<b>ENTITY IN VERSION</b> Role: governed by Cardinality: <b>1..*</b>
<b>VERSION</b> Role: base version for Cardinality: <b>0..1</b> Relation type: Association	<b>ENTITY IN VERSION</b> Role: compatible with Cardinality: <b>0..*</b>
<b>TYPE OF VERSION</b> Role: classification for Cardinality: <b>0..1</b> Relation type: Association	<b>VERSION</b> Role: classified as Cardinality: *
<b>VALIDITY CONDITION</b> Role: defined for Cardinality: <b>0..*</b> Relation type: Association	<b>VERSION</b> Role: characterised by Cardinality: <b>1</b>

## VERSION – Attributes

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VersionIdType</i>	1:1	Identifier of VERSION.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of VERSION.
	<b>EndDate</b>	<i>dateTime</i>	0:1	End date of validity of VERSION.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of VERSION.
	<b>StartDate</b>	<i>dateTime</i>	0:1	
	<b>Status</b>	<i>VersionStatusEnum</i>	0:1	Status of VERSION. Enumerated value.

## VERSION FRAME

(Transmodel v6.Part 1 - Common Concepts (CC).CC Versions & Validity MODEL.CC Generic Version Frame MODEL.VERSION FRAME)

A set of VERSIONS referring to a same DATA SOURCE and belonging to the same TYPE OF FRAME. A FRAME may be restricted by VALIDITY CONDITIONS.

## VERSION FRAME – Relations

Source	Target
<b>VERSION</b> Role: representing Cardinality: 0..1 Relation type: Association	<b>VERSION FRAME</b> Role: represented by Cardinality: 1
<b>DATA SOURCE</b> Role: object of Cardinality: 0..1 Relation type: Association	<b>VERSION FRAME</b> Role: dealing with Cardinality: *
<b>VERSION FRAME</b> Role: comprising Cardinality: 1 Relation type: Association	<b>VERSION</b> Role: belonging to Cardinality: *
<b>TYPE OF FRAME</b> Role: characterising Cardinality: 1 Relation type: Association	<b>VERSION FRAME</b> Role: characterised by Cardinality: *
<b>VERSION FRAME</b> Role: comprising Cardinality: 0..* Relation type: Association	<b>ENTITY IN VERSION</b> Role: belonging to Cardinality: 0..*
<b>VERSION FRAME</b> Role: restricted to Cardinality: 1 Relation type: Association	<b>VALIDITY CONDITION</b> Role: defined for Cardinality: *
<b>INFRASTRUCTURE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>SERVICE CALENDAR FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>COMPOSITE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>FARE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>GENERAL FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>RESOURCE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>SITE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:
<b>SERVICE FRAME</b> Role: Cardinality: Relation type: Generalization	<b>VERSION FRAME</b> Role: Cardinality:

<b>DRIVER SCHEDULE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>VERSION FRAME</b> <i>Role:</i> corresponding to <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>LAYER</b> <i>Role:</i> implemented as <i>Cardinality:</i> 0..*
<b>VEHICLE SCHEDULE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>
<b>TIMETABLE FRAME</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>VERSION FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**VERSION FRAME – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>VersionFrameIdType</i>	1:1	Identifier of VERSION FRAME.
	<b>Name</b>	<i>MultilingualString</i>	0:1	Name of VERSION FRAME.
	<b>Description</b>	<i>MultilingualString</i>	0:1	Description of VERSION FRAME.

**VIA**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Route MODEL.VIA)

A secondary heading relevant for a certain part of the JOURNEY PATTERN advertising an onward intermediate destination to supplement the advertised (final) destination of DESTINATION DISPLAY.

**VIA – Relations**

Source	Target
<b>VIA</b> <i>Role:</i> displayed on <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>DESTINATION DISPLAY</b> <i>Role:</i> displaying <i>Cardinality:</i> 0..1
<b>VIA</b> <i>Role:</i> corresponding to <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ROUTE POINT</b> <i>Role:</i> playing the role of <i>Cardinality:</i> 0..1

**VIA – Attributes**

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ViaIdType</i>	1:1	Identifier of VIA.
	<b>Name</b>	<i>MultiLingualString</i>	1:1	Name of VIA.
	<b>ViaType</b>	<i>ViaTypeEnum</i>	0:1	Type of Via

**WAITING EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.WAITING EQUIPMENT)

Specialisation of STOP PLACE EQUIPMENT for WAITING EQUIPMENTs (shelter, waiting room, etc.).

**WAITING EQUIPMENT – Relations**

Source	Target
<b>SEATING EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>WAITING EQUIPMENT</b> Role: Cardinality:
<b>WAITING EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>SITE EQUIPMENT</b> Role: Cardinality:
<b>WAITING ROOM EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>WAITING EQUIPMENT</b> Role: Cardinality:
<b>SHELTER EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>WAITING EQUIPMENT</b> Role: Cardinality:

**WAITING EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	SITE EQUIPMENT	::>	<b>WAITING EQUIPMENT</b> inherits from <b>SITE EQUIPMENT</b>
	<b>Seats</b>	integer	0:1	Number of seats in WAITING area.
	<b>Width</b>	LengthType	0:1	Width of WAITING area.
	<b>Length</b>	LengthType	0:1	Length of WAITING area.
	<b>AirConditioned</b>	boolean	0:1	Whether Shelter has air conditioning.
	<b>StepFree</b>	boolean	0:1	Whether waiting area is step free.
	<b>WheelchairAreaWidth</b>	LengthType	0:1	Width of Wheelchair WAITING area.
	<b>WheelchairAreaLength</b>	LengthType	0:1	Length of Wheelchair WAITING area.
	<b>SmokingAllowed</b>	boolean	0:1	Whether smoking is allowed in waiting area.
«UID»	<b>Id</b>		1:1	Identifier of WAITING EQUIPMENT.

**WAITING ROOM EQUIPMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).FO Fixed Object MODEL .NT Equipment Description MODEL.NT PassengerEquipment MODEL.NT Site Equipment MODEL.WAITING ROOM EQUIPMENT)

Specialisation of WAITING EQUIPMENT for waiting rooms, classified by TYPE OF WAITING ROOM.



## WAITING ROOM EQUIPMENT – Relations

Source	Target
<b>WAITING ROOM EQUIPMENT</b> Role: classified as Cardinality: 0..* Relation type: Association	<b>TYPE OF WAITING ROOM</b> Role: a classification for Cardinality: 0..1
<b>SANITARY EQUIPMENT</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>WAITING ROOM EQUIPMENT</b> Role: Cardinality: 1
<b>WAITING ROOM EQUIPMENT</b> Role: assigned to Cardinality: 0..* Relation type: Association	<b>CLASS OF USE</b> Role: characterising Cardinality: 0..1
<b>WAITING ROOM EQUIPMENT</b> Role: available for Cardinality: 0..* Relation type: Association	<b>TYPE OF FARE CLASS</b> Role: characterising Cardinality: 0..1
<b>WAITING ROOM EQUIPMENT</b> Role: Cardinality: Relation type: Aggregation	<b>SANITARY EQUIPMENT</b> Role: Cardinality:
<b>WAITING ROOM EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>WAITING EQUIPMENT</b> Role: Cardinality:

## WAITING ROOM EQUIPMENT – Attributes

Classifi- cation	Name	Type	cardinality	Description
::>	::>	WAITING EQUIPMENT	::>	<b>WAITING ROOM EQUIPMENT</b> inherits from <b>WAITING EQUIPMENT</b>
«UID»	<b>Id</b>	WaitingRoomEquipmentIdType	1:1	Identifier of WAITING ROOM EQUIPMENT.
	<b>Facilities</b>	SanitaryEquipment	0:1	Sanitary Facilities in WAITING room.
	<b>WomenOnly</b>	boolean	0:1	Whether Waiting room is women only.

## WHEELCHAIR VEHICLE EQUIPMENT

(Transmodel v6.Part 1 - Common Concepts (CC).CC Reusable Components MODEL.CC Vehicle Passenger Equipment MODEL.WHEELCHAIR VEHICLE EQUIPMENT)

Specialisation of VEHICLE EQUIPMENT for wheel chair accessibility on board a VEHICLE providing information such as the number of wheel chair areas and the access dimensions.

## WHEELCHAIR VEHICLE EQUIPMENT – Relations

Source	Target
<b>WHEELCHAIR VEHICLE EQUIPMENT</b> Role: Cardinality: Relation type: Generalization	<b>ACTUAL VEHICLE EQUIPMENT</b> Role: Cardinality:

**WHEELCHAIR VEHICLE EQUIPMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	ACTUAL VEHICLE EQUIPMENT	::>	<b>WHEELCHAIR VEHICLE EQUIPMENT</b> inherits from <b>ACTUAL VEHICLE EQUIPMENT</b>
«UID»	<b>Id</b>	WheelchairVehicleEquipmentIdType	1:1	Identifier of WHEELCHAIR VEHICLE EQUIPMENT.
	<b>NumberOfWheelchairAreas</b>	integer	0:1	Number of Wheelchair spaces.
	<b>WidthOfAccessArea</b>	LengthType	0:1	Width of Wheelchair space.
	<b>HeightOfAccessArea</b>	LengthType	0:1	Height of Wheelchair space.
	<b>LengthOfAccessArea</b>	LengthType	0:1	Depth of Wheelchair space.
	<b>WheelchairTurningCircle</b>	LengthType	0:1	Wheelchair turning circle in space.
	<b>CompanionSeat</b>	boolean	0:1	Whether there is a companion seat.
	<b>SuitableFor</b>	MobilityNeed	0:*	Types of wheelchair for which are is suitable

**WIRE ELEMENT**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.WIRE ELEMENT)

A type of INFRASTRUCTURE LINK used to describe a wire network.

**WIRE ELEMENT – Relations**

Source	Target
<b>WIRE ELEMENT</b> Role: Cardinality: Relation type: Generalization	<b>INFRASTRUCTURE LINK</b> Role: Cardinality:
<b>WIRE ELEMENT</b> Role: Cardinality: 0..* Relation type: Aggregation	<b>INFRASTRUCTURE FRAME</b> Role: Cardinality:

**WIRE ELEMENT – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INFRASTRUCTURE LINK	::>	<b>WIRE ELEMENT</b> inherits from <b>INFRASTRUCTURE LINK</b>
«UID»	<b>Id</b>	WireElementIdType	1:1	Identifier of WIRE ELEMENT.

**WIRE JUNCTION**

(Transmodel v6.Part 2 - Public Transport Network Topology (NT).ND Network Description MODEL.NT Network Infrastructure MODEL.NT Infrastructure Network MODEL.WIRE JUNCTION)

A type of INFRASTRUCTURE POINT used to describe a wire network.

**WIRE JUNCTION – Relations**

Source	Target
<b>WIRE JUNCTION</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>INFRASTRUCTURE POINT</b> <i>Role:</i> <i>Cardinality:</i>
<b>WIRE JUNCTION</b> <i>Role:</i> <i>Cardinality:</i> 0..* <i>Relation type:</i> Aggregation	<b>INFRASTRUCTURE FRAME</b> <i>Role:</i> <i>Cardinality:</i>

**WIRE JUNCTION – Attributes**

Classification	Name	Type	cardinality	Description
::>	::>	INFRASTRUCTURE POINT	::>	<b>WIRE JUNCTION</b> inherits from <b>INFRASTRUCTURE POINT</b>
«UID»	<b>Id</b>	WireJunctionIdType	1:1	Identifier of WIRE JUNCTION.

**ZONE**

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Zone and Feature MODEL.ZONE)

A two-dimensional PLACE within the service area of a public transport operator (administrative zone, TARIFF ZONE, ACCESS ZONE, etc.).

**ZONE – Relations**

Source	Target
<b>ZONE</b> <i>Role:</i> viewed as <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>SIMPLE FEATURE</b> <i>Role:</i> a view of <i>Cardinality:</i> *
<b>ZONE</b> <i>Role:</i> used as source in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ZONE PROJECTION</b> <i>Role:</i> calling as source <i>Cardinality:</i> 0..*
<b>ZONE</b> <i>Role:</i> including <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ZONE</b> <i>Role:</i> included in <i>Cardinality:</i> *
<b>TYPE OF ZONE</b> <i>Role:</i> a classification for <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ZONE</b> <i>Role:</i> classified as <i>Cardinality:</i> *
<b>TARIFF ZONE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ZONE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ZONE</b> <i>Role:</i> bordered by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>LINK SEQUENCE</b> <i>Role:</i> border for <i>Cardinality:</i> 0..1
<b>GROUP OF POINTS</b> <i>Role:</i> determining <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>ZONE</b> <i>Role:</i> determined by <i>Cardinality:</i> 0..1

<b>ZONE</b> <i>Role:</i> represented by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>POINT</b> <i>Role:</i> functional centroid for <i>Cardinality:</i> 0..1
<b>ADMINISTRATIVE ZONE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ZONE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ROUTING CONSTRAINT ZONE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ZONE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ACCESS ZONE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ZONE</b> <i>Role:</i> <i>Cardinality:</i>
<b>ZONE</b> <i>Role:</i> described by <i>Cardinality:</i> 0..1 <i>Relation type:</i> Association	<b>PLACE</b> <i>Role:</i> a generic description of <i>Cardinality:</i> 0..1
<b>TRANSFER END</b> <i>Role:</i> a view of <i>Cardinality:</i> 0..* <i>Relation type:</i> Association	<b>ZONE</b> <i>Role:</i> viewed as <i>Cardinality:</i> 0..1
<b>PLACE</b> <i>Role:</i> <i>Cardinality:</i> <i>Relation type:</i> Generalization	<b>ZONE</b> <i>Role:</i> <i>Cardinality:</i>

#### ZONE – Attributes

Classifi- cation	Name	Type	cardinality	Description
«UID»	<b><i>Id</i></b>	<i>ZoneldType</i>	1:1	Identifier of ZONE.
	<b><i>Name</i></b>		0:1	Name of ZONE.
	<b><i>Description</i></b>		0:1	Description of Zone

#### ZONE PROJECTION

(Transmodel v6.Part 1 - Common Concepts (CC).CC Generic Framework MODEL.CC Generic Projection MODEL.ZONE PROJECTION)

An oriented correspondence: from one ZONE in a source layer, onto a target entity : e.g. POINT, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.

## ZONE PROJECTION – Relations

Source	Target
<b>ZONE PROJECTION</b> <i>Role:</i> concerning <i>Cardinality:</i> * <i>Relation type:</i> Association	<b>TYPE OF PROJECTION</b> <i>Role:</i> comprising <i>Cardinality:</i> 1
<b>ZONE</b> <i>Role:</i> used as source in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ZONE PROJECTION</b> <i>Role:</i> calling as source <i>Cardinality:</i> 0..*
<b>COMPLEX FEATURE</b> <i>Role:</i> used as target in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ZONE PROJECTION</b> <i>Role:</i> to <i>Cardinality:</i> *
<b>POINT</b> <i>Role:</i> used as target in <i>Cardinality:</i> 1 <i>Relation type:</i> Association	<b>ZONE PROJECTION</b> <i>Role:</i> to <i>Cardinality:</i> *

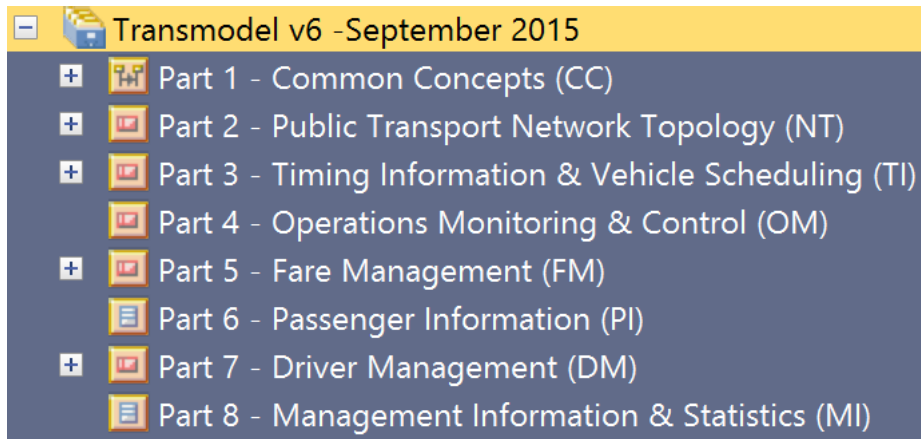
## ZONE PROJECTION – Attributes

Classification	Name	Type	cardinality	Description
«UID»	<b>Id</b>	<i>ZoneProjectionIdType</i>	1:1	Identifier of ZONE PROJECTION.

### 3 Overview of Transmodel

#### 3.1 Transmodel Parts and Packages

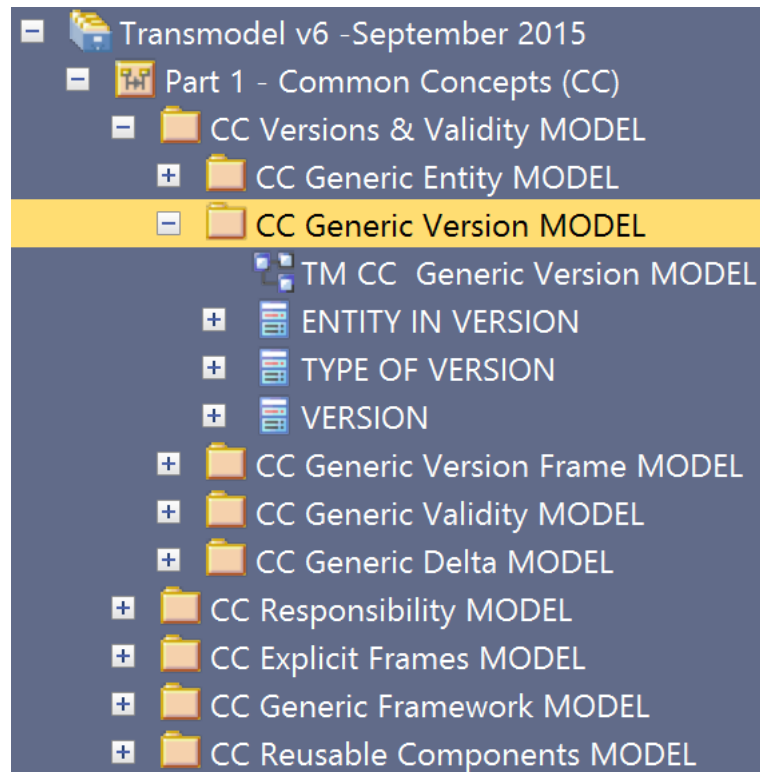
Transmodel is organised into eight parts (Figure 1), which are further structured into a number of packages, called **models**. Some of the models are further divided into sub-models. Leaf models have no child models and contain classes (concepts), which form the core of the Transmodel conceptual model. The concepts grouped together in leaf models for a specific task or functional purposes are the basic building blocks for modelling public transport.



**Figure 1. Eight parts of Transmodel conceptual model**

As an example Figure 2 shows five sub-models taken from Transmodel “Part 1 – Common Concepts” with expanded Versions & Validity MODEL and its expanded Generic Version MODEL.

The leaf model is a home package for three concepts, called classes in UML (e.g. ENTITY IN VERSION, TYPE OF VERSION, VERSION). The classes from the Versions & Validity MODEL are specifically used for describing the successive versions of data elements to precisely define their temporal dimension (i.e. timetable data of the VERSION named “2015V01” valid between “01.01.2015 and 31.12.2015”).



**Figure 2. Transmodel Part1 sub-models, class diagram and classes**

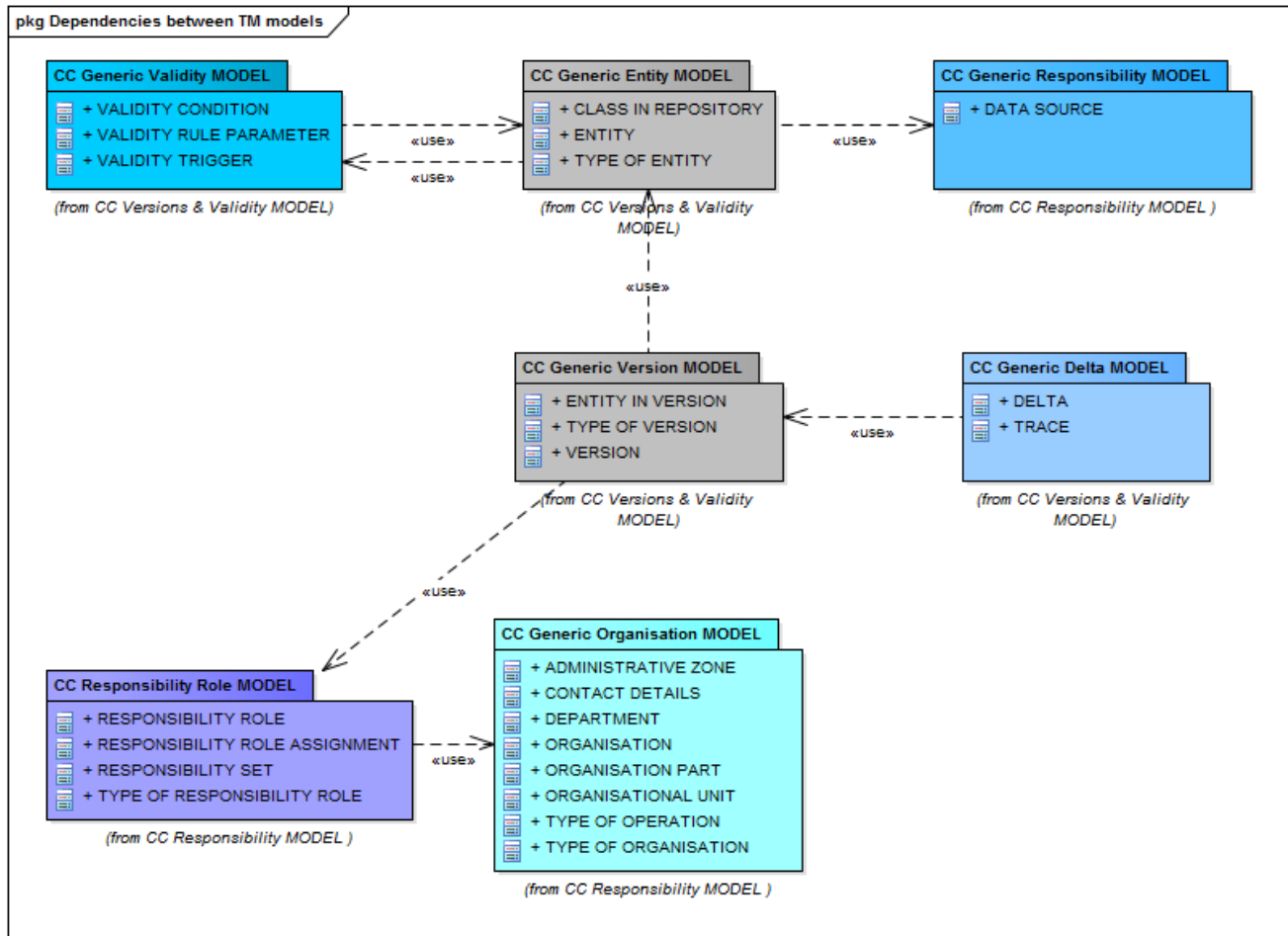
The Generic Validity MODEL describes the validity conditions for different object classes. For example, a VALIDITY CONDITION must be used to express the fact that a public transport operator prepared the first version of a planned timetable that will be valid in January 2015 and submitted it to a public transport authority.

### 3.2 Dependencies of Common Concepts packages

Transmodel defines concepts, which meet modelling needs in the vast majority of public transport cases. Some of these concepts (i.e. versions and validity of data, alternative name for data objects, source of data, responsibility on data) are particularly important because they apply to all data domains. These concepts are defined as sub-models of the Part 1 - Common Concepts and create the fundamental framework classes from which all the relevant Transmodel models are built.

Dependency, in general, represents the fact that one element requires another element for its full implementation or operation. To have a precise view of the different dependencies, dependency graphs have to be generated for any package to represent the links between this particular package and the different packages of the Common Concepts Packages, for instance. As an example, the links between the different sub-packages of the CC Versions & Validity MODEL are represented in Figure 3.

The dependencies shown in Figure 3 have to be understood as follows: the Generic Version MODEL uses the Generic Entity MODEL, which uses the Generic Responsibility MODEL, etc. This diagram shows that the Generic Validity and the Generic Entity MODELS are tightly linked.



**Figure 3. Dependencies between models contained in Versions & Validity MODEL and CC Responsibility MODEL**

### 3.3 Versions, validity, responsibility and naming packages

### 3.3.1 General

The packages described in this section present mechanisms that may apply in general throughout the data model. It is important to keep this in mind when considering, for instance, a particular sub-model underpinning a particular use case as these mechanisms may be taken into account for any data instance (ENTITY). This section is a short reminder of what is explained in more detail in the documentation Public Transport – Reference Data Model - Part 1.

### 3.3.2 Versions of data

Public transport data are continually evolving. It is therefore necessary to be able to organise data elements to support a lifecycle with multiple versions of a given element being in use concurrently, and different assemblies of data referencing different versions for different purposes. The versioning mechanism is defined in the Part1 - Versions & Validity MODEL with its sub-models (Generic Entity MODEL, Generic Version MODEL, Generic Version Frame MODEL, Generic Validity MODEL, Generic Delta MODEL) and is applicable, but not mandatory, to all Transmodel concepts.

A data object, may be versioned (may exist as different ENTITIES IN VERSION). To each versioned object a VERSION is mandatorily attached. VERSIONS of an object (ENTITY IN VERSION) may be consecutive (successive versions) or parallel (alternative versions). Parallel VERSIONS describe an alternative version for use in particular circumstances, i.e. under specific VALIDITY CONDITIONS. For example, for a single line



there may be parallel versions of data at the same time; a working version in operation, a planned version submitted to the authority for registration and a registered version for a particular operating period. The purpose of the VERSION may be categorised with an arbitrary classification using a TYPE OF VERSION, for example planning, scheduled, operational, etc. In practice versioning often will be just done at an aggregate level and not at each individual data instance.

### 3.3.3 Validity of data

VALIDITY CONDITIONS from the Generic Validity MODEL form another concept that may be related to any individual object or a set of objects. An ENTITY, a VERSION or a VERSION FRAME may be associated with VALIDITY CONDITIONS to define a coherent set with common validity conditions and compatible versions. Validity conditions for data may be expressed in terms of space- or time-related parameters, which define when a particular version is active or available. Examples of validity conditions are: “Maribor bus stops”, “Today’s train timetables”, “Paris Metro Fares Winter 2015”.

### 3.3.4 Responsibility for data

The Responsibility MODEL makes it possible to define responsibility for specific data objects in a multi-source complex environment.

The Responsibility MODEL comprises 3 sub-models:

- The Generic Responsibility MODEL describes the DATA SOURCE (i.e. the system which has produced the data).
- The Responsibility Role MODEL describes a list of possible responsibilities over one or more ENTITIES IN VERSION resulting from the process of the assignment of RESPONSIBILITY ROLES (such as data origination, ownership, etc.) on specific data (instances) to ORGANISATIONS or ORGANISATION PARTS.
- The Generic Organisation MODEL defines the common structures of an organisation. Note that this is further extended in the Reusable Components model with specific classes for specific types of organisation such as OPERATOR, AUTHORITY, SERVICED ORGANISATION, etc.

### 3.3.5 Alternative names of data

ALTERNATIVE NAME presents yet another generic mechanism that may also be linked to any ENTITY to provide aliases i.e. alternative names for data elements. The concept ALTERNATIVE NAME is defined in the Alternative Name MODEL, which is part of the Reusable Components MODEL. A typical example would be to use it to hold alternative names (local dialect) for stop points used in public timetables.

### 3.3.6 Generic Framework and Reusable Components

The models included in these two packages describe a number of generic objects and representational mechanisms that are not specific to transport but which are specialized or used by Transmodel transport related objects.

Reusable Components comprise certain common low-level components, for example TRANSPORT MODE, SERVICE CALENDAR, DAY TYPE, etc., that are not specific to any particular functional part of Transmodel but are widely used in several different functional areas.

### 3.3.7 Frames

The Explicit Frames Model describes the mechanisms useful to build coherent sets of versioned data. Each part of Transmodel comprises an Explicit Frames Model semantically linked to it.

### 3.4 Sub-models

#### 3.4.1 Introduction

This section shows the main steps necessary to extract relevant concepts in order to model a public transport use case, i.e. how to extract a sub-model that may then be instantiated to represent concrete data objects for the practical use case.

#### 3.4.2 Use case: timetable

The example in Figure 4 shows a simple bus timetable from Slovenia presenting passing times for one line, which groups two linear routes (outbound and inbound) as submitted by a public transport operator (Integral Stojna d.o.o.) to a public transport authority (Ministry of Infrastructure responsible for public transport).

The service is planned to operate every day during the operating period between 1.1.2015 and 31.12.2015. The timetable contains names of the routes ("Briga to Nova sela" and "Nova sela to Briga") with implicit directions (outbound, inbound), departure and passing times for stop points. At the bottom of the printed timetable availability condition is also shown ("vozi vsak dan" = "operates every day").

#### 3.4.3 Conceptual description of timetable

The timetable includes two ROUTES (outbound DIRECTION – "Briga to Nova sela" and inbound DIRECTION – "Nova sela to Briga") belonging to one LINE (id=K66, "Kočevje – Petrina") with the transport MODE "bus". The timetable includes three stop points (SCHEDULED STOP POINTs: Briga, Banja Loka and Nova sela) that are in this case also ROUTE POINTs, i.e. define two ROUTEs in each DIRECTION. Finally, the timetable aggregates the following components: two VEHICLE JOURNEYs operated according to two SERVICE JOURNEYs each following its own SERVICE PATTERN with boarding/alighting status made up of ordered SCHEDULED STOP POINTs defining the SERVICE PATTERN (i.e. they are STOP POINTs IN JOURNEY PATTERN). Each SERVICE JOURNEY also refers to a TIME DEMAND TYPE, which defines a set of vehicle running times for links between stop points. The given TIME DEMAND TYPE is used for calculation of vehicle arrival and departure times for each SCHEDULED STOP POINT and written to the timetable as the sequence of PASSING TIMES.

A reference to DAY TYPE, which has property values "Everyday" and "AnyHoliday", defines operating days for the timetable. Since the timetable may be exchanged in an interoperated computer system it also includes reference to the system (DATA SOURCE), which has produced it. Each VERSION of the timetable is uniquely identified and characterised by VALIDITY CONDITIONS and their key-value VALIDITY RULE PARAMETERS. The timetable example is extended with NOTICE ASSIGNMENTS for NOTICES, which are valid between POINTs IN JOURNEY PATTERN. NOTICES are used for informational purposes usable for passengers or drivers. NOTICES are delivered in different languages (i.e. Slovene, German, English) as DELIVERY VARIANTS.

In total, the timetable is described using about 20 different Transmodel concepts.

The task of extracting the relevant concepts for modelling the timetable is described in the next section.

## VOZNOREDNI OBRAZEC

Koncesionar: A09 (INTEGRAL STOJNA d.o.o.)

Oznaka linije: K66

Naziv linije: Kočevje - Petrina

Obdobje: 01.01.2009 - 31.12.2009

Vrsta prevoza: MK - Medkrajevni

Stanje: P (Predlog)

Itinerarji:

01	Briga - Nova sela
02	Nova sela - Briga

### K66: 01 Briga - Nova sela

POSTAJA (p.točka)	Km	01
		0
BRIGA smer Petrina	0,0	7:00
BANJALOKA smer Petrina	1,9	7:03
NOVA SELA smer Petrina	3,3	7:04

### K66: 02 Nova sela - Briga

POSTAJA (p.točka)	Km	02
		0
NOVA SELA smer Kočevje	0,0	7:10
BANJALOKA smer Kočevje	1,2	7:11
BRIGA smer Kočevje	3,2	7:14

REŽIMI:

0	Vozi vsak dan
---	---------------

Odgovorna oseba in žig

Koncedent :

Direkcija Republike Slovenije za ceste



**Figure 4. Timetable for Line K66, “Kočevje-Petrina”**

#### 3.4.4 Extraction of conceptual sub-model

Since we are looking at a timetable the most obvious Transmodel concept related to a timetable is the concept TIMETABLE FRAME (Figure 5). Our task is to find concepts that are directly associated to (generally speaking “are components of”) the TIMETABLE FRAME in order to start deriving what eventually will lead to the proper conceptual sub-model for the timetable.

The TIMETABLE FRAME diagram comprises a large number of object classes that build a coherent set that is commonly called a “timetable”.

Starting from this model it is possible to concentrate on the classes that were already described at the beginning of the document. As a result of such a process, the following simplified model is generated (Figure 5).

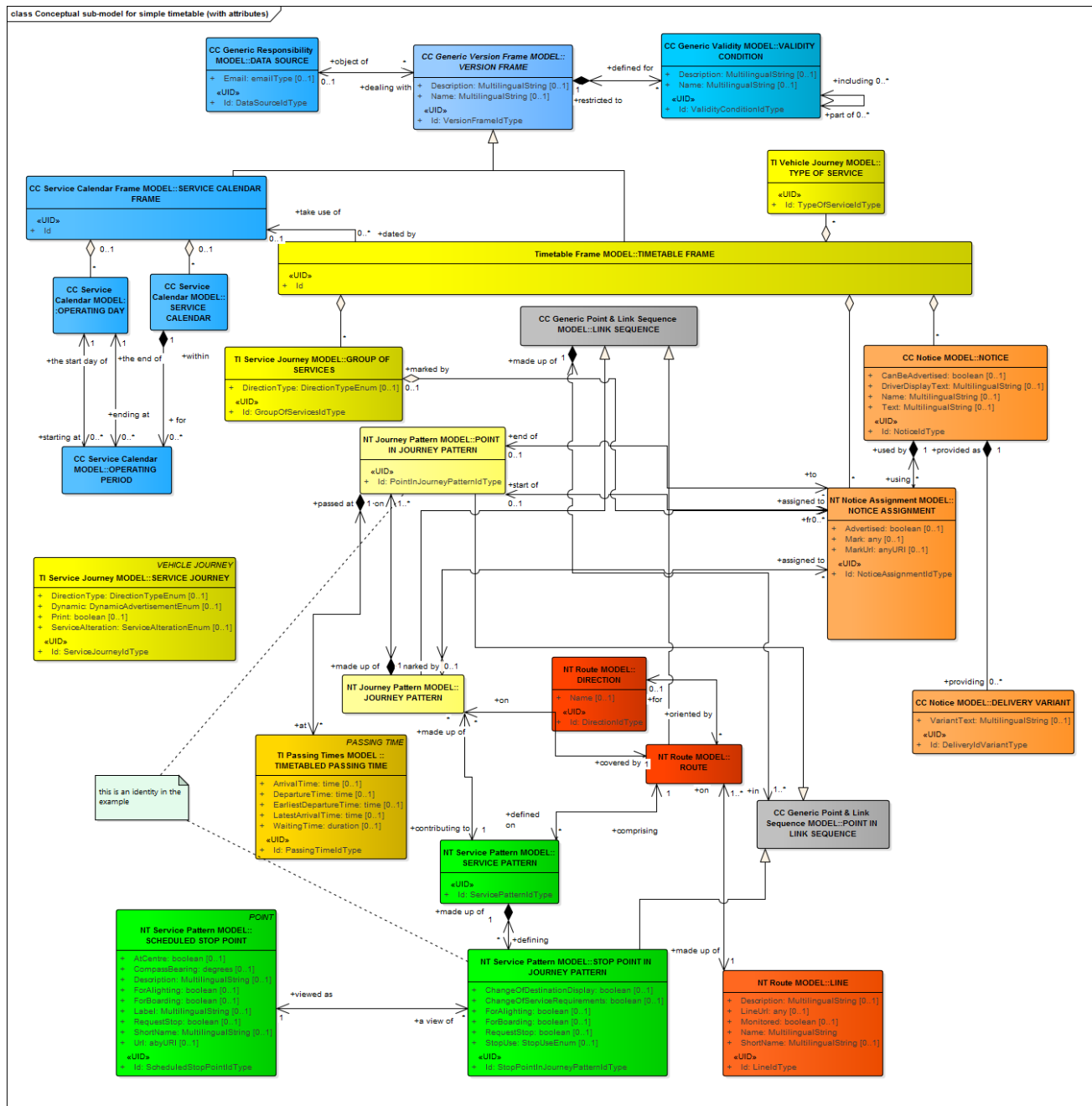


Figure 5. Main components of a sub-model for the simple timetable

There is also another possibility offered to users of the Enterprise Architect modelling tool<sup>1</sup>. Since Transmodel has been developed using this tool, it is possible to automate the extraction of dependencies for the TIMETABLE FRAME.

A script "TM Dependency Collector" (TMDC)<sup>2</sup> was developed to help with collection of dependencies for a selected concept. The TMDC script works inside the Enterprise Architect model file. On a selected class

<sup>1</sup> Enterprise Architect, <http://www.sparxsystems.com/products/ea/>

<sup>2</sup> Provided with the Enterprise Architect version of the model

(concept) the TMDC script is executed in the project browser; this collects its direct dependencies and creates a new sub-model diagram, which displays the collected concepts. It also shows 2<sup>nd</sup> level links: these are the links between concepts which are themselves directly linked to the selected concept. For example, if we run the TMDC on the TIMETABLE FRAME concept the resulting diagram shows all concepts directly linked to it. Non-essential concepts could then be deleted and the resulting diagram would contain only VERSION FRAME, SERVICE CALENDAR FRAME, COMPOSITE FRAME, JOURNEY, GROUP OF SERVICES, NOTICE ASSIGNMENT and NOTICE, which are candidate concepts for a sub-model for a simple timetable.

With recursive application of the TMDC script for the collected concepts and the stepwise removal of non-essential concepts we can systematically extract a conceptual sub-model. In the final sub-model some generic concepts that appear in Figure 5 might not be included because, especially in the case of a generalisation, they are replaced with their inherited specialized concepts.

### 3.5 Generation of an instance model

The extracted sub-model for a timetable can then be used to create an object (or instance) diagram (Figure 6).

It is important to note that, as explained above, several models from the Common Concepts Part apply to any "object", i.e. ENTITY. This is the case, for instance, for the TIMETABLE FRAME representing the studied timetable example to which a VERSION is assigned.

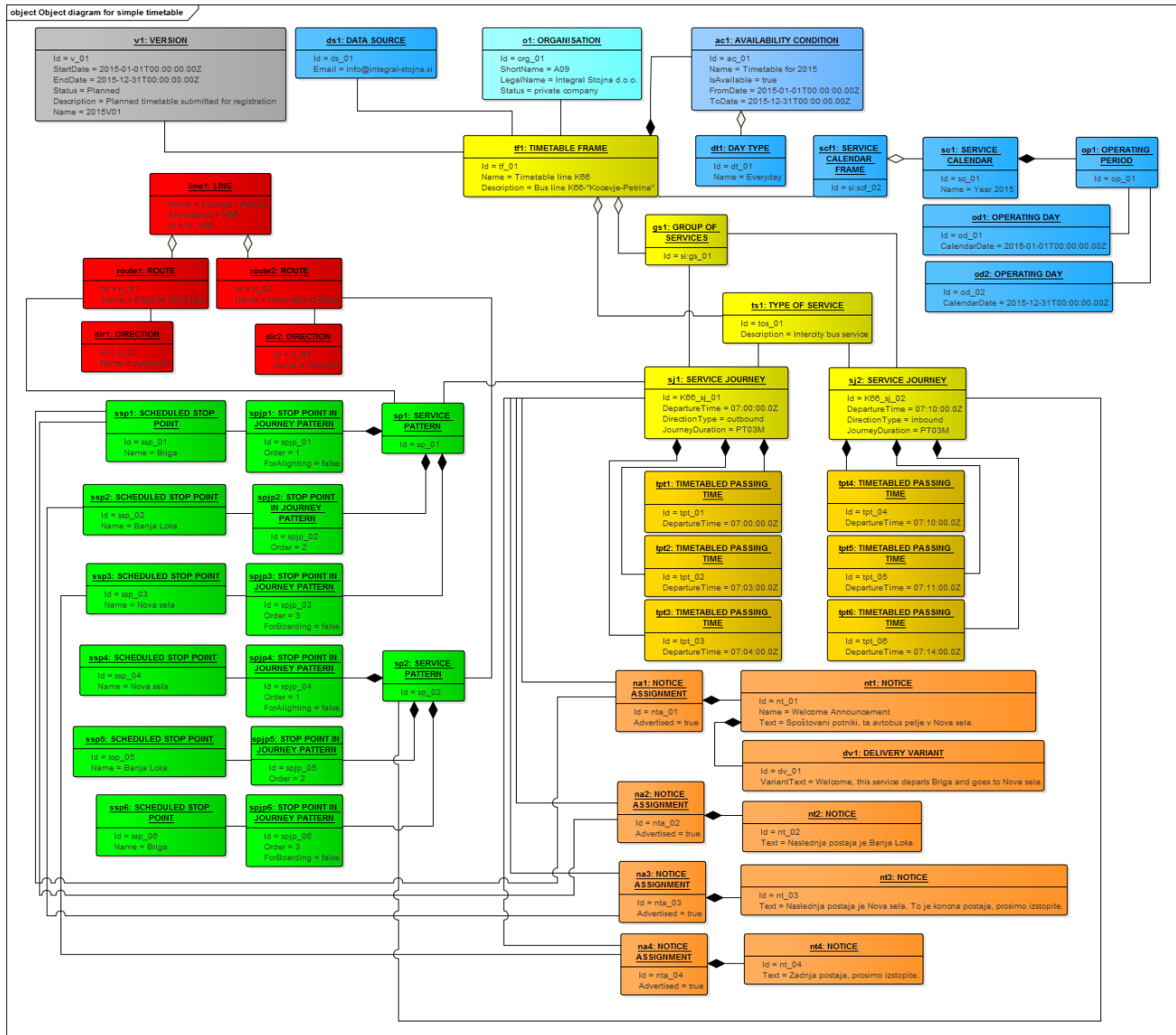


Figure 6. Object (instance) diagram for the simple timetable

## 4 Frequently Asked Questions

### 4.1 General

#### What is Transmodel?

Transmodel is the European Reference Data Model for public transport and constitutes an offer to public transport companies and other providers of services related to the process of **passenger transportation (planning, operation and information)**, to suppliers of software products supporting these processes, and to consultants and other experts acting in the field of public transport in the widest sense.

The reference data model, developed at conceptual level, can support the development of software applications, their interaction or combination in an integrated information system, and the system's organisation and information management which rules the utilisation of the existing telematics environment in a company (or group of companies) running computer applications supporting the different functional areas of public transport.

#### What help does Transmodel provide?

As a *reference* standard, it is not necessary for individual systems or specifications to implement Transmodel as a whole. It is possible to describe for those elements of systems, interfaces and specifications which fall within the scope of Transmodel:

- the aspects of Transmodel that they have adopted;
- the aspects of Transmodel that they have chosen NOT to adopt.

#### In what situations is Transmodel useful?

Transmodel may be applied to any framework for information systems within the public transport industry, but there are three circumstances to which it is particularly suited:

- specification of an organisation's 'information architecture';
- specification of a database;
- specification of a data exchange interface.

#### What business areas are covered by Transmodel?

The Reference Data Model (Transmodel v6) covers the following data domains:

- Network Description: routes, lines, journey patterns, timing patterns, service patterns, scheduled stop points and stop places: this part corresponds to the network description as in Transmodel V5.1 extended by the relevant parts of IFOPT (EN28701);
- Timing Information and Vehicle Scheduling: runtimes, vehicle journeys, day type-related vehicle schedules;
- Passenger Information: planned and real-time;
- Operations Monitoring and Control: operating day-related data, vehicle follow-up, control actions;
- Fare Management: fare structure and access rights definition, sales, validation, control of access rights and/or travel documents;
- Management Information and Statistics including data dedicated to service performance indicators;
- Driver Management:
  - o Driver Scheduling: definition of day-type related driver schedules,
  - o Rostering: ordering of driver duties into sequences according to some chosen methods,
  - o Driving Personnel Disposition: assignment of logical drivers to physical drivers and recording of driver performance.

### 4.2 Documentation

#### What sort of Transmodel documentation is available?

Transmodel v6 is provided in modular form. The series comprises the following documents:  
Public Transport - Reference Data Model - Part 1: Common Concepts

Public Transport - Reference Data Model - Part 2: Public Transport Network  
 Public Transport - Reference Data Model - Part 3: Timing Information and Vehicle Scheduling  
 Public Transport - Reference Data Model - Part 4: Operations Monitoring and Control  
 Public Transport - Reference Data Model - Part 5: Fare Management  
 Public Transport - Reference Data Model - Part 6: Passenger Information  
 Public Transport - Reference Data Model - Part 7: Driver Management  
 Public Transport - Reference Data Model - Part 8: Management Information and Statistics  
 Together these documents create version 6 of the European Standard EN 12896, known as “Transmodel” and thus replace Transmodel V5.1 and IFOPT (Identification of Fixed Objects for Public Transport, EN28701). The split into several documents is intended to ease the task of users interested in particular functional domains. Parts 1-2-3 are finalised in 2015.

### How can I get documentation about Transmodel?

To get the documentation the users have to address their national standardisation organisations.

### How can I get additional information about Transmodel?

The web site [www.transmodel-cen.eu](http://www.transmodel-cen.eu) gives a lot of additional information. Contacts are available to the Transmodel development team.

### Is a Transmodel data dictionary available?

Transmodel partial data dictionaries (i.e. referring to the Common Concepts, to the Network Description, to Timing Information and Vehicle Sheduling) are available the corresponding documentation parts. An overall Data Dictionary, for Parts 1-2-3 all together is published in the Technical Report that represents informative information of these parts. In this version of the Data Dictionary not only concepts are defined, but detailed attribute tables give a short description of all attributes.

## 4.3 Users

### Who are the potential users of Transmodel?

Transmodel may prove of value to:

- *organisations within the public transport industry that specify, acquire and operate* information systems: Transmodel may be distilled, refined, or adapted to form a comprehensive data model for the organisation. This will enable the organisation to specify its *database structures and/or its system interfaces*, in such a way that separate modules can be openly tendered but will still integrate easily.
- *organisations that design, develop and supply* information systems for the public transport industry: Transmodel may be adapted to form a comprehensive *data model for the product suite*. This will enable the organisation to develop its products in such a way that separate modules will integrate easily, but also so that they may be sold separately to clients seeking Transmodel-compliant systems.

### How can I use Transmodel?

Transmodel may be applied to any framework for information systems within the public transport industry, but there are three circumstances to which it is particularly suited:

- specification of an organisation’s ‘information architecture’;
- specification of a database;
- specification of a data exchange interface.

### What is the status of Transmodel?

Tranmodel EN12896:2006 is an adopted European strandard. It corresponds to Transmodel Version 5.1.



Transmodel Version 6 is currently being published: it will replace EN12896:2006 (and IFOPT EN28701).

Three parts are currently available:

Part 1: Common Concepts

Part 2: Network Topology

Part 3: Timing Information and Vehicle Scheduling

### What prerequisites are necessary to use Transmodel?

Knowledge of modelling methodologies, in particular of UML basics is very useful. Notation UML 2 is an object-oriented modelling notation and is used for describing (specifying, documenting and visualising) the conceptual data model in Transmodel. The UML specification has proved efficient because it facilitates common understanding and use of conceptual data model. Transmodel uses a notation that bears some features of UML 1 (or E/R conceptual modelling), in particular as regards the labelling of roles/relationship names.

Transmodel documentation provides the necessary detailed information (Part 1: Common Concepts, Methodology for conceptual modelling).

### How can I implement Transmodel?

Transmodel can serve as a starting point for the definition of a *database schema*, which will be used for the physical implementation of databases. Whether applications access a common database built to this schema, or have their own databases and exchange data built to consistent schemas, the use of an overall reference data model assists integration.

Public transport organisations may require different applications to *exchange data* with each other. Also, public transport organisations may exchange data with other organisations. In either case, the reference data model can be used to help design the interfaces.

Two standards NeTEx and SIRI have already used Transmodel parts and generated standard data exchange implementations:

- SIRI for Real Time Passenger Information,
- NeTEx for the domains Network Topology, Timing Information, Vehicle Scheduling, Fare Information.

In both cases the user has *to determine the requirements of a particular context, extract a sub-model* before proceeding to the definition of a database schema or of data exchange profiles

### Is Transmodel free of charge?

Transmodel documentation is distributed by national standardisation bodies which determine documentation price.

A further use is free of charge.

## 4.4 Model structure

### What are “Common Concepts”?

Several concepts are *shared by the different functional domains* covered by Transmodel. This data domain is called “Common Concepts”.

### What types of “Common Concepts” are taken into account?

“Reference Data Model – Common Concepts” domain incorporates data structures used by all other data domains of Transmodel. It is composed of the following data packages:

- Versions and Validity: describes the successive versions of data elements and the conditions to be attached to elements to precisely know when they should be used;
- Responsibility: describes the type of responsibility or role the different organisations may have over the data;

- Generic Framework: describes a number of generic objects and representational mechanisms that are not specific to transport but which are specialized or used by Transmodel transport related objects.
- Reusable Components: certain common low-level components, for example TRANSPORT MODE, SERVICE CALENDAR, DAY TYPE, etc. are not specific to any particular functional part of Transmodel but are widely used in several different functional areas.
- Explicit Frames referring to generic data: describes the mechanisms useful to build coherent sets of versioned data. Part 1 presents explicit frames for data referring to the Common Concepts domain.

### **What aspects of “Network Topology” are represented in Transmodel?**

Public Transport Network incorporates data structures which form the network topology description of Transmodel V5.1 and the major part of the fixed objects model of IFOPT. It is composed of three data packages:

- Network Description: routes, lines, journey patterns, flexible routes and lines, specific point types;
- Fixed Objects: sites, stop places, equipment, parking places;
- Tactical Planning Components: journey patterns, timing patterns, service patterns, connections, common sections.

### **What aspects of “Timing Information” are represented in Transmodel?**

- Vehicle Journeys , Service Journeys, Coupled Journeys, Flexible Service,
- Journey Times and Journey Patterns Times, Interchanges and Interchange Rules,
- Dated Journeys, Timetables Passing Times, Dated Passing Times.

### **What aspects of “Vehicle Scheduling” are represented in Transmodel?**

Based on the Timing Information model, Vehicle service, i.e. the workplan for a vehicle for a whole day, planned for a specific DAY TYPE is described in terms of BLOCKS, i.e. of the work of a vehicle from the time it leaves a PARKING POINT after parking until its next return to park at a PARKING POINT.

### **What is the purpose of the “frames” of Transmodel?**

In order to facilitate the management of information, data in an information system may be associated in groups of data, which share the same validity conditions. Such a group of data is described by a VERSION FRAME.

## 5 Outline of on-line Tutorial

### 5.1 Introduction

The objective of the on-line Tutorial is to draw the attention of the reader to important questions regarding the contents of Transmodel. The answers given on the web site ([www.transmodel-cen.eu](http://www.transmodel-cen.eu)) to the following questions provide a sort of check list for any user of Transmodel. These answers together with the main data model extracts refer also the corresponding sub-models of which a full description is present in the Transmodel documentation.

The paragraphs below give an indication of the questions to which answers will be found on the web site (but the questions and answers there may be updated from time to time).

### 5.2 Model structure

- What are “Common Concepts”?
- What types of “Common Concepts” are taken into account?
- What aspects of “Network Topology” are represented in Transmodel?
- What aspects of “Timing Information” are represented in Transmodel?
- What aspects of “Vehicle Scheduling” are represented in Transmodel?
- What is the purpose of the “frames” of Transmodel?

### 5.3 Common Concepts

#### 5.3.1 Versions

- How is the evolution of data taken into account?
- What granularity of evolution is represented?

#### 5.3.2 Validity Conditions

- What types of validity conditions are modelled?

#### 5.3.3 Responsibility

- How do I represent the organisational aspects of the data system?
- What types of responsibility for data are taken into account?
- What types of organisations are taken into account?

#### 5.3.4 Generic Framework

##### 5.3.4.1 Points and Links

- What are the basic concepts for network description?
- How to reference network-related objects in space?
- How is the network evolution taken into account?

##### 5.3.4.2 Link Sequences

- How to represent the different paths through the network?

##### 5.3.4.3 Groupings

- What is the use of groupings of objects in Transmodel?
- What groupings of topological objects are defined in Transmodel?

**5.3.4.4 Zones**

- How are zones taken into account?

**5.3.4.5 Point and Link Types**

- What different types of points taken into account?
- What is the relation between a timing point and a scheduled stop point?

**5.3.4.6 Complex Objects**

- How are complex objects represented?

**5.3.4.7 Layers and Projections**

- How to define network topology in a coherent way?
- What are projections?
- How to relate topological objects defined by different departments in my company?
- What type of projections are taken into account?

**5.3.4.8 Accessibility**

- How to represent accessibility of spatial objects?

**5.3.4.9 Places**

- What elements are defined to represent the origin/destination of a passenger trip?

**5.3.5 Reusable Components****5.3.5.1 Modes**

- What types of modes are taken into account?

**5.3.5.2 Calendars**

- How are the calendars represented?
- What types of time-related validities are modelled?

**5.3.5.3 Addresses**

- How can I represent topographic features, like addresses?

**5.3.5.4 Equipment and Facility**

- What type of equipment is taken into account?
- How is vehicle equipment taken into account?
- What is a facility vs. equipment?

**5.3.5.5 Vehicle Type and Train**

- What is a vehicle vs vehicle type?
- How to represent a train?
- What type of information is provided by the Vehicle type model?

## 5.4 Public Transport Network Topology

- Is the road network taken into account?
- How to represent the restrictions due to physical constraints of the road network?
- What is an itinerary in Transmodel?
- What is a Line vs. a Route?
- Are routing constraints taken into account?
- Can I represent a flexible network?
- What is a Journey Pattern?
- What is the passenger view of a Journey Pattern?
- Are elements dedicated to operations monitoring and control taken into account?
- What is a Common Section?
- How can I represent connections with Transmodel?

## 5.5 Timing Information

- How are the time-related aspects of a public transport network taken into account?
- What are the main Tactical Planning Components?
- How does Transmodel define timetables?
- What is a journey in Transmodel?
- Does Transmodel describe journey coupling and splitting?
- How is journey timing considered in Transmodel?
- Are passing times at stops defined?
- Are Demand Responsive Services taken into account?
- How does Transmodel represent scheduled interchanges?
- How is the tactical planning of operations related to the plans for a particular day?

## 5.6 Vehicle Scheduling

- What does Vehicle Scheduling domain cover?
- What is a Vehicle Service?
- What is a Block?
- How does Transmodel represent vehicle services for rail operation?

## Appendix 1 : Model Evolution

This Appendix documents the way in which the current terminology of Transmodel has evolved from Transmodel v5.1, IFOPT and/or NeTEx into the terminology used in Transmodel v6 [TM6].

This current version of the table only considers terminology used in Parts 1, 2 and 3 of TM6. The table will be extended in subsequent editions to cover the terms used in Parts 4, 5, 6, 7 and 8 once these Parts have been published.

The following codes are used in the table to achieve a compact presentation of the information :

A	Abandoned
Md	Modified / adapted definition
N	New term (but the underlying concept may have existed previously)
S	Same (unchanged)
x	the standard from which the term comes

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION

The first column shows each TERM as it appears in TM6 (or elsewhere even if it is no longer used in TM6), and the second column indicates the Part of TM6 where the TERM first appears.

The third and fourth columns indicate what alternate TERM had been used in Transmodel v5.1 [TM5] or IFOPT where relevant.

The fifth and sixth columns show the ancestry for TM6 and NeTEx using the codes listed above.

The seventh column shows the definition of the TERM in TM6

The eighth column shows the definition of the TERM in NeTEx (or "*Same as TM6*" where the definition was precisely the same)

The ninth and tenth columns show the definition of the TERM in TM5.1 and IFOPT (or indicate if it is the same as in TM6 or NeTEx).

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
ACCESS	P1	ACCESS LINK		N	N	ACCESS The physical (spatial) possibility for a passenger to access or leave the public transport system. This link may be used during a trip for:- the walking movement of a passenger from a PLACE (origin of the trip) to a SCHEDULED STOP POINT (origin of the PT TRIP), or- the walking movement from a SCHEDULED STOP POINT (destination of the PT TRIP) to a PLACE (destination of the trip).	ACCESS The physical (spatial) possibility for a passenger to access or leave the public transport system. This link may be used during a trip for:- the walking movement of a passenger from a PLACE (origin of the trip) to a STOP POINT (origin of the PT TRIP), or- the walking movement from a STOP POINT (destination of the PT TRIP) to a PLACE (destination of the trip).		
ACCESS END	P1			N	N	ACCESS END Origin or destination end of an ACCESS link. May indicate a POINT and/or PLACE	ACCESS END Origin or destination end of an ACCESS link. May indicate a MODE, POINT and PLACE		
ACCESS LINK	re-named	x		A	A	ACCESS	ACCESS	ACCESS LINK The physical (spatial) possibility for a passenger to access or leave the public transport system. This link may be used during a trip for:- the walking movement of a passenger from a PLACE (origin of the trip) to a STOP POINT (origin of the PT TRIP), or- the walking movement from a STOP POINT (destination of the PT TRIP) to a PLACE (destination of the trip).	
ACCESS MODE	P1			N	N	ACCESS MODE A characterisation of the passenger movement according to the means of transport different from public transport (e.g. walk, bicycle, etc)	ACCESS MODE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINTION	DEFINTION
ACCESS PATH LINK	re-named and re-vised		x	A	A	PATH LINK	PATH LINK		<p>ACCESS PATH LINK</p> <p>A type of external PATH LINK connecting a PLACE with another PLACE. A sequence of ACCESS PATH LINKs may project onto an ACCESS LINK.Each end of an ACCESS PATH LINK should connect to an entity that is a concrete subtype of PLACE, for example STOP PLACE, POINT OF INTEREST, ADDRESS, ROAD ADDRESS, QUAY, etc that is a ACCESSIBLE PLACE. Each end of an ACCESS PATH LINK may further have a specific ENTRANCE of the same concrete subtype of PLACE associated with that end, that is, STOP PLACE ENTRANCE, QUAY ENTRANCE, POINT OF INTEREST ENTRANCE, etc; to indicate the exact entrance to the building. Inside a physical STOP PLACE, STOP PATH LINKs should be used instead of ACCESS PATH LINKs.</p>
ACCESS SPACE	P2		x	S	S	<p>ACCESS SPACE</p> <p>A passenger area within a STOP PLACE such as a concourse or booking hall, immigration hall or security area that is accessible by passengers, but without a direct access to vehicles. Direct access to a VEHICLE is always from a QUAY and/or BOARDING POSITION. An ACCESS SPACE may be a Room, Hall, Concourse, Corridor, or bounded open space within a STOP PLACE.</p>	ACCESS SPACE <i>same as TM6</i>		ACCESS SPACE <i>same as TM6</i>



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
ACCESS ZONE	P2	x		Md	S	ACCESS ZONE A ZONE for which the duration to cover any ACCESS link to a particular SCHEDULED STOP POINT is the same.	ACCESS ZONE A ZONE for which the duration to cover any ACCESS LINK to a particular STOP POINT is the same.	ACCESS ZONE <i>same as NeTex.</i>	
ACCESSIBILITY ASSESSMENT	P1		x	S	S	ACCESSIBILITY ASSESSMENT The accessibility characteristics of an entity used by passengers such as a STOP PLACE, or a STOP PLACE COMPONENT. Described by ACCESSIBILITY LIMITATIONS, and/or a set of SUITABILITIES	ACCESSIBILITY ASSESSMENT <i>same as TM6</i>		ACCESSIBILITY ASSESSMENT <i>same as TM6</i>
ACCESSIBILITY LIMITATION	P1		x	Md	Md	ACCESSIBILITY LIMITATION A categorisation of the accessibility characteristics of a SITE, e.g. a STOP PLACE or a STOP PLACE COMPONENT to indicate its usability by passengers with specific needs, for example, those needing wheelchair access, step-free access or wanting to avoid confined spaces such as lifts. A small number of well-defined categories are used that are chosen to allow the consistent capture of data and the efficient computation of routes for different classes of user.	ACCESSIBILITY LIMITATION <i>same as TM6</i>		ACCESSIBILITY LIMITATION A categorisation of the ACCESSIBILITY characteristics of a STOP PLACE COMPONENT such as a STOP PATH LINK, STOP PLACE or ACCESS SPACE to indicate its usability by passengers with specific needs, for example, those needing wheelchair access, step-free access or wanting to avoid confined spaces such as lifts. A small number of well-defined categories are used that are chosen to allow the consistent capture of data and the efficient computation of routes for different classes of user.
ACCOMODATION	P1			N	N	ACCOMODATION A combination of accommodation characteristics available on a service, e.g. "First Class Couchette with shower and 2 bunks".	ACCOMODATION <i>same as TM6</i>		
ACTIVATED EQUIPMENT	P2	x		S	S	ACTIVATED EQUIPMENT An equipment activated by the passage of a vehicle at an ACTIVATION POINT or on an ACTIVATION LINK.	ACTIVATED EQUIPMENT <i>same as TM6</i>	ACTIVATED EQUIPMENT <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
ACTIVATION ASSIGNMENT	P2	x		S	S	ACTIVATION ASSIGNMENT An assignment of an ACTIVATION POINT/LINK to an ACTIVATED EQUIPMENT related on its turn to a TRAFFIC CONTROL POINT. The considered ACTIVATION POINT/LINK will be used to influence the control process for that TRAFFIC CONTROL POINT (e.g. to fix priorities as regards the processing of competing requests from different ACTIVATION POINTS/LINKS).	ACTIVATION ASSIGNMENT <i>same as TM6</i>	ACTIVATION ASSIGNMENT <i>same as TM6</i>	
ACTIVATION LINK	P2	x		S	S	ACTIVATION LINK A LINK where a control process is activated when a vehicle passes it.	ACTIVATION LINK <i>same as TM6</i>	ACTIVATION LINK <i>same as TM6</i>	
ACTIVATION POINT	P2	x		S	S	ACTIVATION POINT A POINT where a control process is activated when a vehicle passes it. Equipment may be needed for the activation	ACTIVATION POINT <i>same as TM6</i>	ACTIVATION POINT <i>same as TM6</i>	
ACTUAL VEHICLE EQUIPMENT	P1	x		Md	Md	ACTUAL VEHICLE EQUIPMENT An item of equipment of a particular type in an individual VEHICLE.	ACTUAL VEHICLE EQUIPMENT <i>same as TM6</i>	ACTUAL VEHICLE EQUIPMENT An item of equipment of a particular type actually available in an individual VEHICLE.	
ADDRESS	P1		x	Md	Md	ADDRESS The descriptive data associated with a PLACE that can be used to describe the unique geographical context of a PLACE for the purposes of identifying it. May be refined as either a ROAD ADDRESS, a POSTAL ADDRESS or both.	ADDRESS An address of a PLACE.		ADDRESS The descriptive data associated with a PLACE that can be used to describe the unique geographical context of a PLACE for the purposes of identifying it. May be refined as either a ROAD ADDRESS, a POSTAL ADDRESS or both. An ADDRESS can be associated with a PLACE or POINT OF INTEREST where a trip can start or end.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
ADDRESSABLE PLACE	P1			N		ADDRESSABLE PLACE A type of PLACE to which passengers may refer to indicate the origin or a destination of a trip and that is so specific that it has an ADDRESS.			
ADMINISTRATIVE ZONE	P1	x		Md	Md	ADMINISTRATIVE ZONE The area of a district, a region, a city, a municipality, or other area with which an ORGANIZATION has a RESPONSIBILITY ROLE.	ADMINISTRATIVE ZONE <i>same as TM6</i>	ADMINISTRATIVE ZONE The area of a district, a region, a city, a municipality, or the area managed by an AUTHORITY.	
ALLOWED LINE DIRECTION	P2			N	N	ALLOWED LINE DIRECTION An allowed DIRECTION that can be used on a given ROUTE. This can be used to validate the selection of allowed values.	ALLOWED LINE DIRECTION <i>same as TM6</i>		
ALTERNATIVE COMMON NAME	re-vised		x	A	A	ALTERNATIVE NAME	ALTERNATIVE NAME		ALTERNATIVE COMMON NAME Passenger Information systems will support the use of one or more names to identify PLACES, STOP PLACES, DESTINATIONS, POINTS OF INTEREST, etc to users in journey planners and other systems.
ALTERNATIVE NAME	P1		ALTERNATIVE COMMON NAME	N	N	ALTERNATIVE NAME Alternative name for the entity.	ALTERNATIVE NAME <i>same as TM6</i>		
ASSISTANCE SERVICE	P2			N	N	ASSISTANCE SERVICE Specialisation of LOCAL SERVICE for ASSISTANCE providing information like language, accessibility trained staff, etc.	ASSISTANCE SERVICE <i>same as TM6</i>		
AUTHORITY	P1	x		S	S	AUTHORITY The organisation under which the responsibility of organising the transport service in a certain area is placed.	AUTHORITY <i>same as TM6</i>	AUTHORITY <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
AVAILABILITY CONDITION	P1			N	N	AVAILABILITY CONDITION A VALIDITY CONDITION expressed in terms of temporal parameters and referring to DAY TYPES.	AVAILABILITY CONDITION <i>same as TM6</i>		
BEACON POINT	P2	x		S	S	BEACON POINT A POINT where a beacon or similar device to support the automatic detection of vehicles passing by is located.	BEACON POINT <i>same as TM6</i>	BEACON POINT <i>same as TM6</i>	
BLOCK	P3	x		S	S	BLOCK The work of a vehicle from the time it leaves a PARKING POINT after parking until its next return to park at a PARKING POINT. Any subsequent departure from a PARKING POINT after parking marks the start of a new BLOCK. The period of a BLOCK has to be covered by DUTies.	BLOCK <i>same as TM6</i>	BLOCK <i>same as TM6</i>	
BLOCK PART	P3	TRAIN BLOCK PART		N	N	BLOCK PART Part of a BLOCK corresponding to the different JOURNEY PARTs of the VEHICLE JOURNEYs in a BLOCK.	BLOCK PART <i>same as TM6</i>		
BOARDING POSITION	P2		x	S	S	BOARDING POSITION A location within a QUAY from which passengers may directly board, or onto which passengers may directly alight from a VEHICLE.	BOARDING POSITION <i>same as TM6</i>		BOARDING POSITION A location within a QUAY from which passengers may directly board, or onto which passengers may directly alight from, a vehicle.
BOOKING ARRANGEMENTS	P2			N	N	BOOKING ARRANGEMENTS Booking arrangements for FLEXIBLE LINE.	BOOKING ARRANGEMENTS <i>same as TM6</i>		
CATERING SERVICE	P2			N		CATERING SERVICE Specialisation of LOCAL SERVICE dedicated to catering service.			

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
CHECK CONSTRAINT	P2			N	N	CHECK CONSTRAINT Characteristics of a process that takes place at a SITE COMPONENT, such as check-in, security screening, ticket control or immigration, that may potentially incur a time penalty that should be allowed for when journey planning.	CHECK CONSTRAINT <i>same as TM6</i>		
CHECK CONSTRAINT DELAY	P2			N	N	CHECK CONSTRAINT DELAY Time penalty associated with a CHECK CONSTRAINT.	CHECK CONSTRAINT DELAY <i>same as TM6</i>		
CHECK CONSTRAINT THROUGHPUT	P2			N	N	CHECK CONSTRAINT THROUGHPUT Throughput of a CHECK CONSTRAINT: the number of passengers who can pass through it in a specified interval.	CHECK CONSTRAINT THROUGHPUT <i>same as TM6</i>		
CHECKPOINT	A		x	A	A	CHECK CONSTRAINT	CHECK CONSTRAINT		CHECKPOINT The characteristics of a STOP PLACE COMPONENT representing a process, such as check-in, security screening, ticket control or immigration, that may potentially incur a time penalty that should be allowed for when journey planning. Used to mark STOP PATH LINKs to determine transit routes through interchanges.
CHECKPOINT DELAY	A		x	A	A	CHECK CONSTRAINT	CHECK CONSTRAINT		CHECKPOINT DELAY Delay associated with a specific CHECKPOINT. The CHECKPOINT DELAY may vary according to time of day as specified by a VALIDITY CONDITION, in line with the passenger processing capacity of the CHECKPOINT and traffic congestion levels.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
CHECKPOINT PROCESS	A		x	A	A	CHECK CONSTRAINT	CHECK CONSTRAINT		CHECKPOINT PROCESS A classification of a CHECKPOINT as a particular type due to the process that takes place at it, such as security, ticketing etc.
CLASS IN FRAME	P1	ENTITY IN FRAME		N	N	CLASS IN FRAME The different CLASSEs IN REPOSITORY which can be relevant for corresponding VERSION FRAMEs.	CLASS IN FRAME <i>same as TM6</i>		
CLASS IN REPOSITORY	P1	ENTITY IN REPOSITORY		N	N	CLASS IN REPOSITORY Any ENTITY name belonging to the repository. E.g. DAY TYPE, PROPERTY OF DAY, TIME BAND, VEHICLE TYPE, DUTY, etc, are relevant instances of CLASS IN REPOSITORY in the context of Version Management.	CLASS IN REPOSITORY <i>same as TM6</i>		
CLASS OF USE	P1			N	N	CLASS OF USE A classification of fare and other service classes by category of user entitled to use them.	CLASS OF USE <i>same as TM6</i>		
COMMON SECTION	P2	x		Md	Md	COMMON SECTION A part of a public transport network where the ROUTEs of several JOURNEY PATTERNS are going in parallel and where the synchronisation of SERVICE JOURNEYS may be planned and controlled with respect to commonly used LINKs and SCHEDULED STOP POINTs. COMMON SECTIONs are defined arbitrarily and need not cover the total lengths of topologically bundled sections.	COMMON SECTION A part of a public transport network where the ROUTEs of several JOURNEY PATTERNS are going in parallel and where the synchronisation of SERVICE JOURNEYS may be planned and controlled with respect to commonly used LINKs and STOP POINTs. COMMON SECTIONs are defined arbitrarily and need not cover the total lengths of topologically bundled sections.	COMMON SECTION <i>same as NeTex</i>	
COMMUNICATION SERVICE	P2			N	N	COMMUNICATION SERVICE Specialisation of LOCAL SERVICE dedicated to communication services.	COMMUNICATION SERVICE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
COMPLAINTS SERVICE	P2			N	N	COMPLAINTS SERVICE Specialisation of CUSTOMER SERVICE for COMPLAINTs	COMPLAINTS SERVICE <i>same as TM6</i>		
COMPLEX FEATURE	P1	x		Md	S	COMPLEX FEATURE An aggregate of SIMPLE FEATURES and/or other COMPLEX FEATURES.	COMPLEX FEATURE An aggregate of SIMPLE FEATURES and/or other COMPLEX FEATURES; e.g. a STOP AREA : combination of STOP POINTS ; a train station : combination of SIMPLE FEATURES (POINTS, LINKs) and COMPLEX FEATURES (STOP AREAs).	COMPLEX FEATURE <i>same as NeTEx</i>	
COMPLEX FEATURE PROJECTION	P1	x		S	S	COMPLEX FEATURE PROJECTION An oriented correspondence: from one COMPLEX FEATURE in the source layer, onto an entity in a target layer: e.g. POINT, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.	COMPLEX FEATURE PROJECTION <i>same as TM6</i>	COMPLEX FEATURE PROJECTION <i>same as TM6</i>	
COMPOSITE FRAME	P1			N	N	COMPOSITE FRAME A set of VERSION FRAMEs to which the same VALIDITY CONDITIONS have been assigned.	COMPOSITE FRAME <i>same as TM6</i>		
COMPOUND BLOCK	P3	TRAIN BLOCK		N	N	COMPOUND BLOCK The work of a vehicle during the time it is coupled to another vehicle.	COMPOUND BLOCK <i>same as TM6</i>		
COMPOUND TRAIN	P1			N	N	COMPOUND TRAIN A VEHICLE TYPE composed of a sequence of more than one vehicles of the type TRAIN.	COMPOUND TRAIN <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
CONNECTION	P2	CONNECTION LINK		N	N	CONNECTION The physical (spatial) possibility for a passenger to change from one public transport vehicle to another to continue the trip, determined by two SCHEDULED STOP POINTS. Different times may be necessary to cover the link between these points, depending on the kind of passenger.	CONNECTION <i>same as TM6</i>		
CONNECTION END	P2			N	N	CONNECTION END One end of a CONNECTION.	CONNECTION END <i>same as TM6</i>		
CONNECTION LINK	re-named	x		A	A	CONNECTION	CONNECTION	CONNECTION LINK The physical (spatial) possibility for a passenger to change from one public transport vehicle to another to continue the trip. Different times may be necessary to cover this link, depending on the kind of passenger.	
CONNECTION LINK ASSIGNMENT	re-named		x	A	A	NAVIGATION PATH ASSIGNMENT	NAVIGATION PATH ASSIGNMENT		CONNECTION LINK ASSIGNMENT The association of a CONNECTION LINK (e.g. between two journeys of a JOURNEY PATTERN) with a PATH LINK or set of PATH LINKs representing different paths to indicate that the journey connection should be made over that path within the STOP PLACE. May be subject to a VALIDITY CONDITION.
CONTACT DETAILS	P1			N	N	CONTACT DETAILS Contact details for ORGANISATION for public use.	CONTACT DETAILS <i>same as TM6</i>		
CONTROL CENTRE	P1			N	N	CONTROL CENTRE An ORGANISATION PART for an operational team who are responsible for issuing commands to control the services.	CONTROL CENTRE <i>same as TM6</i>		



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
COUNTRY	P1		x	Md	Md	COUNTRY A jurisdictional geographic boundary. A COUNTRY normally has a two character IANA identifier.	COUNTRY <i>same as TM6</i>		COUNTRY For the purposes of IFOPT the primary use of COUNTRY is as a unique name space within which to identify TOPOGRAPHICAL PLACES, STOP PLACES, STOP PLACE COMPONENTS, POINTS OF INTEREST, ADDRESSES, etc, according to an ADMINISTRATIVE MODEL. A STOP PLACE or TOPOGRAPHICAL PLACE may span a jurisdictional boundary, but in this case the entity should be assigned to one or other jurisdiction for the purpose of allocating identifiers.
COUPLED JOURNEY	P3	x		S	S	COUPLED JOURNEY A complete journey operated by a coupled train, composed of two or more VEHICLE JOURNEYS remaining coupled together all along a JOURNEY PATTERN. A COUPLED JOURNEY may be viewed as a single VEHICLE JOURNEY.	COUPLED JOURNEY <i>same as TM6</i>	COUPLED JOURNEY <i>same as TM6</i>	
COURSE OF JOURNEYS	P3	x		S	S	COURSE OF JOURNEYS A part of a BLOCK composed of consecutive VEHICLE JOURNEYS defined for the same DAY TYPE, all operated on the same LINE.	COURSE OF JOURNEYS <i>same as TM6</i>	COURSE OF JOURNEYS <i>same as TM6</i>	
CREW BASE	P2	x		Md	S	CREW BASE A place where operating employees (e.g. drivers) report on and register their work.	CREW BASE <i>same as TM6</i>	CREW BASE A place where operating EMPLOYEES (e.g. drivers) report on and register their work.	
CROSSING EQUIPMENT	P2			N	N	CROSSING EQUIPMENT Specialisation of PLACE ACCESS EQUIPMENT for CROSSING EQUIPMENTS (zebra, pedestrian lights, acoustic device sensors, tactile guide strips, etc.).	CROSSING EQUIPMENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
CUSTOMER SERVICE	P2			N	N	CUSTOMER SERVICE Generic specialisation of LOCAL SERVICE for CUSTOMER SERVICES (lost properties, meeting point, complaints, etc.).	CUSTOMER SERVICE <i>same as TM6</i>		
CYCLE STORAGE EQUIPMENT	P2			N	N	CYCLE STORAGE EQUIPMENT A specialisation of PLACE EQUIPMENT describing cycle parking equipment.	CYCLE STORAGE EQUIPMENT <i>same as TM6</i>		
DATA ADMINISTRATION ROLE	A		x	A	A				DATA ADMINISTRATION ROLE A data management function of a DATA ADMINISTRATOR needed for the distributed processing and sharing of data in a STOP PLACE, POINT OF INTEREST or TOPOGRAPHICAL PLACE model.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
DATA ADMINISTRATOR	A		x	A	A				<p>DATA ADMINISTRATOR</p> <p>An organisation responsible for managing data of a specific type, for example TOPOGRAPHICAL PLACE, POINT OF INTEREST, STOP PLACE and STOP POINT data in one or more ADMINISTRATIVE AREAs. Administration may be decentralised to many different DATA ADMINISTRATORS, each with responsibility for data of a particular scope. A DATA ADMINISTRATOR may correspond to an ORGANISATIONAL UNIT or may be an external body such as a Local Authority or responsible organisation. Within a physical STOP PLACE, different DATA ADMINISTRATORS may be responsible for all or just some of the data, for example different modes may be managed by different administrators. Different DATA ADMINISTRATORS may be responsible for different data processing roles such as gathering, aggregating or distributing the data depending on their DATA ADMINISTRATION ROLE. The role of data administrator may be procured by the responsible organisation from a contractor. Each DATA ADMINISTRATOR will use a known NAMESPACE for issuing identifiers</p>

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
DATA MANAGED OBJECT	A		x	A	A				DATA MANAGED OBJECT An entity that is managed by a DATA ADMINISTRATOR as part of a distributed system of data management of objects with well defined identifiers and data ownership. Such objects conform to the abstract DATA MANAGED OBJECT supertype that defines associations and behaviour for data management.
DATA SOURCE	P1	DATA SYSTEM		N	N	DATA SOURCE The DATA SOURCE identifies the system which has produced the data. References to a data source are useful in an interoperated computer system.	DATASOURCE <i>same as TM6</i>		
DATA SYSTEM	re-named and definition revised	x		A	A	DATA SOURCE	DATA SOURCE	DATA SYSTEM The origin of operational data referring to one single responsibility. References to a data system are useful in an interoperated computer system.	
DATED BLOCK	P3	x		S	A	DATED BLOCK The work of a vehicle on a particular OPERATING DAY from the time it leaves a PARKING POINT after parking until its next return to park at a PARKING POINT.		DATED BLOCK <i>same as TM6</i>	
DATED PASSING TIME	P3	x		S	S	DATED PASSING TIME A PASSING TIME on a particular OPERATING DAY.	DATED PASSING TIME <i>same as TM6</i>	DATED PASSING TIME <i>same as TM6</i>	
DATED VEHICLE JOURNEY	P3	x		S	S	DATED VEHICLE JOURNEY A particular journey of a vehicle on a particular OPERATING DAY including all modifications possibly decided by the control staff.	DATED VEHICLE JOURNEY <i>same as TM6</i>	DATED VEHICLE JOURNEY <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
DAY OF WEEK	P1	x		S	S	DAY OF WEEK A particular week day (from Monday to Sunday).	DAY OF WEEK <i>same as TM6</i>	DAY OF WEEK <i>same as TM6</i>	
DAY TYPE	P1	x		S	S	DAY TYPE A type of day characterised by one or more properties which affect public transport operation. For example: weekday in school holidays.	DAY TYPE <i>same as TM6</i>	DAY TYPE <i>same as TM6</i>	
DAY TYPE ASSIGNMENT	P1	SHORT TERM DAY TYPE ASSIGNMENT		N	N	DAY TYPE ASSIGNMENT The assignment of operational characteristics, expressed by DAY TYPES, to particular OPERATING DAYS within a SERVICE CALENDAR.	DAY TYPE ASSIGNMENT <i>same as TM6</i>		
DEAD RUN	P3	x		S	S	DEAD RUN A non-service VEHICLE JOURNEY	DEAD RUN <i>same as TM6</i>	DEAD RUN <i>same as TM6</i>	
DEAD RUN PATTERN	P2	x		S	S	DEAD RUN PATTERN A JOURNEY PATTERN to be used for DEAD RUNS.	DEAD RUN PATTERN <i>same as TM6</i>	DEAD RUN PATTERN <i>same as TM6</i>	
DEFAULT CONNECTION	P2			N	N	DEFAULT CONNECTION The physical (spatial) possibility for a passenger to change from one public transport vehicle to another to continue the trip. It specifies default times to be used to change from one mode of transport to another at an area or national level as specified by a TOPOGRAPHIC PLACE, STOP AREA or SITE ELEMENT. It may be restricted to a specific MODE or OPERATOR or only apply in a particular direction of transfer, e.g. bus to rail may have a different time for rail to bus.	DEFAULT CONNECTION <i>same as TM6</i>		
DEFAULT CONNECTION END	P2			N	N	DEFAULT CONNECTION END One end of a DEFAULT CONNECTION.	DEFAULT CONNECTION END <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
DEFAULT DEAD RUN RUN TIME	P3	x		S	S	DEFAULT DEAD RUN RUN TIME The time taken to traverse a TIMING LINK during a DEAD RUN, for a specified TIME DEMAND TYPE. This time may be superseded by the JOURNEY PATTERN RUN TIME or VEHICLE JOURNEY RUN TIME if these exist.	DEFAULT DEAD RUN RUN TIME <i>same as TM6</i>	DEFAULT DEAD RUN RUN TIME <i>same as TM6</i>	
DEFAULT INTERCHANGE	P3	x		Md	Md	DEFAULT INTERCHANGE A quality parameter fixing the acceptable duration (standard and maximum) for an INTERCHANGE to be planned between two SCHEDULED STOP POINTs. This parameter will be used to control whether any two VEHICLE JOURNEYs serving those points may be in connection.	DEFAULT INTERCHANGE <i>same as TM6</i>	DEFAULT INTERCHANGE A quality parameter fixing the acceptable duration (standard and maximum) for an interchange to be planned between two STOP POINTs. This parameter will be used to control whether any two VEHICLE JOURNEYs serving those points may be in connection.	
DEFAULT SERVICE JOURNEY RUN TIME	P3	x		S	S	DEFAULT SERVICE JOURNEY RUN TIME The default time taken by a vehicle to traverse a TIMING LINK during a SERVICE JOURNEY, for a specified TIME DEMAND TYPE. This time may be superseded by the JOURNEY PATTERN RUN TIME or VEHICLE JOURNEY RUN TIME if these exist.	DEFAULT SERVICE JOURNEY RUN TIME <i>same as TM6</i>	DEFAULT SERVICE JOURNEY RUN TIME <i>same as TM6</i>	
DELIVERY VARIANT	P1			N	N	DELIVERY VARIANT A variant text of a NOTICE for use in a specific media or delivery channel (voice, printed material, etc).	DELIVERY VARIANT <i>same as TM6</i>		
DELTA	P1	x		S	S	DELTA A record of the detailed changes of a given ENTITY IN VERSION from one VERSION to the next one. A DELTA contains pairs of attributes' old values - new values.	DELTA <i>same as TM6</i>	DELTA <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
DEPARTMENT	P1			N	N	DEPARTMENT An ORGANIZATION PART specific to a purpose and/or organisational structure.	DEPARTMENT <i>same as TM6</i>		
DESTINATION DISPLAY	P2	x		S	S	DESTINATION DISPLAY An advertised destination of a specific JOURNEY PATTERN, usually displayed on a headsign or at other on-board locations.	DESTINATION DISPLAY <i>same as TM6</i>	DESTINATION DISPLAY <i>same as TM6</i>	
DESTINATION DISPLAY VARIANT	P2			N	N	DESTINATION DISPLAY VARIANT An advertised destination of a specific JOURNEY PATTERN, usually displayed on a headsign or at other on-board locations.	DESTINATION DISPLAY VARIANT <i>same as TM6</i>		
DIRECTION	P2	x		S	S	DIRECTION A classification for the general orientation of ROUTEs.	DIRECTION <i>same as TM6</i>	DIRECTION <i>same as TM6</i>	
DISPLAY ASSIGNMENT	P2	x		Md	Md	DISPLAY ASSIGNMENT The assignment of one SCHEDULED STOP POINT and one JOURNEY PATTERN to a PASSENGER INFORMATION EQUIPMENT specifying that information on the SCHEDULED STOP POINT and the JOURNEY PATTERN will be provided (e.g. displayed, printed).	DISPLAY ASSIGNMENT The assignment of one STOP POINT and one JOURNEY PATTERN to a PASSENGER INFORMATION EQUIPMENT specifying that information on the STOP POINT and the JOURNEY PATTERN will be provided (e.g. displayed, printed).	DISPLAY ASSIGNMENT The assignment of one STOP POINT and one JOURNEY PATTERN to a PI FACILITY, specifying that information on this STOP POINT and this JOURNEY PATTERN will be provided (e.g. displayed, printed).	
DYNAMIC STOP ASSIGNMENT	P2		DYNAMIC STOP ASSIGNMENT	N	N	DYNAMIC STOP ASSIGNMENT The dynamic association of a SCHEDULED STOP POINT (i.e. a SCHEDULED STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) with the next available STOP PLACE, QUAY or BOARDING POSITION within a STOP PLACE.	DYNAMIC STOP ASSIGNMENT The dynamic association of a SCHEDULED STOP POINT (i.e. a STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) with the next available STOP PLACE, QUAY or BOARDING POSITION within a STOP PLACE.		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
DYNAMIC STOP POINT ASSIGNMENT	renamed		x	A	A	DYNAMIC STOP ASSIGNMENT	DYNAMIC STOP ASSIGNMENT		DYNAMIC STOP POINT ASSIGNMENT The dynamic association of a SCHEDULED STOP POINT (i.e. a STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) with the next available STOP PLACE, QUAY or BOARDING POSITION within a STOP PLACE. May be subject to a VALIDITY CONDITION.
ENCUMBRANCE NEED	P1			N	N	ENCUMBRANCE NEED A specific USER NEED, i.e. a requirement of a passenger travelling with luggage, animal or any other object requiring special arrangements to access public transport.	ENCUMBRANCE NEED <i>same as TM6</i>		
ENTITY	P1	x		Md	Md	ENTITY Any data instance to be managed in an operational Version Management System. When several data sources coexist (multimodality and/or interoperability), an ENTITY has to be related to a given DATA SOURCE in which it is defined.	ENTITY <i>same as TM6</i>	ENTITY <i>same as TM6</i>	
ENTITY IN FRAME	re-named	x		A	A	CLASS IN FRAME	CLASS IN FRAME	ENTITY IN FRAME The different ENTITIES IN REPOSITORY which can be relevant for corresponding VERSION FRAMES.	
ENTITY IN REPOSITORY	re-named	x		A	A	CLASS IN REPOSITORY	CLASS IN REPOSITORY	ENTITY IN REPOSITORY Any ENTITY name belonging to the repository. E.g DAY TYPE, PROPERTY OF DAY, TIME BAND, VEHICLE TYPE, DUTY, etc, are relevant instances of ENTITY IN REPOSITORY in the context of Version Management.	



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
ENTITY IN VERSION	P1	x		Md	Md	ENTITY IN VERSION The ENTITY associated to a given VERSION.	ENTITY IN VERSION <i>same as TM6</i>	ENTITY IN VERSION The ENTITIES associated to a given VERSION. ENTITY IN VERSION is restricted by ENTITY IN FRAME.	
ENTRANCE	P2		x	Md	Md	ENTRANCE A physical entrance or exit to/from a SITE. May be a door, barrier, gate or other recognizable point of access.	ENTRANCE <i>same as TM6</i>		ENTRANCE An identified point of entry or exit for a passenger to or from a STOP PLACE, ACCESS SPACE or POINT OF INTEREST. It may or may not have a physical manifestation such as a Door, barrier, turnstile or other obstacle. The passenger may be on foot, in a wheelchair, on a bicycle or on some other private mode of transport. The ENTRANCE may have a TRANSPORT MODE to indicate the permitted modes. A door may be marked for use for entry, exit or both.
ENTRANCE EQUIPMENT	P2			N	N	ENTRANCE EQUIPMENT Specialisation of PLACE ACCESS EQUIPMENT for ENTRANCES (door, barrier, revolving door, etc.).	ENTRANCE EQUIPMENT <i>same as TM6</i>		
ENTRANCE FOR VEHICLES	A		x	A	A				ENTRANCE FOR VEHICLES An entrance for VEHICLES to a STOP PLACE. Distinct from an ENTRANCE TO VEHICLE, which is for passenger access to a vehicle. May be marked for entry, exit use, or both.
ENTRANCE TO VEHICLE	A		x	A	A				ENTRANCE TO VEHICLE An entrance or exit for passengers onto a VEHICLE, usually having a door. Distinct from an ENTRANCE FOR VEHICLES, which is for access by a vehicle to a STOP PLACE.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
EQUIPMENT	P1			N	N	EQUIPMENT An item of equipment installed either fixed (PLACE EQUIPMENT) or on-board vehicles (VEHICLE EQUIPMENT). A service (LOCAL SERVICE such as LEFT LUGGAGE, TICKETING SERVICE) is considered as immaterial equipment as well.	EQUIPMENT <i>same as TM6</i>		
EQUIPMENT PLACE	P2		x	Md	Md	EQUIPMENT PLACE A SITE COMPONENT containing EQUIPMENT	EQUIPMENT PLACE <i>same as TM6</i>		EQUIPMENT PLACE A STOP PLACE COMPONENT containing equipment associated with other STOP PLACE COMPONENTs or other places accessible to passengers.
EQUIPMENT POSITION	P2		x	S	S	EQUIPMENT POSITION The precise position within an EQUIPMENT PLACE where particular equipment is placed.	EQUIPMENT POSITION <i>same as TM6</i>		EQUIPMENT POSITION <i>same as TM6</i>
ESCALATOR EQUIPMENT	P2			N	N	ESCALATOR EQUIPMENT Specialisation of STAIR EQUIPMENT for ESCALATORS.	ESCALATOR EQUIPMENT <i>same as TM6</i>		
FACILITY	P1			N	N	FACILITY A named amenity available to the public at a SITE or on a SERVICE. A facility has no further properties other than a name. An EQUIPMENT or LOCAL SERVICE is used to describe the further properties provided as part of particular facility.	FACILITY <i>same as TM6</i>		
FACILITY REQUIREMENT	P1			N	N	FACILITY REQUIREMENT A classification of public transport vehicles according to the facilities available on the vehicle.	FACILITY REQUIREMENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
FACILITY SET	P1			N	N	FACILITY SET Set of FACILITIES available for a SERVICE JOURNEY or a JOURNEY PART. The set may be available only for a specific VEHICLE TYPE within the SERVICE (e.g. carriage equipped with low floor).	FACILITY SET A set of FACILITIES that may be associated with an ENTITY and subject to a specific VALIDITY CONDITION.		
FLEXIBLE AREA	P2			N	N	FLEXIBLE AREA Specialisation of a FLEXIBLE QUAY (which is abstract) to identify what is the catchment area for a flexible service (so that a stop finder can find the nearest available types of transport). It is a named zone visited by a particular mode of transport. It is part of the SITE data set rather than the service data set, since it can be defined and exists independently of an actual service.	FLEXIBLE AREA <i>same as TM6</i>		
FLEXIBLE LINE	P2			N	N	FLEXIBLE LINE Specialisation of LINE for flexible service. As all the service on a LINE may not all be flexible, flexibility itself is described at JOURNEY PATTERN level (meaning that a separate JOURNEY PATTERN is needed for each type of flexibility available for the line). Types of flexible services are :- Virtual line service- Flexible service with main route- Corridor service - Fixed stop area-wide flexible service- Free area-wide flexible service- Mixed types of flexible service- Mixed type of flexible and regular services	FLEXIBLE LINE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
FLEXIBLE LINK PROPERTIES	P2			N	N	FLEXIBLE LINK PROPERTIES Set of properties describing the flexible characteristics of a LINK. A composition is used with LINK in order to avoid multiple inheritance and a type explosion of link subtypes	FLEXIBLE LINK PROPERTIES <i>same as TM6</i>		
FLEXIBLE POINT PROPERTIES	P2			N	N	FLEXIBLE POINT PROPERTIES Set of characteristics describing the possible flexibility of POINTs. A composition is used with POINT in order to avoid multiple inheritance.	FLEXIBLE POINT PROPERTIES <i>same as TM6</i>		
FLEXIBLE QUAY	P2			N	N	FLEXIBLE QUAY A physical ZONE such as a section of a road where a flexible service is available on demand. The existence of the zone makes the services visible to journey planners looking for available services for an area.	FLEXIBLE QUAY <i>same as TM6</i>		
FLEXIBLE ROUTE	P2			N	N	FLEXIBLE ROUTE Specialisation of ROUTE for flexible service. May include both point and zonal areas and ordered and unordered sections.	FLEXIBLE ROUTE <i>same as TM6</i>		
FLEXIBLE SERVICE PROPERTIES	P3			N	N	FLEXIBLE SERVICE PROPERTIES Additional characteristics of flexible service. A service may be partly fixed, partly flexible.	FLEXIBLE SERVICE PROPERTIES <i>same as TM6</i>		
FLEXIBLE STOP ASSIGNMENT	P2			N	N	FLEXIBLE STOP ASSIGNMENT The allocation of a SCHEDULED STOP POINT (i.e. a STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific FLEXIBLE STOP PLACE, and also possibly a FLEXIBLE AREA or HAIL AND RIDE AREA. May be subject to a VALIDITY CONDITION.	FLEXIBLE STOP ASSIGNMENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
FLEXIBLE STOP PLACE	P2			N	N	FLEXIBLE STOP PLACE A specialisation of the STOP PLACE describing a stop of a FLEXIBLE SERVICE. It may be composed of FLEXIBLE AREAs or HAIL AND RIDE AREAs identifying the catchment areas for flexible services (when they use areas or flexible quays). Some FLEXIBLE SERVICE also use regular STOP PLACES for their stops. When assigned to a SCHEDULED STOP POINT the corresponding SCHEDULED STOP POINT is supposed to be a ZONE (the centroid point of the ZONE being the SCHEDULED STOP POINT).	FLEXIBLE STOP PLACE <i>same as TM6</i>		
FOOTNOTE	re-named	x		A	A	NOTICE	NOTICE	FOOTNOTE A text for informational purposes on exceptions in a LINE, a JOURNEY PATTERN, etc. The information may be usable for passenger or driver information.	
FOOTNOTE ASSIGNMENT	re-named	x		A	A	NOTICE ASSIGNMENT	NOTICE ASSIGNMENT	FOOTNOTE ASSIGNMENT The assignment of a FOOTNOTE showing an exception in a JOURNEY PATTERN, a COMMON SECTION, or a VEHICLE JOURNEY, possibly specifying at which POINT IN JOURNEY PATTERN the validity of the FOOTNOTE starts and ends respectively.	
GARAGE	P2	x		S	S	GARAGE A facility used for parking and maintaining vehicles. PARKING POINTs in a GARAGE are called GARAGE POINTs.	GARAGE <i>same as TM6</i>	GARAGE <i>same as TM6</i>	
GARAGE POINT	P2	x		S	S	GARAGE POINT A subtype of PARKING POINT located in a GARAGE.	GARAGE POINT <i>same as TM6</i>	GARAGE POINT <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
GENERAL FRAME	P1			N	N	GENERAL FRAME Set of data containing information, to which the same VALIDITY CONDITIONS have been assigned.	GENERAL FRAME NeTeX explicit FRAME containing information, to which the same VALIDITY CONDITIONS have been assigned.		
GENERAL SIGN	P2			N	N	GENERAL SIGN Specialisation of SIGN EQUIPMENT which are not HEADING SIGNS nor PLACE SIGNS.	GENERAL SIGN <i>same as TM6</i>		
GROUP OF ENTITIES	P1			N	N	GROUP OF ENTITIES A set of ENTITIES grouped together according to a PURPOSE OF GROUPING, e.g. grouping of stops known to the public by a common name.	GROUP OF ENTITIES <i>same as TM6</i>		
GROUP OF LINES	P2	x		S	S	GROUP OF LINES A grouping of lines which will be commonly referenced for a specific purpose.	GROUP OF LINES <i>same as TM6</i>	GROUP OF LINES <i>same as TM6</i>	
GROUP OF LINK SEQUENCES	P1	x		S	S	GROUP OF LINK SEQUENCES A grouping of LINK SEQUENCES.	GROUP OF LINK SEQUENCES <i>same as TM6</i>	GROUP OF LINK SEQUENCES <i>same as TM6</i>	
GROUP OF LINKS	P1	x		S	S	GROUP OF LINKS A grouping of LINKs. E.g. one GROUP OF LINKs may be managed by a same AUTHORITY.	GROUP OF LINKS <i>same as TM6</i>	GROUP OF LINKS <i>same as TM6</i>	
GROUP OF OPERATORS	P1	x		S	S	GROUP OF OPERATORS A group of OPERATORS having for instance common schemes for fare collection or passenger information.	GROUP OF OPERATORS <i>same as TM6</i>	GROUP OF OPERATORS <i>same as TM6</i>	
GROUP OF POINTS	P1	x		Md	S	GROUP OF POINTS A grouping of POINTs of a certain TYPE OF POINT and dedicated to a FUNCTIONAL PURPOSE.	GROUP OF POINTS A grouping of POINTs. The STOP AREA represents one of the most significant GROUPs OF POINTs.	GROUP OF POINTS <i>same as NeTeX</i>	
GROUP OF SERVICES	P3	x		Md	Md	GROUP OF SERVICES A group of SERVICES, often known to its users by a name or a number.	GROUP OF SERVICES <i>same as TM6</i>	GROUP OF SERVICES A group of SPECIAL SERVICES, often known to its users by a name or a number.	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
GROUP OF TIMEBANDS	P1	x		S	S	GROUP OF TIMEBANDS A grouping of TIME BANDS.	GROUP OF TIMEBANDS <i>same as TM6</i>	GROUP OF TIMEBANDS <i>same as TM6</i>	
GROUP OF TIMING LINKS	P2	x		S	S	GROUP OF TIMING LINKS A set of TIMING LINKS grouped together according to the similarity of TIME BANDS which are relevant to them. There may be a GROUP OF TIMING LINKS which covers all TIMING LINKS, for use when different GROUPS OF TIMING LINKS are not needed.	GROUP OF TIMING LINKS <i>same as TM6</i>	GROUP OF TIMING LINKS <i>same as TM6.</i>	
HAIL AND RIDE AREA	P2			N	N	HAIL AND RIDE AREA Specialisation of a FLEXIBLE QUAY to identify what is the catchment zone for a hail and ride service (so that a stop finder can find the nearest available types of transport). It is a named zone visited by a particular mode of transport and may be designated by a start point and end point on the road. It is part of the Site data set rather than the service data set, since it can be defined and exists indepently of an actual service.	HAIL AND RIDE AREA <i>same as TM6</i>		
HEADING SIGN	P2			N	N	HEADING SIGN Specialisation of SIGN EQUIPMENT for headings providing information like direction name, line name, etc.	HEADING SIGN <i>same as TM6</i>		
HEADWAY INTERVAL	P3			N	N	HEADWAY INTERVAL A time interval or a duration defining a headway period and characterizing HEADWAY JOURNEY GROUP (e.g. every 10 min, every 4-6 min).	HEADWAY INTERVAL <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
HEADWAY JOURNEY GROUP	P3			N	N	HEADWAY JOURNEY GROUP A group of VEHICLE JOURNEYS following the same JOURNEY PATTERN having the same HEADWAY INTERVAL between a specified start and end time (for example, every 10 min). This is especially useful for passenger information.	HEADWAY JOURNEY GROUP <i>same as TM6</i>		
HIRE SERVICE	P2			N	N	HIRE SERVICE Specialisation of LOCAL SERVICE dedicated to hire services (e.g. cycle hire, car hire).	HIRE SERVICE <i>same as TM6</i>		
IMPEDED TIME	A	x		A	A			IMPEDED TIME The difference between the impeded and non-impeded passage of a LINK. It consists of slow down time, waiting time, and accelerating time.	
IMPOSSIBLE MANOEUVRE	P2	x		S	S	IMPOSSIBLE MANOEUVRE A specification of impossible move for a certain type of vehicle. It specifies from which INFRASTRUCTURE LINK to which other (adjacent) INFRASTRUCTURE LINK a certain VEHICLE TYPE cannot proceed, due to physical restrictions.	IMPOSSIBLE MANOEUVRE <i>same as TM6</i>	IMPOSSIBLE MANOEUVRE <i>same as TM6</i>	
INFO LINK	A		x	A	A				INFO LINK An element of the STOP PLACE Model that can be used to associate an arbitrary link to an external web resource such as an image or URL with any STOP PLACE COMPONENT



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
INFRASTRUCTURE FRAME	P2			N	N	INFRASTRUCTURE FRAME A set of infrastructure network data (and other data logically related to these) to which the same VALIDITY CONDITIONS have been assigned.	INFRASTRUCTURE FRAME NeTex explicit FRAME containing INFRASTRUCTURE information, to which the same VALIDITY CONDITIONS have been assigned.		
INFRASTRUCTURE LINK	P2	x		S	S	INFRASTRUCTURE LINK A super-type including all LINKs of the physical network (e.g. RAILWAY ELEMENT).	INFRASTRUCTURE LINK <i>same as TM6</i>	INFRASTRUCTURE LINK <i>same as TM6</i>	
INFRASTRUCTURE POINT	P2	x		S	S	INFRASTRUCTURE POINT A super-type including all POINTs of the physical network (e.g. RAILWAY JUNCTION).	INFRASTRUCTURE POINT <i>same as TM6</i>	INFRASTRUCTURE POINT <i>same as TM6</i>	
INSTALLED EQUIPMENT	P1			N	N	INSTALLED EQUIPMENT An item of equipment either fixed (PLACE EQUIPMENT) or on board i.e. associated with vehicles. This equipment is materialised as opposed to a service (LOCAL SERVICE) considered as an immaterial equipment.	INSTALLED EQUIPMENT <i>same as TM6</i>		
INTERCHANGE	P3			N	N	INTERCHANGE The scheduled possibility for transfer of passengers at the same or different SCHEDULED STOP POINTs.	INTERCHANGE The scheduled possibility for transfer of passengers between two SERVICE JOURNEYS at the same or different STOP POINTs.		
INTERCHANGE RULE	P3			N	N	INTERCHANGE RULE Conditions for considering JOURNEYS to meet or not to meet, specified indirectly: by a particular MODE, DIRECTION or LINE. Such conditions may alternatively be specified directly, indicating the corresponding services. In this case they are either a SERVICE JOURNEY PATTERN INTERCHANGE or a SERVICE JOURNEY INTERCHANGE.	INTERCHANGE RULE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINTION	DEFINTION
INTERCHANGE RULE PARAMETER	P3			N	N	INTERCHANGE RULE PARAMETER Assignment of parameters characterising an INTERCHANGE RULE.	INTERCHANGE RULE PARAMETER <i>same as TM6</i>		
INTERCHANGE RULE TIMING	P3			N	N	INTERCHANGE RULE TIMING Timings for an INTERCHANGE RULE for a given TIME DEMAND TYPE or TIME BAND.	INTERCHANGE RULE TIMING <i>same as TM6</i>		
JOURNEY	P3			N	N	JOURNEY Common properties of VEHICLE JOURNEYS and SPECIAL SERVICES, e.g. their link to accounting characteristics.	JOURNEY <i>same as TM6</i>		
JOURNEY ACCOUNTING	P3			N	N	JOURNEY ACCOUNTING Parameters characterizing VEHICLE JOURNEYS or SPECIAL SERVICES used for accounting purposes in particular in contracts between ORGANISATIONS.	JOURNEY ACCOUNTING <i>same as TM6</i>		
JOURNEY FREQUENCY GROUP	P3			N	N	JOURNEY FREQUENCY GROUP A group of JOURNEYS defined in order to describe special behaviour like frequency based services or rhythmical services (runs all xxh10, xxh25 and xxh45... for example; this is especially useful for passenger information).	JOURNEY FREQUENCY GROUP <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
JOURNEY HEADWAY	P3			N	N	JOURNEY HEADWAY Headway interval information that is available for all the VEHICLE JOURNEYS running on the JOURNEY PATTERN for a given TIME DEMAND TYPE, at a given TIMING POINT. This is a default value that can be superseded by VEHICLE JOURNEY HEADWAY. This information must be consistent with HEADWAY JOURNEY GROUP if available (HEADWAY JOURNEY GROUP being a more detailed way of describing headway services).	JOURNEY HEADWAY <i>same as TM6</i>		
JOURNEY LAYOVER	P3			N	N	JOURNEY LAYOVER Time allowance at the end of each journey to allow for delays and for other purposes.	JOURNEY LAYOVER Time allowance at the end of each journey to allow for delays and for other purposes. This layover supersedes any global layover and may be superseded by a specific VEHICLE JOURNEY LAYOVER.		
JOURNEY MEETING	P3	x		S	S	JOURNEY MEETING A time constraint for one or several SERVICE JOURNEYS fixing interchanges between them and/or an external event (e.g. arrival or departure of a feeder line, opening time of the theatre, etc.).	JOURNEY MEETING <i>same as TM6</i>	JOURNEY MEETING <i>same as TM6</i>	
JOURNEY PART	P3	x		S	S	JOURNEY PART A part of a VEHICLE JOURNEY created according to a specific functional purpose, for instance in situations when vehicle coupling or separating occurs.	JOURNEY PART <i>same as TM6</i>	JOURNEY PART <i>same as TM6</i>	
JOURNEY PART COUPLE	P3	x		S	S	JOURNEY PART COUPLE Two JOURNEY PARTs of different VEHICLE JOURNEYS served simultaneously by a train set up by coupling their single vehicles.	JOURNEY PART COUPLE <i>same as TM6</i>	JOURNEY PART COUPLE <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
JOURNEY PATTERN	P2	x		Md	Md	JOURNEY PATTERN An ordered list of SCHEDULED STOP POINTs and TIMING POINTs on a single ROUTE, describing the pattern of working for public transport vehicles.A JOURNEY PATTERN may pass through the same POINT more than once. The first point of a JOURNEY PATTERN is the origin. The last point is the destination.	JOURNEY PATTERN <i>same as TM6</i>	JOURNEY PATTERN An ordered list of STOP POINTs and TIMING POINTs on a single ROUTE, describing the pattern of working for public transport vehicles.A JOURNEY PATTERN may pass through the same POINT more than once.The first point of a JOURNEY PATTERN is the origin. The last point is the destination.	
JOURNEY PATTERN HEADWAY	P3			N	N	JOURNEY PATTERN HEADWAY Headway interval information that is available for all the VEHICLE JOURNEYs running on the JOURNEY PATTERN. This is a default value that can be superseded by the VEHICLE JOURNEY HEADWAY on a specific journey. This information must be consistent with HEADWAY JOURNEY GROUP if available (HEADWAY JOURNEY GROUP being a more detailed way of describing headway services).	JOURNEY PATTERN HEADWAY <i>same as TM6</i>		
JOURNEY PATTERN LAYOVER	P3	x		S	S	JOURNEY PATTERN LAYOVER Time allowance at the end of each journey on a specified JOURNEY PATTERN, to allow for delays and for other purposes. This layover supersedes any global layover and may be superseded by a specific VEHICLE JOURNEY LAYOVER.	JOURNEY PATTERN LAYOVER <i>same as TM6</i>	JOURNEY PATTERN LAYOVER <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
JOURNEY PATTERN RUN TIME	P3	x		S	S	JOURNEY PATTERN RUN TIME The time taken to traverse a TIMING LINK in a particular JOURNEY PATTERN, for a specified TIME DEMAND TYPE. If it exists, it will override the DEFAULT SERVICE JOURNEY RUN TIME and DEFAULT DEAD RUN RUN TIME.	JOURNEY PATTERN RUN TIME <i>same as TM6</i>	JOURNEY PATTERN RUN TIME <i>same as TM6</i>	
JOURNEY PATTERN WAIT TIME	P3	x		S	S	JOURNEY PATTERN WAIT TIME The time a vehicle has to wait at a specific TIMING POINT IN JOURNEY PATTERN, for a specified TIME DEMAND TYPE. This wait time can be superseded by a VEHICLE JOURNEY WAIT TIME.	JOURNEY PATTERN WAIT TIME <i>same as TM6</i>	JOURNEY PATTERN WAIT TIME <i>same as TM6</i>	
JOURNEY RUN TIME	P3	x		S	S	JOURNEY RUN TIME The time taken to traverse a TIMING LINK in a particular JOURNEY PATTERN, for a specified TIME DEMAND TYPE. If it exists, it will override the DEFAULT SERVICE JOURNEY RUN TIME and DEFAULT DEAD RUN RUN TIME.	JOURNEY RUN TIME <i>same as TM6</i>	JOURNEY RUN TIME <i>same as TM6</i>	
JOURNEY TIMING	P3			N	N	JOURNEY TIMING A time-related information referring to journey timing whose value depends on the time of use and so can be associated with a TIME DEMAND TYPE, TIME BAND or OPERATIONAL CONTEXT.	JOURNEY TIMING <i>same as TM6</i>		
JOURNEY WAIT TIME	P3			N	N	JOURNEY WAIT TIME The time a vehicle has to wait at a specific TIMING POINT IN JOURNEY PATTERN, for a specified TIME DEMAND TYPE. This wait time can be superseded by a VEHICLE JOURNEY WAIT TIME.	JOURNEY WAIT TIME <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
LAYER	P1	x		Md	A	LAYER A user-defined GROUP OF ENTITIES, specified for a particular functional purpose, associating data referring to a particular LOCATING SYSTEM.		LAYER A user-defined VERSION FRAME, specified for a particular functional purpose, within a particular DATA SYSTEM, associating data referring to a particular LOCATING SYSTEM. A LAYER may be subject to various VALIDITY CONDITIONS.	
LEFT LUGGAGE SERVICE	P2			N	N	LEFT LUGGAGE SERVICE Specialisation of CUSTOMER SERVICE for left luggage (provides left luggage information like self service locker, locker free, etc.).	LEFT LUGGAGE SERVICE <i>same as TM6</i>		
LEVEL	P2		x	Md	Md	LEVEL An identified storey (ground, first, basement, mezzanine, etc) within an interchange building or SITE on which SITE COMPONENTS reside. A PATH LINK may connect components on different levels.	LEVEL <i>same as TM6</i>		LEVEL An identified storey (ground, first, basement, mezzanine, etc) within an interchange building on which STOP PLACE COMPONENTS reside. A STOP PATH LINK may connect components on different levels.
LIFT EQUIPMENT	P2			N	N	LIFT EQUIPMENT Specialisation of PLACE ACCESS EQUIPMENT for LIFTS (provides lift characteristics like depth, maximum load, etc.).	LIFT EQUIPMENT <i>same as TM6</i>		
LINE	P2	x		S	S	LINE A group of ROUTES which is generally known to the public by a similar name or number.	LINE <i>same as TM6</i>	LINE <i>same as TM6</i>	
LINE NETWORK	P2			N	N	LINE NETWORK The topological structure of a NETWORK as a graph of LINE SECTIONS. This allows the branches and loops of a LINE to be described as a whole.	LINE NETWORK <i>same as TM6</i>		
LINE SECTION	P2			N	N	LINE SECTION A part of a NETWORK comprising an edge between two nodes. Not directional.	LINE SECTION <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
LINE SHAPE	P1	x		S	S	LINE SHAPE The graphical shape of a LINK obtained from a formula or other means, using the LOCATION of its limiting POINTs and depending on the LOCATING SYSTEM used for the graphical representation.	LINE SHAPE <i>same as TM6</i>	LINE SHAPE <i>same as TM6</i>	
LINK	P1	x		S	S	LINK An oriented spatial object of dimension 1 with view to the overall description of a network, describing a connection between two POINTs.	LINK <i>same as TM6</i>	LINK <i>same as TM6</i>	
LINK IN LINK SEQUENCE	P1	x		S	S	LINK IN LINK SEQUENCE The order of a LINK in a LINK SEQUENCE to which it belongs.	LINK IN LINK SEQUENCE <i>same as TM6</i>	LINK IN LINK SEQUENCE <i>same as TM6</i>	
LINK PROJECTION	P1	x		S	S	LINK PROJECTION An oriented correspondence from one LINK of a source layer, onto an entity in a target layer: e.g. LINK SEQUENCE, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.	LINK PROJECTION <i>same as TM6</i>	LINK PROJECTION <i>same as TM6</i>	
LINK SEQUENCE	P1	x		S	S	LINK SEQUENCE An ordered sequence either of POINTs or of LINKs, defining a path through the network.	LINK SEQUENCE <i>same as TM6</i>	LINK SEQUENCE <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
LOCAL SERVICE	P1		x	Md	Md	LOCAL SERVICE A named service relating to the use of the SITE or transport services at a particular location, for example portage, assistance for disabled users, booking offices etc. The service may have a VALIDITY CONDITION associated with it. A LOCAL SERVICE is treated as a form of immaterial EQUIPMENT.	LOCAL SERVICE <i>same as TM6</i>		LOCAL SERVICE A named service relating to the use of the STOP PLACE or transport services at a particular location, for example portage, assistance for disabled users, booking offices etc. The service may have a VALIDITY CONDITION associated with it. A LOCAL SERVICE is treated as a form of non-material EQUIPMENT. EXAMPLE : Examples of Services are TICKETING SERVICE, CUSTOMER SERVICE, LEFT LUGGAGE SERVICE, LOST PROPERTY SERVICE, COMPLAINTS SERVICE, LUGGAGE SERVICE, HIRE SERVICE, MONEY SERVICE, REFRESHMENT SERVICE, COMMUNICATION SERVICE.
LOCATING SYSTEM	P1	x		S	S	LOCATING SYSTEM The system used as reference for location and graphical representation of the network and other spatial objects.	LOCATING SYSTEM <i>same as TM6</i>	LOCATING SYSTEM <i>same as TM6</i>	
LOCATION	P1	x		S	S	LOCATION The position of a POINT with a reference to a given LOCATING SYSTEM (e. g. coordinates).	LOCATION <i>same as TM6</i>	LOCATION <i>same as TM6</i>	



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
LOGICAL DISPLAY	P2			N	N	LOGICAL DISPLAY A set of data that can be assembled for assignment to a physical PASSENGER INFORMATION EQUIPMENT or to a logical channel such as web or media. It is independent of any physical embodiment. A LOGICAL DISPLAY may have a set of DISPLAY ASSIGNMENTS each of which associates a JOURNEY PATTERN whose journeys are to be shown at the LOGICAL DISPLAY. It may also be associated with a SCHEDULED STOP POINT. A LOGICAL DISPLAY corresponds to a SIRI STOP MONITORING point.	LOGICAL DISPLAY <i>same as TM6</i>		
LOST PROPERTY SERVICE	P2			N	N	LOST PROPERTY SERVICE Specialisation of CUSTOMER SERVICE for lost properties.	LOST PROPERTY SERVICE <i>same as TM6</i>		
LUGGAGE LOCKER EQUIPMENT	P2			N	N	LUGGAGE LOCKER EQUIPMENT Specialisation of STOP PLACE EQUIPMENT for luggage lockers.	LUGGAGE LOCKER EQUIPMENT <i>same as TM6</i>		
LUGGAGE SERVICE	P2			N	N	LUGGAGE SERVICE Specialisation of CUSTOMER SERVICE for luggage services (provides luggage service facilities and characteristics like luggage trolley, free to use, etc.).	LUGGAGE SERVICE <i>same as TM6</i>		
MANAGEMENT AGENT	P1			N	N	MANAGEMENT AGENT Specialisation of ORGANISATION for MANAGEMENT AGENTS.	MANAGEMENT AGENT <i>same as TM6</i>		
MANOEUVRING REQUIREMENT	P1			N	N	MANOEUVRING REQUIREMENT A classification of requirements for a public transport VEHICLE according to the Maneuvering capabilities of the vehicle.	MANOEUVRING REQUIREMENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
MEDICAL NEED	P1			N	N	MEDICAL NEED A specific USER NEED, i.e. a requirement of a passenger as regards medical constraint (e.g. allergy) to access public transport .	MEDICAL NEED <i>same as TM6</i>		
MEETING POINT SERVICE	P2			N	N	MEETING POINT SERVICE Specialisation of CUSTOMER SERVICE for meeting points (provides characteristics like description, label, etc.).	MEETING POINT SERVICE <i>same as TM6</i>		
MEETING RESTRICTION	P2	x		S	S	MEETING RESTRICTION A pair of INFRASTRUCTURE LINKS where vehicles of specified VEHICLE TYPEs are not allowed to meet.	MEETING RESTRICTION <i>same as TM6</i>	MEETING RESTRICTION <i>same as TM6</i>	
MOBILITY NEED	P1			N	N	MOBILITY NEED A specific USER NEED, i.e. a constraint of a passenger as regards his mobility, e.g. wheelchair, assisted wheelchair, etc.	MOBILITY NEED <i>same as TM6</i>		
MODE	P1	TRANSPORT MODE		N	N	MODE Any means of transport.	MODE <i>same as TM6</i>		
MONEY SERVICE	P2			N	N	MONEY SERVICE Specialisation of LOCAL SERVICE dedicated to money services.	MONEY SERVICE <i>same as TM6</i>		
MONITORING POINT	A		x	A	A				MONITORING POINT A point at which real-time status is reported. Normally corresponds to a STOP POINT.In IFOPT only a minimal representation of MONITORING POINTs is made sufficient to relate their location to the STOP PLACE and its components.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
MONITORING POINT ASSIGNMENT	A		x	A	A				MONITORING POINT ASSIGNMENT A MONITORING POINT ASSIGNMENT associates a MONITORING POINT with a specific SCHEDULED STOP POINT.
NAVIGATION PATH	P2		x	Md	Md	NAVIGATION PATH A designated path between two places. May include an ordered sequence of PATH LINKs.	NAVIGATION PATH <i>same as TM6</i>		NAVIGATION PATH A representation of a detailed pathway that a passenger may take between two PLACES within a STOP PLACE, or between STOP PLACE, POINT OF INTEREST, etc. A NAVIGATION PATH can be made up of an ordered set of PATH LINKs IN SEQUENCE, an ordered set of ACCESSIBLE PLACES IN SEQUENCE or both – a POINT or a LINK representation may be useful for different applications There may be multiple NAVIGATION PATHs between the same STOP PLACE COMPONENTs or other PLACES, reflecting different physical paths and with particular ACCESSIBILITY ASSESSMENTS. NAVIGATION PATHs may be predefined, or be computed dynamically from the underlying set of STOP PLACE COMPONENTs and other PLACE and LINK types. The same PATH LINK may occur in different sequences in different NAVIGATION PATHs.
NAVIGATION PATH ASSIGNMENT	P2		PATH ASSIGNMENT	N	N	NAVIGATION PATH ASSIGNMENT The allocation of a NAVIGATION PATH to a specific STOP POINT ASSIGNMENT, for example to indicate the path to be taken to make a CONNECTION	NAVIGATION PATH ASSIGNMENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
NETWORK	P2			N	N	NETWORK A named grouping of LINEs under which a transport network is known	NETWORK <i>same as TM6</i>		
NETWORK VERSION	re-named	x		A	A	SERVICE FRAME	SERVICE FRAME	NETWORK VERSION A set of network data (and other data logically related to these) to which the same validity period has been assigned.	
NORMAL DATED BLOCK	P3	x		Md	Md	NORMAL DATED BLOCK A DATED BLOCK identical to a long-terms planned BLOCK, possibly updated according to short-term modifications decided by the control staff.	NORMAL DATED BLOCK A DATED BLOCK identical to a long-terms planned BLOCK, possibly updated according to short-term modifications of the PRODUCTION PLAN decided by the control staff.	NORMAL DATED BLOCK <i>same as NeTEx</i>	
NORMAL DATED VEHICLE JOURNEY	P3	x		Md	Md	NORMAL DATED VEHICLE JOURNEY A DATED VEHICLE JOURNEY identical to a long-term planned VEHICLE JOURNEY, possibly updated according to short-term modifications of the PRODUCTION PLAN decided by the control staff.	NORMAL DATED VEHICLE JOURNEY <i>same as TM6</i>	NORMAL DATED VEHICLE JOURNEY <i>same as TM6</i>	
NOTICE	P1	FOOTNOTE		N	N	NOTICE A text for informational purposes on exceptions in a LINE, a JOURNEY PATTERN, etc. The information may be usable for passenger or driver information.	NOTICE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
NOTICE ASSIGNMENT	P2	FOOTNOTE ASSIGNMENT		N	N	NOTICE ASSIGNMENT The assignment of a NOTICE showing an exception in a JOURNEY PATTERN, a COMMON SECTION, or a VEHICLE JOURNEY, possibly specifying at which POINT IN JOURNEY PATTERN the validity of the NOTICE starts and ends respectively.	NOTICE ASSIGNMENT The assignment of a NOTICE showing an exception in a JOURNEY PATTERN, a COMMON SECTION, or a VEHICLE JOURNEY, possibly specifying at which POINT IN JOURNEY PATTERN the validity of the NOTICE starts and ends respectively. For NeTeX Part 3, NOTICE ASSIGNMENT is also available for DISTANCE MATRIX ELEMENT and SERIES PATTERN.		
ONBOARD STAY	P1			N	N	ONBOARD STAY Permission to board early before the journey or stay on board after the journey.	ONBOARD STAY <i>same as TM6</i>		
OPERATING DAY	P1	x		Md	Md	OPERATING DAY A day of public transport operation of which the characteristics are defined within in a specific SERVICE CALENDAR. An OPERATING DAY may last more than 24 hours.	OPERATING DAY <i>same as TM6</i>	OPERATING DAY A day of public transport operation in a specific calendar. An OPERATING DAY may last more than 24 hours.	
OPERATING DEPARTMENT	P1	x		Md	Md	OPERATING DEPARTMENT A specific DEPARTMENT which administers certain LINES.	OPERATING DEPARTMENT <i>same as TM6</i>	OPERATING DEPARTMENT The operating department which administers certain LINES.	
OPERATING PERIOD	P1	PERIOD		S	S	OPERATING PERIOD A continuous interval of time between two OPERATING DAYS which will be used to define validities.	OPERATING PERIOD <i>same as TM6</i>		
OPERATIONAL CONTEXT	P1			N	N	OPERATIONAL CONTEXT Characterization of a set of operational objects, such as timing or links determined either by a DEPARTMENT or by an ORGANISATIONAL UNIT.	OPERATIONAL CONTEXT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
OPERATOR	P1	x		S	S	OPERATOR A company providing public transport services.	OPERATOR <i>same as TM6</i>	OPERATOR <i>same as TM6</i>	
ORGANISATION	P1			N	N	ORGANISATION A legally incorporated body associated with any aspect of the transport system.	ORGANISATION <i>same as TM6</i>		
ORGANISATION DAY TYPE	P1			N	N	ORGANISATION DAY TYPE DAY TYPE that is defined in terms of operation or not operation of a referenced SERVICED ORGANISATION.	ORGANISATION DAY TYPE <i>same as TM6</i>		
ORGANISATION PART	P1			N	N	ORGANISATION PART A part of an ORGANISATION to which specific responsibilities upon the data and data management may be assigned.	ORGANISATION PART <i>same as TM6</i>		
ORGANISATIONAL UNIT	P1	x		Md	Md	ORGANISATIONAL UNIT An ORGANISATION PART to which a set of responsibilities in a public transport company for planning and control is assigned	ORGANISATIONAL UNIT <i>same as TM6</i>	ORGANISATIONAL UNIT A grouping of responsibilities in a public transport company for planning and control.	
OTHER ORGANISATION	P1			N	N	OTHER ORGANISATION Generic ORGANISATION being neither an AUTHORITY, neither a public transport OPERATOR (TRAVEL AGENT, MANAGEMENT AGENT, etc.).	OTHER ORGANISATION <i>same as TM6</i>		
OVERTAKING POSSIBILITY	P2	x		Md	Md	OVERTAKING POSSIBILITY NETWORK RESTRICTION specifying a POINT or a LINK where vehicles of specified VEHICLE TYPEs are or are not allowed to overtake each other.	OVERTAKING POSSIBILITY <i>same as TM6</i>	OVERTAKING POSSIBILITY A POINT or a LINK where vehicles of specified VEHICLE TYPEs are not allowed to overtake each other.	
PARKING	P2		x	S	S	PARKING Designated locations for leaving vehicles such as cars, motorcycles and bicycles.	PARKING <i>same as TM6</i>		PARKING <i>same as TM6</i>

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
PARKING AREA	P2		x	S	S	PARKING AREA A marked zone within a PARKING containing PARKING BAYS.	PARKING AREA <i>same as TM6</i>		PARKING AREA <i>same as TM6</i>
PARKING BAY	P2		x	S	S	PARKING BAY A place to park an individual vehicle.	PARKING BAY <i>same as TM6</i>		PARKING BAY <i>same as TM6</i>
PARKING CAPACITY	P2			N	N	PARKING CAPACITY PARKING properties providing information about its CAPACITY.	PARKING CAPACITY <i>same as TM6</i>		
PARKING COMPONENT	P2			N	N	PARKING COMPONENT Generic COMPONENT of a PARKING (e.g. PARKING AREA or PARKING BAY)	PARKING COMPONENT <i>same as TM6</i>		
PARKING ENTRANCE FOR VEHICLES	P2		x	S	S	PARKING ENTRANCE FOR VEHICLES An entrance for vehicles to the PARKING from the road.	PARKING ENTRANCE FOR VEHICLES <i>same as TM6</i>		PARKING ENTRANCE FOR VEHICLES <i>same as TM6</i>
PARKING PASSENGER ENTRANCE	P2		x	S	S	PARKING PASSENGER ENTRANCE An entrance to the PARKING for passengers on foot or other out-of-vehicle mode, such as wheelchair.	PARKING PASSENGER ENTRANCE <i>same as TM6</i>		PARKING PASSENGER ENTRANCE <i>same as TM6</i>
PARKING POINT	P2	x		S	S	PARKING POINT A TIMING POINT where vehicles may stay unattended for a long time. A vehicle's return to park at a PARKING POINT marks the end of a BLOCK.	PARKING POINT <i>same as TM6</i>	PARKING POINT <i>same as TM6</i>	
PARKING PROPERTIES	P2			N	N	PARKING PROPERTIES PARKING specific properties other than its capacity.	PARKING PROPERTIES <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
PASSENGER ACCESSIBILITY NEED	P1		PASSENGER ACCESSIBILITY NEEDS	N	N	PASSENGER ACCESSIBILITY NEED A passenger's requirement for accessibility, comprising one or more USER NEEDS. For example, that he is unable to navigate stairs, or lifts, or has visual or auditory impairments. PASSENGER ACCESSIBILITY NEEDS can be used to derive an accessibility constraint for the passenger, allowing the computation of paths for passengers with specifically constrained mobility. Example: Wheelchair, No Lifts, No Stairs.	PASSENGER ACCESSIBILITY NEED <i>same as TM6</i>		
PASSENGER ACCESSIBILITY NEEDS	re-named		x	A	A	PASSENGER ACCESSIBILITY NEED	PASSENGER ACCESSIBILITY NEED		PASSENGER ACCESSIBILITY NEEDS A passenger's requirements for ACCESSIBILITY, comprising one or more USER NEEDS. For example, that they are unable to navigate stairs, or lifts, or have visual or auditory impairments. PASSENGER ACCESSIBILITY NEEDS can be used to derive an accessibility constraint for the passenger, allowing the computation of paths for passengers with specifically constrained mobility. EXAMPLE : Wheelchair, No Lifts, No Stairs.
PASSENGER CARRYING REQUIREMENT	P1			N	N	PASSENGER CARRYING REQUIREMENT A classification of requirements for a public transport vehicle according to the passenger carrying capabilities of the vehicle.	PASSENGER CARRYING REQUIREMENT <i>same as TM6</i>		
PASSENGER EQUIPMENT	P1		STOP PLACE EQUIPMENT	N	N	PASSENGER EQUIPMENT An item of equipment of a particular type actually available at a location within a PLACE or a VEHICLE	PASSENGER EQUIPMENT <i>same as TM6</i>		



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
PASSENGER INFORMATION EQUIPMENT	P2	PI FACILITY		N	N	PASSENGER INFORMATION EQUIPMENT A public transport information piece of equipment, as for instance terminals (on street, at information desks, telematic, ...) or printed material (leaflets displayed at stops, booklets, ...).	PASSENGER INFORMATION EQUIPMENT <i>same as TM6</i>		
PASSENGER SAFETY EQUIPMENT	P2			N	N	PASSENGER SAFETY EQUIPMENT Specialisation of PASSENGER EQUIPMENT for passenger safety.	PASSENGER SAFETY EQUIPMENT <i>same as TM6</i>		
PASSENGER STOP ASSIGNMENT	P2		PASSENGER STOP POINT ASSIGNMENT	N	N	PASSENGER STOP ASSIGNMENT The allocation of a SCHEDULED STOP POINT (i.e. a SCHEDULED STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific STOP PLACE for a SERVICE JOURNEY, and also possibly a QUAY and BOARDING POSITION.	PASSENGER STOP ASSIGNMENT The allocation of a SCHEDULED STOP POINT (i.e. a STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific STOP PLACE for a PASSENGER SERVICE, and also possibly a QUAY and BOARDING POSITION.		
PASSENGER STOP POINT ASSIGNMENT	re-named		x	A	A	PASSENGER STOP ASSIGNMENT	PASSENGER STOP ASSIGNMENT		PASSENGER STOP POINT ASSIGNMENT The allocation of a SCHEDULED STOP POINT (i.e. a STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific STOP PLACE, and also possibly a QUAY and BOARDING POSITION. May be subject to a VALIDITY CONDITION. Assignment may be done in advance, or be done in-real-time as a DYNAMIC STOP POINT ASSIGNMENT made as a result of a CONTROL ACTION. May be accompanied by a VEHICLE STOPPING POINT ASSIGNMENT for the allocation of a VEHICLE to a VEHICLE STOPPING PLACE and VEHICLE STOPPING POSITION.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
PASSING TIME	P3	x		S	S	PASSING TIME Time data concerning public transport vehicles passing a particular POINT; e.g. arrival time, departure time, waiting time.	PASSING TIME <i>same as TM6</i>	PASSING TIME <i>same as TM6</i>	
PATH ASSIGNMENT	re-named		x	A	A	NAVIGATION PATH ASSIGNMENT	NAVIGATION PATH ASSIGNMENT		PATH ASSIGNMENT The allocation of a specific NAVIGATION PATH with which to make a CONNECTION LINK.
PATH JUNCTION	P2		x	Md	Md	PATH JUNCTION A designated point, inside or outside of a STOP PLACE or POINT OF INTEREST, at which two or more PATH LINKs may connect or branch.	PATH JUNCTION <i>same as TM6</i>		PATH JUNCTION A designated point, inside or outside of a STOP PLACE or POINT OF INTEREST, at which two or more PATH LINKs may connect. This allows ACCESS PATH LINKs to be linked together outside of a specific STOP PLACE. Within a STOP PLACE, ACCESS SPACES are usually used as junction points.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
PATH LINK	P2		x	Md	Md	PATH LINK A link within a PLACE of or between two PLACES (that is STOP PLACES, ACCESS SPACES or QUAYS, BOARDING POSITIONS,, POINTS OF INTEREST etc or PATH JUNCTIONS) that represents a step in a possible route for pedestrians, cyclists or other out-of-vehicle passengers within or between a PLACE. NOTE: It is possible but not mandatory that a PATH LINK projects onto a more detailed set of infrastructure or mapping links that plot the spatial course, allowing it to be represented on maps and to tracking systems.	PATH LINK <i>same as TM6</i>		PATH LINK A link between any two STOP PLACES, STOP PLACE SPACES (that is, ACCESS SPACES or QUAYS or BOARDING POSITIONS), POINTS OF INTEREST or PATH JUNCTIONS that represents a step in a possible route for pedestrians, cyclists or other out of vehicle passengers within or between a PLACE. A STOP PATH LINK is used within a STOP PLACE and may have further properties and attributes derived from its relationship with the STOP PLACE. An ACCESS PATH LINK is used outside of a STOP PLACE. NOTE It is possible but not mandatory that a PATH LINK projects onto a more detailed set of infrastructure or mapping links that plot the spatial course, allowing it to be represented on maps and to tracking systems.
PATH LINK END	P2			N	N	PATH LINK END Beginning or end SITE for a PATH LINK. May be linked to a specific LEVEL of the SITE.	PATH LINK END <i>same as TM6</i>		
PATH LINK IN SEQUENCE	P2		x	S	S	PATH LINK IN SEQUENCE A step of a NAVIGATION PATH indicating traversal of a particular PATH LINK as part of a recommended route. The same PATH LINK may occur in different sequences in different NAVIGATION PATHS.	PATH LINK IN SEQUENCE <i>same as TM6</i>		PATH LINK IN SEQUENCE <i>same as TM6</i>

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
PATH LINK VIEW	A		x	A	A				PATH LINK VIEW A PATH LINK VIEW specifies information about which details of a PATH LINK referenced by a PATH LINK IN SEQUENCE should be used when describing a step of a NAVIGATION PATH.
PI FACILITY	re-named	x		A	A	PASSENGER INFORMATION EQUIPMENT	PASSENGER INFORMATION EQUIPMENT	PI FACILITY A public transport information facility, as for instance terminals (on street, at information desks, telematic, ...) or printed material (leaflets displayed at stops, booklets, ...).	
PLACE	P1	x		S	S	PLACE A geographic place of any type which may be specified as the origin or destination of a trip. A PLACE may be represented as a POINT (dimension 0) , a road section (dimension 1) or a ZONE (dimension 2).	PLACE <i>same as TM6</i>	PLACE A geographic place of any type which may be specified as the origin or destination of a trip. A PLACE may be of dimension 0 (a POINT), 1 (a road section) or 2 (a ZONE).	
PLACE ACCESS EQUIPMENT	P2			N	N	PLACE ACCESS EQUIPMENT Specialisation of PLACE EQUIPMENT dedicated to access (e.g. lifts, entrances, stairs, ramps, etc.).	PLACE ACCESS EQUIPMENT <i>same as TM6</i>		
PLACE EQUIPMENT	P1		STOP PLACE EQUIPMENT	N	N	PLACE EQUIPMENT An item of equipment of a particular type actually available at a location within a PLACE.	PLACE EQUIPMENT <i>same as TM6</i>		
PLACE IN SEQUENCE	P2			N	N	PLACE IN SEQUENCE Point traversed by a NAVIGATION PATH in sequence, connected by a PATH LINK to the next point. May be a Place, PATH JUNCTION or POINT.	PLACE IN SEQUENCE POINT building up a NAVIGATION PATH within an ordered set of other PLACES IN SEQUENCE. May also be the beginning or end of a PATH LINK IN SEQUENCE.		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
PLACE LIGHTING	P2			N	N	PLACE LIGHTING Specialisation of PLACE EQUIPMENT for LIGHTING EQUIPMENT (e.g. lamp post).	PLACE LIGHTING <i>same as TM6</i>		
PLACE SIGN	P2			N	N	PLACE SIGN Sign with the name of a PLACE on it.	PLACE SIGN <i>same as TM6</i>		
PLATFORM CHANGE	A		x	A	A				PLATFORM CHANGE A CONTROL ACTION of interest to passengers marking the reassignment of a SCHEDULED STOP POINT from one designated QUAY and or BOARDING POSITION to another.
POINT	P1	x		S	S	POINT A 0-dimensional node of the network used for the spatial description of the network. POINTs may be located by a LOCATION in a given LOCATING SYSTEM.	POINT <i>same as TM6</i>	POINT <i>same as TM6</i>	
POINT IN JOURNEY PATTERN	P2	x		Md	S	POINT IN JOURNEY PATTERN A SCHEDULED STOP POINT or TIMING POINT in a JOURNEY PATTERN with its order in that JOURNEY PATTERN.	POINT IN JOURNEY PATTERN A STOP POINT or TIMING POINT in a JOURNEY PATTERN with its order in that JOURNEY PATTERN.	POINT IN JOURNEY PATTERN <i>same as NeTex</i>	
POINT IN LINK SEQUENCE	P1	x		S	S	POINT IN LINK SEQUENCE A POINT in a LINK SEQUENCE indicating its order in that particular LINK SEQUENCE.	POINT IN LINK SEQUENCE <i>same as TM6</i>	POINT IN LINK SEQUENCE <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
POINT OF INTEREST	P2		x	Md	Md	POINT OF INTEREST A type of PLACE to or through which passengers may wish to navigate as part of their journey and which is modelled in detail by journey planners.	POINT OF INTEREST <i>same as TM6</i>		POINT OF INTEREST A type of PLACE to or through which passengers may wish to navigate as part of their journey and which is modelled in detail by journey planners. A POINT OF INTEREST may further have a complex spatial substructure with constrained POINT OF INTEREST ENTRANCES and access pathways described using ACCESS PATH LINKS. A journey planner will normally provide an optimised route from a STOP PLACE to a POINT OF INTEREST ENTRANCE using a NAVIGATION PATH comprising one or more PATH LINKS IN SEQUENCE.
POINT OF INTEREST CLASSIFICATION	P2		x	Md	Md	POINT OF INTEREST CLASSIFICATION A classification of a POINT OF INTEREST that may be used in a CLASSIFICATION HIERARCHY to categorise the point by nature of interest using a systematic taxonomy, for example Museum, Football, Stadium.	POINT OF INTEREST CLASSIFICATION <i>same as TM6</i>		POINT OF INTEREST CLASSIFICATION A category used to classify a POINT OF INTEREST by nature of interest using a systematic taxonomy, for example Museum, Football Stadium.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
POINT OF INTEREST CLASSIFICATION HIERARCHY	P2		x	Md	Md	POINT OF INTEREST CLASSIFICATION HIERARCHY A logical hierarchy for organizing POINT OF INTEREST CLASSIFICATIONS. A POINT OF INTEREST CLASSIFICATION can belong to more than one hierarchy	POINT OF INTEREST CLASSIFICATION HIERARCHY <i>same as TM6</i>		POINT OF INTEREST CLASSIFICATION HIERARCHY A set of multilevel hierarchies used to organise POINT OF INTEREST CLASSIFICATIONS systematically. EXAMPLE 1 Cultural Attraction – Museum – Art Gallery, or Government Office – Department for Transport. A POINT OF INTEREST CLASSIFICATION can belong to more than one hierarchy. EXAMPLE 2 A given Sports Stadium can appear as both a Football Ground and a Rugby Ground.
POINT OF INTEREST CLASSIFICATION MEMBERSHIP	P2		POINT OF INTEREST MEMBERSHIP	N	N	POINT OF INTEREST CLASSIFICATION MEMBERSHIP The POINT OF INTEREST CLASSIFICATION and POINT OF INTEREST CLASSIFICATION MEMBERSHIP are used to encode a hierarchy of classifications to index and find different types of POINT OF INTEREST. For example, Educational Building -> School -> Primary School, or Cultural Attraction -> Museum -> Art Museum. POINT OF INTEREST CLASSIFICATION MEMBERSHIP does not have to be disjoint, i.e. the same category may appear in more than one classification.	POINT OF INTEREST CLASSIFICATION MEMBERSHIP <i>same as TM6</i>		
POINT OF INTEREST COMPONENT	P2			N	N	POINT OF INTEREST COMPONENT Specialisation of SITE COMPONENT for COMPONENT of POINT OF INTEREST. Usually used for POINT OF INTEREST SPACES.	POINT OF INTEREST COMPONENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
POINT OF INTEREST ENTRANCE	P2		x	Md	Md	POINT OF INTEREST ENTRANCE Specialisation of ENTRANCE to enter/exit a POINT OF INTEREST.	POINT OF INTEREST ENTRANCE <i>same as TM6</i>		POINT OF INTEREST ENTRANCE A specific located external ENTRANCE to a POINT OF INTEREST. A journey planner will normally provide an optimised route from a STOP PLACE to a POINT OF INTEREST ENTRANCE as an ACCESS PATH LINK.
POINT OF INTEREST MEMBERSHIP	re-named		x	A	A	POINT OF INTEREST CLASSIFICATION MEMBERSHIP			POINT OF INTEREST MEMBERSHIP Assignment of a POINT OF INTEREST to one or more POINT OF INTEREST CLASSIFICATIONS.
POINT OF INTEREST SPACE	P2			N	N	POINT OF INTEREST SPACE Specialisation of POINT OF INTEREST COMPONENT for SPACES. A physical area within the POINT OF INTEREST, such as a concourse.	POINT OF INTEREST SPACE <i>same as TM6</i>		
POINT OF INTEREST VEHICLE ENTRANCE	P2			N	N	POINT OF INTEREST VEHICLE ENTRANCE A physical entrance or exit to/from a POINT OF INTEREST for vehicles.	POINT OF INTEREST VEHICLE ENTRANCE <i>same as TM6</i>		
POINT ON LINK	P1	x		S	S	POINT ON LINK A POINT on a LINK which is not needed for LINK definition, but may be used for other purposes, e.g. for purposes of automatic vehicle monitoring, passenger information or for driver information	POINT ON LINK A POINT on a LINK which is not needed for LINK definition, but may be used for other purposes, e.g. for purposes of AVM or PI, or for driver information.	POINT ON LINK <i>same as NeTEx</i>	
POINT ON ROUTE	P2	x		S	S	POINT ON ROUTE A ROUTE POINT used to define a ROUTE with its order on that ROUTE.	POINT ON ROUTE <i>same as TM6</i>	POINT ON ROUTE <i>same as TM6</i>	



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
POINT PROJECTION	P1	x		S	S	POINT PROJECTION An oriented correspondence from one POINT of a source layer, onto a entity in a target layer: e.g. POINT, LINK, LINK SEQUENCE, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.	POINT PROJECTION <i>same as TM6</i>	POINT PROJECTION <i>same as TM6</i>	
POSTAL ADDRESS	P1		x	Md	Md	POSTAL ADDRESS A specification of ADDRESS refining it by using the attributes used for conventional identification for mail. Comprises variously a building Identifier, Street name, Post code and other descriptors.	POSTAL ADDRESS <i>same as TM6</i>		POSTAL ADDRESS The data associated with a PLACE that can be used to describe the geographical context of a PLACE for the purposes of identifying it. The POSTAL ADDRESS refines the ADDRESS and uses the attributes used for conventional identification for mail. Comprises variously a building Identifier, Street name, Post code and other descriptors.
PROPERTY OF DAY	P1	x		S	S	PROPERTY OF DAY A property which a day may possess, such as school holiday, weekday, summer, winter etc.	PROPERTY OF DAY <i>same as TM6</i>	PROPERTY OF DAY <i>same as TM6</i>	
PSYCHOSENSORY NEED	P1			N	N	PSYCHOSENSORY NEED A specific USER NEED, i.e. a constraint of a passenger as regards his psycho-sensory impairments, such as visual impairment, auditory impairment, averse to confined spaces, etc.	PSYCHOSENSORY NEED <i>same as TM6</i>		
PURPOSE OF EQUIPMENT PROFILE	P1	x		S	S	PURPOSE OF EQUIPMENT PROFILE A functional purpose which requires a certain set of equipment of different types put together in a VEHICLE EQUIPMENT PROFILE.	PURPOSE OF EQUIPMENT PROFILE A functional purpose which requires a certain set of equipment of different types put together in a VEHICLE EQUIPMENT PROFILE or STOP POINT EQUIPMENT PROFILE.	PURPOSE OF EQUIPMENT PROFILE <i>same as NeTEx</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
PURPOSE OF GROUPING	P1	x		S	S	PURPOSE OF GROUPING Functional purpose for which GROUPs of elements are defined. The PURPOSE OF GROUPING may be restricted to one or more types of the given object.	PURPOSE OF GROUPING <i>same as TM6</i>	PURPOSE OF GROUPING <i>same as TM6</i>	
PURPOSE OF JOURNEY PARTITION	P3	x		Md	Md	PURPOSE OF JOURNEY PARTITION An operational purpose changing within a JOURNEY PATTERN and with this subdividing the SERVICE JOURNEY into JOURNEY PARTs.	PURPOSE OF JOURNEY PARTITION <i>same as TM6</i>	PURPOSE OF JOURNEY PARTITION An operational purpose to change the characteristic of within a JOURNEY PATTERN and with this subdividing the SERVICE JOURNEY into JOURNEY PARTs.	
QUAY	P2		x	Md	Md	QUAY A place such as platform, stance, or quayside where passengers have access to PT vehicles, Taxi, cars or other means of transportation. A QUAY may serve one or more VEHICLE STOPPING PLACES and be associated with one or more SCHEDULED STOP POINTS. A QUAY may contain other sub QUAYs. A child QUAY must be physically contained within its parent QUAY.	QUAY A place such as platform, stance, or quayside where passengers have access to PT vehicles, Taxi, cars or other means of transportation. A QUAY may serve one or more VEHICLE STOPPING PLACES and be associated with one or more STOP POINTS. A QUAY may contain other sub QUAYs. A child QUAY must be physically contained within its parent QUAY.		QUAY A place such as platform, stance, or quayside where passengers have access to PT vehicles, Taxi cars or other means of transportation. A QUAY may serve one or more VEHICLE STOPPING PLACES and be associated with one or more STOP POINTS. A QUAY is a recursive structure that may contain other sub QUAYs. A child QUAY must be physically contained within its parent QUAY.
QUAY ENTRANCE	A		x	A	A				QUAY ENTRANCE An entrance or exit for passengers to/from a QUAY.
QUEUING EQUIPMENT	P2			N	N	QUEUING EQUIPMENT Specialisation of PLACE ACCESS EQUIPMENT dedicated to queuing.	QUEUING EQUIPMENT <i>same as TM6</i>		
RAILWAY ELEMENT	P2	x		S	S	RAILWAY ELEMENT A type of INFRASTRUCTURE LINK used to describe a railway network.	RAILWAY ELEMENT <i>same as TM6</i>	RAILWAY ELEMENT <i>same as TM6</i>	
RAILWAY JUNCTION	P2	x		S	S	RAILWAY JUNCTION A type of INFRASTRUCTURE POINT used to describe a railway network.	RAILWAY JUNCTION <i>same as TM6</i>	RAILWAY JUNCTION <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
RAMP EQUIPMENT	P2			N	N	RAMP EQUIPMENT Specialisation of PLACE ACCESS EQUIPMENT for ramps (provides ramp characteristics like length, gradient, etc.).	RAMP EQUIPMENT <i>same as TM6</i>		
RELIEF OPPORTUNITY	P3	x		S	S	RELIEF OPPORTUNITY A time in a BLOCK where a vehicle passes a RELIEF POINT. This opportunity may or may not be actually used for a relief.	RELIEF OPPORTUNITY <i>same as TM6</i>	RELIEF OPPORTUNITY <i>same as TM6</i>	
RELIEF POINT	P2	x		S	S	RELIEF POINT A TIMING POINT where a relief is possible, i.e. a driver may take on or hand over a vehicle. The vehicle may sometimes be left unattended.	RELIEF POINT <i>same as TM6</i>	RELIEF POINT <i>same as TM6</i>	
RESOURCE FRAME	P1			N	N	RESOURCE FRAME A set of resource data to which the same VALIDITY CONDITIONS have been assigned.	RESOURCE FRAME <i>same as TM6</i>		
RESPONSIBILITY ROLE	P1			N	N	RESPONSIBILITY ROLE A particular role an ORGANISATION or an ORGANISATION PART is playing as regards certain data, for example data origination, data augmentation, data aggregation, data distribution, planning, operation, control, ownership etc).	RESPONSIBILITY ROLE <i>same as TM6</i>		
RESPONSIBILITY ROLE ASSIGNMENT	P1			N	N	RESPONSIBILITY ROLE ASSIGNMENT The assignment of one or more roles to an ORGANISATION or an ORGANISATION PART as regards the responsibility it will have as regards specific data (e.g. ownership, planning, etc.) and the management of this data (e.g. distribution, updates, etc.).	RESPONSIBILITY ROLE ASSIGNMENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
RESPONSIBILITY SET	P1			N	N	RESPONSIBILITY SET A list of possible responsibilities over one or more ENTITIES IN VERSION., resulting from the process of the assignment of RESPONSIBILITY ROLES (such as data origination, ownership, etc) on specific data (instances) to ORGANISATIONS or ORGANISATION PARTs.	RESPONSIBILITY SET <i>same as TM6</i>		
RETAIL SERVICE	P2			N	N	RETAIL SERVICE Specialisation of LOCAL SERVICE dedicated to retail services.	RETAIL SERVICE <i>same as TM6</i>		
RHYTHMICAL JOURNEY GROUP	P3			N	N	RHYTHMICAL JOURNEY GROUP A group of VEHICLE JOURNEYS following the same JOURNEY PATTERN having the same rhythm" every hour (for example runs at xxh10, xxh25 and xxh45... ) between a specified start and end time."	RHYTHMICAL JOURNEY GROUP <i>same as TM6</i>		
ROAD ADDRESS	P1		x	Md	Md	ROAD ADDRESS Specialization of ADDRESS refining it by using the characteristics such as road number, and name used for conventional identification of along a road.	ROAD ADDRESS <i>same as TM6</i>		ROAD ADDRESS The data associated with a PLACE that can be used to describe the geographical context of a PLACE for the purposes of identifying it in terms of the road network. The ROAD ADDRESS refines the ADDRESS of a PLACE located on a road and uses the attributes such as road number, and name used for conventional identification of a road.
ROAD ELEMENT	P2	x		S	S	ROAD ELEMENT A type of INFRASTRUCTURE LINK used to describe a road network.	ROAD ELEMENT <i>same as TM6</i>	ROAD ELEMENT <i>same as TM6</i>	
ROAD JUNCTION	P2	x		S	S	ROAD JUNCTION A type of INFRASTRUCTURE POINT used to describe a road network.	ROAD JUNCTION <i>same as TM6</i>	ROAD JUNCTION <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
ROUGH SURFACE	P2			N	N	ROUGH SURFACE Specialisation of PLACE EQUIPMENT for rough surfaces, giving properties of surface texture, mainly for impaired person information.	ROUGH SURFACE <i>same as TM6</i>		
ROUTE	P2	x		S	S	ROUTE An ordered list of located POINTs defining one single path through the road (or rail) network. A ROUTE may pass through the same POINT more than once.	ROUTE <i>same as TM6</i>	ROUTE <i>same as TM6</i>	
ROUTE LINK	P2	x		S	S	ROUTE LINK An oriented link between two ROUTE POINTs allowing the definition of a unique path through the network.	ROUTE LINK <i>same as TM6</i>	ROUTE LINK <i>same as TM6</i>	
ROUTE POINT	P2	x		S	S	ROUTE POINT A POINT used to define the shape of a ROUTE through the network.	ROUTE POINT <i>same as TM6</i>	ROUTE POINT <i>same as TM6</i>	
ROUTING CONSTRAINT ZONE	P2			N	N	ROUTING CONSTRAINT ZONE A ZONE defining a ROUTING CONSTRAINT. The ZONE may be defined by its contained SCHEDULED STOP POINTS or by its boundary points.Examples of routing constraints are : If you board in this ZONE, you can't alight in the same ZONE".	ROUTING CONSTRAINT ZONE <i>same as TM6</i>		
RUBBISH DISPOSAL	P2			N	N	RUBBISH DISPOSAL Specialization of EQUIPMENT for Rubbish disposal, describing rubbish types, etc.	RUBBISH DISPOSAL <i>same as TM6</i>		
SANITARY EQUIPMENT	P2			N	N	SANITARY EQUIPMENT Specialisation of PASSENGER EQUIPMENT for sanitary facilities.	SANITARY EQUIPMENT <i>same as TM6</i>		
SCHEDULED STOP POINT	P2	STOP POINT		N	N	SCHEDULED STOP POINT A POINT where passengers can board or alight from vehicles.	SCHEDULED STOP POINT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
SCHEMATIC MAP	P1			N	N	SCHEMATIC MAP A map representing schematically the layout of the topographic structure of PLACES (e.g. a set of SITES) or the public transport network (a set of LINES). It can include a pixel projection of a set of ENTITIES onto a bitmap image so as to support hyperlinked interactions.	SCHEMATIC MAP A map representing schematically the layout of the topographic structure of the public transport network (a set of LINES) and a set of SITES. It can include a pixel projection of a set of ENTITIES onto a bitmap image so as to support hyperlinked interactions.		
SEATING EQUIPMENT	P2			N	N	SEATING EQUIPMENT Specialisation of PLACE EQUIPMENT describing the properties of seating	SEATING EQUIPMENT <i>same as TM6</i>		
SERVICE CALENDAR	P1			N	N	SERVICE CALENDAR A collection of DAY TYPE ASSIGNMENTS.	SERVICE CALENDAR <i>same as TM6</i>		
SERVICE CALENDAR FRAME	P1			N	N	SERVICE CALENDAR FRAME A coherent set of assignments of OPERATING DAYS to DAY TYPES.	SERVICE CALENDAR FRAME NeTeX explicit FRAME containing SERVICE CALENDAR information, to which the same VALIDITY CONDITIONS have been assigned.		
SERVICE EXCLUSION	P2			N	N	SERVICE EXCLUSION A constraint expressing the fact that the service, on a specific JOURNEY PATTERN (usually a flexible transport service JOURNEY PATTERN) cannot operate when another (regular) service operates. This may occur only on a subpart of the JOURNEY PATTERN, or only on one or some specific SCHEDULED STOP POINTS.	SERVICE EXCLUSION <i>same as TM6</i>		
SERVICE FACILITY SET	P1			N	N	SERVICE FACILITY SET Set of FACILITIES available for a specific VEHICLE TYPE (e.g. carriage equipped with low floor) possibly only for a service (or for a SERVICE JOURNEY or a JOURNEY).	SERVICE FACILITY SET Set of FACILITIES available for a SERVICE JOURNEY or a JOURNEY PART. The set may be available only for a specific VEHICLE TYPE within the SERVICE (e.g. carriage equipped with low floor).		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
SERVICE FRAME	P2	NETWORK VERSION		N	N	SERVICE FRAME A set of network service data (and other data logically related to these) to which the same VALIDITY CONDITIONS has been assigned.	SERVICE FRAME A set of network data (and other data logically related to these) to which the same validity period has been assigned.		
SERVICE JOURNEY	P3	x		S	S	SERVICE JOURNEY A passenger carrying VEHICLE JOURNEY for one specified DAY TYPE. The pattern of working is in principle defined by a SERVICE JOURNEY PATTERN.	SERVICE JOURNEY <i>same as TM6</i>	SERVICE JOURNEY <i>same as TM6</i>	
SERVICE JOURNEY INTERCHANGE	P3	x		Md	S	SERVICE JOURNEY INTERCHANGE The scheduled possibility for transfer of passengers between two SERVICE JOURNEYS at the same or different SCHEDULED STOP POINTS.	SERVICE JOURNEY INTERCHANGE The scheduled possibility for transfer of passengers between two SERVICE JOURNEYS at the same or different STOP POINTS.	SERVICE JOURNEY INTERCHANGE <i>same as NeTEx</i>	
SERVICE JOURNEY PATTERN	P2	x		S	S	SERVICE JOURNEY PATTERN The JOURNEY PATTERN for a (passenger carrying) SERVICE JOURNEY.	SERVICE JOURNEY PATTERN <i>same as TM6</i>	SERVICE JOURNEY PATTERN <i>same as TM6</i>	
SERVICE JOURNEY PATTERN INTERCHANGE	P3	x		Md	S	SERVICE JOURNEY PATTERN INTERCHANGE A recognised/organised possibility for passengers to change public transport vehicles using two SCHEDULED STOP POINTS (which may be identical) on two particular SERVICE JOURNEY PATTERNS, including the maximum wait duration allowed and the standard to be aimed at. These may supersede the times given for the DEFAULT INTERCHANGE. Schedulers may use this entity for synchronisation of journeys.	SERVICE JOURNEY PATTERN INTERCHANGE A recognised/organised possibility for passengers to change public transport vehicles using two STOP POINTS (which may be identical) on two particular SERVICE JOURNEY PATTERNS, including the maximum wait duration allowed and the standard to be aimed at. These may supersede the times given for the DEFAULT INTERCHANGE. Schedulers may use this entity for synchronisation of journeys.	SERVICE JOURNEY PATTERN INTERCHANGE <i>same as NeTEx</i>	
SERVICE LINK	P2	x		Md	Md	SERVICE LINK A LINK between an ordered pair of SCHEDULED STOP POINTS.	SERVICE LINK <i>same as TM6</i>	SERVICE LINK <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
SERVICE PATTERN	P2	x		S	S	SERVICE PATTERN The subset of a JOURNEY PATTERN made up only of STOP POINTs IN JOURNEY PATTERN.	SERVICE PATTERN <i>same as TM6</i>	SERVICE PATTERN <i>same as TM6</i>	
SERVICE RESTRICTION	P1			N	N	SERVICE RESTRICTION Parameters describing the limitations as regards the use of equipment or service.	SERVICE RESTRICTION <i>same as TM6</i>		
SERVICE SITE	P2	x		Md	Md	SERVICE SITE A sub-type of SITE which is of specific interest for the operator (e.g. where a joint service or a joint fee is proposed), other than a STOP PLACE.	SERVICE SITE <i>same as TM6</i>	SERVICE SITE A sub-type of SITE which is of specific interest for the operator (e.g. where a joint service or a joint fee is proposed).	
SERVED ORGANISATION	P1			N	N	SERVED ORGANISATION A public or private organisation for which public transport services are provided on specific days, e.g. a school, university or works.	SERVED ORGANISATION <i>same as TM6</i>		
SHELTER EQUIPMENT	P2			N	N	SHELTER EQUIPMENT Specialisation of WAITING EQUIPMENT for a shelter.	SHELTER EQUIPMENT <i>same as TM6</i>		
SHORT TERM DAY TYPE ASSIGNMENT	re-named	x		A	A	DAY TYPE ASSIGNMENT	DAY TYPE ASSIGNMENT	SHORT TERM DAY TYPE ASSIGNMENT A specification of a particular DAY TYPE which will be valid during a TIME BAND on a OPERATING DAY for a GROUP OF LINES. This assignment overrides the DAY TYPE which was generally chosen for this OPERATING DAY in the overall DAY TYPE assignment plan.	
SIGN EQUIPMENT	P2			N	N	SIGN EQUIPMENT Specialisation of PLACE EQUIPMENT for signs (heading signs, etc.).	SIGN EQUIPMENT <i>same as TM6</i>		



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
SIMPLE FEATURE	P1	x		S	S	SIMPLE FEATURE An abstract representation of elementary objects related to the spatial representation of the network. POINTs (0-dimensional objects), LINKs (1-dimensional objects) and ZONEs (2-dimensional objects) may be viewed as SIMPLE FEATUREs.	SIMPLE FEATURE <i>same as TM6</i>	SIMPLE FEATURE <i>same as TM6</i>	
SITE	P2	x		S	Md	SITE A well known PLACE to which passengers may refer to indicate the origin or a destination of a trip.	SITE A type of PLACE, such as a STOP PLACE, POINT OF INTEREST or ADDRESS, to which passengers may wish to travel. A SITE can have designated ENTRANCES that represent the available points of access for different USER NEEDs.	SITE <i>same as TM6</i>	
SITE COMPONENT	P2			N	N	SITE COMPONENT An element of a SITE describing a part of its structure. SITE COMPONENTs share common properties for data management, accessibility and other features.	SITE COMPONENT <i>same as TM6</i>		
SITE CONNECTION	P2			N	N	SITE CONNECTION The physical (spatial) possibility for a passenger to change from one public transport vehicle to another to continue the trip, determined by physical locations, such as SITEs and/or its components and/or ENTRANCES, in particular STOP PLACEs and/or its components. Different times may be necessary to cover the resulting distance, depending on the kind of passenger.	SITE CONNECTION <i>same as TM6</i>		
SITE CONNECTION END	P2			N	N	SITE CONNECTION END One end of a SITE CONNECTION.	SITE CONNECTION END <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
SITE ELEMENT	P2			N	N	SITE ELEMENT A type of ADDRESSABLE PLACE specifying common properties of a SITE or a SITE COMPONENT to describe it, including accessibility.	SITE ELEMENT A type of PLACE specifying common properties of a SITE or a SITE COMPONENT to describe it., including accessibility.		
SITE EQUIPMENT	P2			N	N	SITE EQUIPMENT Specialisation of PLACE EQUIPMENT for SITES (e.g. LUGGAGE LOCKER, WAITING EQUIPMENT, TROLLEY STAND, etc.)	SITE EQUIPMENT <i>same as TM6</i>		
SITE FACILITY SET	P1			N	N	SITE FACILITY SET Set of FACILITIES available for a SITE ELEMENT .	SITE FACILITY SET <i>same as TM6</i>		
SITE FRAME	P2			N	N	SITE FRAME A set of SITE data to which the same VALIDITY CONDITIONS have been assigned.	SITE FRAME NeTeX explicit FRAME containing SITE information, to which the same VALIDITY CONDITIONS have been assigned.		
SPECIAL SERVICE	P3	x		S	S	SPECIAL SERVICE A work of a vehicle that is not planned in a classical way, i.e. that is generally not based on VEHICLE JOURNEYS using JOURNEY PATTERNS. It involves specific characteristics (such as specific access rights) and/or may be operated under specific circumstances.	SPECIAL SERVICE <i>same as TM6</i>	SPECIAL SERVICE <i>same as TM6</i>	
STAIR EQUIPMENT	P2			N	N	STAIR EQUIPMENT Specialisation of PLACE ACCESS EQUIPMENT for stairs (stair, escalator, staircase, etc.).	STAIR EQUIPMENT <i>same as TM6</i>		
STAIRCASE EQUIPMENT	P2			N	N	STAIRCASE EQUIPMENT Specialisation of STAIR EQUIPMENT for stair cases.	STAIRCASE EQUIPMENT <i>same as TM6</i>		
STOP AREA	P2	x		Md	Md	STOP AREA A group of SCHEDULED STOP POINTs close to each other.	STOP AREA <i>same as TM6</i>	STOP AREA A group of STOP POINTs close to each other.	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
STOP ASSIGNMENT	P2			N	N	STOP ASSIGNMENT The allocation of a SCHEDULED STOP POINT (i.e. a SCHEDULED STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific STOP PLACE, for either a SERVICE JOURNEY or VEHICLE SERVICE.	STOP ASSIGNMENT The allocation of a SCHEDULED STOP POINT (i.e. a SCHEDULED STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) to a specific STOP PLACE, for either a Passenger JOURNEY or VEHICLE SERVICE		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
STOP PATH LINK	A		x	A	A	PATH LINK			<p>STOP PATH LINK</p> <p>A path between any two physical STOP PLACE SPACEs within an interchange that represents a step of a possible transfer route for passengers within a STOP PLACE. A STOP PATH LINK is a STOP PLACE COMPONENT in its own right and may have ACCESSIBILITY LIMITATIONS and CHECKPOINTS associated with it to indicate impediments that may prevent access or slow a user down. A sequence of one or more STOP PATH LINKs may make up a NAVIGATION PATH. Each end of a STOP PATH LINK should connect to an entity that is a concrete subtype of an ABSTRACT STOP PLACE SPACE, that is, ACCESS SPACE or QUAY or BOARDING POSITION. Each end of a STOP PATH LINK may further have a specific ENTRANCE of the same concrete subtype of ABSTRACT STOP PLACE SPACE associated with that end, that is QUAY ENTRANCE, ACCESS SPACE ENTRANCE or BOARDING POSITION ENTRANCE. STOP PATH LINKs should be used only within an interchange. ACCESS PATH LINKs should be used for PATH LINKs outside the physical STOP PLACE.</p>

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
STOP PLACE	P2		x	S	S	STOP PLACE A place comprising one or more locations where vehicles may stop and where passengers may board or leave vehicles or prepare their trip. A STOP PLACE will usually have one or more wellknown names	STOP PLACE <i>same as TM6</i>		STOP PLACE <i>same as TM6</i>
STOP PLACE COMPONENT	P2		x	S	S	STOP PLACE COMPONENT An element of a STOP PLACE describing part of its structure. STOP PLACE COMPONENTs share common properties for data management, accessibility and other features.	STOP PLACE COMPONENT <i>same as TM6</i>		STOP PLACE COMPONENT <i>same as TM6</i>
STOP PLACE ENTRANCE	P2		x	S	S	STOP PLACE ENTRANCE A physical entrance or exit to/from a STOP PLACE for a Passenger. May be a door, barrier, gate or other recognizable point of access.	STOP PLACE ENTRANCE <i>same as TM6</i>		STOP PLACE ENTRANCE <i>same as TM6</i>

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
STOP PLACE EQUIPMENT	re-revised		x	A	A	PLACE EQUIPMENT and PASSENGER EQUIPMENT			STOP PLACE EQUIPMENT An item of equipment of a particular type actually available at a location within a STOP PLACE that is itself a place, such as QUAY, ACCESS SPACE or STOP PATH LINK.STOP PLACE EQUIPMENT may comprise information equipment; Info Equipment, Passenger Info Equipment, Signage: Stop Sign, Other Sign, Heading Sign, Access Equipment, Queueing Equipment, Stair Equipment, Lift Equipment, Ramp Equipment, Crossing Equipment, Entrance Equipment, Escalator Equipment, Staircase Equipment, Rough Surface, or other service related equipment such as Ticketing Equipment, Trolley Stand Equipment, Waiting Equipment, Passenger Safety Equipment, Luggage Locker Equipment, Shelter Equipment, Waiting Room Equipment, Sanitary Facility Equipment.
STOP PLACE SPACE	P2		x	S	S	STOP PLACE SPACE A physical area within a STOP PLACE, for example, a QUAY, BOARDING POSITION, ACCESS SPACE or EQUIPMENT PLACE	STOP PLACE SPACE <i>same as TM6</i>		STOP PLACE SPACE <i>same as TM6</i>
STOP PLACE VEHICLE ENTRANCE	P2			N	N	STOP PLACE VEHICLE ENTRANCE A physical entrance or exit to/from a STOP PLACE for a vehicle.	STOP PLACE VEHICLE ENTRANCE <i>same as TM6</i>		
STOP POINT	re-named	x		A	A	SCHEDULED STOPPOINT	SCHEDULED STOP POINT	STOP POINT A POINT where passengers can board or alight from vehicles.	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
STOP POINT EQUIPMENT PROFILE	A	x		A	A			STOP POINT EQUIPMENT PROFILE Each instantiation of this entity gives the number of items of one TYPE OF EQUIPMENT a TYPE OF STOP POINT should contain for a given PURPOSE OF EQUIPMENT PROFILE. The set of instantiations for one TYPE OF STOP POINT and one purpose gives one complete 'profile'.	
STOP POINT IN JOURNEY PATTERN	P2	x		Md	Md	STOP POINT IN JOURNEY PATTERN A POINT in a JOURNEY PATTERN which is a SCHEDULED STOP POINT.	STOP POINT IN JOURNEY PATTERN <i>same as TM6</i>	STOP POINT IN JOURNEY PATTERN A POINT in a JOURNEY PATTERN which is a STOP POINT.	
SUBMODE	P1			N	N	SUBMODE A variant of a MODE, as for instance international or domestic rail (rail being the MODE).	SUBMODE <i>same as TM6</i>		
SUITABILITY	P1		x	Md	Md	SUITABILITY A statement of whether a particular USER NEED can be met. It can be used to state whether a SITE can be accessed by a passenger with a particular USER NEED.	SUITABILITY <i>same as TM6</i>		SUITABILITY Whether a particular facility such as a STOP PLACE COMPONENT or VEHICLE can be used by a passenger with a particular USER NEED.
TARGET PASSING TIME	P3	x		S	S	TARGET PASSING TIME Time data about when a public transport vehicle should pass a particular POINT IN JOURNEY PATTERN on a particular DATED VEHICLE JOURNEY, in order to match the latest valid plan.	TARGET PASSING TIME <i>same as TM6</i>	TARGET PASSING TIME <i>same as TM6</i>	
TARIFF ZONE	P1	x	x	S	S	TARIFF ZONE A ZONE used to define a zonal fare structure in a zone-counting or zone-matrix system.	TARIFF ZONE <i>same as TM6</i>	TARIFF ZONE <i>same as TM6</i>	TARIFF ZONE <i>same as TM6</i>

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TEMPLATE SERVICE JOURNEY	P3			N	N	TEMPLATE SERVICE JOURNEY A passenger carrying TEMPLATE SERVICE JOURNEY. As TEMPLATE SERVICE JOURNEY, it may represent multiple journeys.	TEMPLATE SERVICE JOURNEY <i>same as TM6</i>		
TEMPLATE VEHICLE JOURNEY	P3			N	N	TEMPLATE VEHICLE JOURNEY A repeating VEHICLE JOURNEY for which a frequency has been specified, either as a HEADWAY JOURNEY GROUP (e.g. every 20 minutes) or a RHYTHMICAL JOURNEY GROUP (e.g. at 15, 27 and 40 minutes past the hour). It may thus represent multiple journeys.	TEMPLATE VEHICLE JOURNEY <i>same as TM6</i>		
TICKET SCOPE	P1			N	N	TICKET SCOPE Scope of ticket.	TICKET SCOPE <i>same as TM6</i>		
TICKET VALIDATOR EQUIPMENT	P2			N	N	TICKET VALIDATOR EQUIPMENT Specialisation of PASSENGER EQUIPMENT (PLACE EQUIPMENT) describing ticket validators.	TICKET VALIDATOR EQUIPMENT <i>same as TM6</i>		
TICKETING EQUIPMENT	P2			N	N	TICKETING EQUIPMENT Specialization of PASSENGER EQUIPMENT for ticketing.	TICKETING EQUIPMENT <i>same as TM6</i>		
TICKETING SERVICE	P2			N	N	TICKETING SERVICE Specialization of LOCAL SERVICE for ticketing, providing ticket counter and online purchase information, also associated with payment method and TYPE OF TICKET.	TICKETING SERVICE <i>same as TM6</i>		
TIME BAND	P1	x		S	S	TIME BAND A period in a day, significant for some aspect of public transport, e.g. similar traffic conditions or fare category.	TIME BAND <i>same as TM6</i>	TIME BAND <i>same as TM6</i>	



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TIME DEMAND TYPE	P2	x		S	S	TIME DEMAND TYPE An indicator of traffic conditions or other factors which may affect vehicle run or wait times. It may be entered directly by the scheduler or defined by the use of TIME BANDS.	TIME DEMAND TYPE <i>same as TM6</i>	TIME DEMAND TYPE <i>same as TM6</i>	
TIME DEMAND TYPE ASSIGNMENT	P2	x		S	S	TIME DEMAND TYPE ASSIGNMENT The assignment of a TIME DEMAND TYPE to a TIME BAND depending on the DAY TYPE and GROUP OF TIMING LINKS.	TIME DEMAND TYPE ASSIGNMENT <i>same as TM6</i>	TIME DEMAND TYPE ASSIGNMENT <i>same as TM6</i>	
TIMETABLE FRAME	P3			N	N	TIMETABLE FRAME A set of timetable data to which the same VALIDITY CONDITIONS have been assigned.	TIMETABLE FRAME A set of timetable data (VEHICLE JOURNEYS and BLOCKS) to which the same VALIDITY CONDITIONS have been assigned.		
TIMETABLED PASSING TIME	P3	x		S	S	TIMETABLED PASSING TIME Long-term planned time data concerning public transport vehicles passing a particular POINT IN JOURNEY PATTERN on a specified VEHICLE JOURNEY for a certain DAY TYPE.	TIMETABLED PASSING TIME <i>same as TM6</i>	TIMETABLED PASSING TIME <i>same as TM6</i>	
TIMING LINK	P2	x		S	S	TIMING LINK An ordered pair of TIMING POINTS for which run times may be recorded.	TIMING LINK <i>same as TM6</i>	TIMING LINK <i>same as TM6.</i>	
TIMING LINK IN JOURNEY PATTERN	P2	x		S	S	TIMING LINK IN JOURNEY PATTERN The position of a TIMING LINK in a JOURNEY PATTERN. This entity is needed if a TIMING LINK is repeated in the same JOURNEY PATTERN, and separate information is to be stored about each iteration of the TIMING LINK.	TIMING LINK IN JOURNEY PATTERN <i>same as TM6</i>	TIMING LINK IN JOURNEY PATTERN <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TIMING PATTERN	P2	x		S	S	TIMING PATTERN The subset of a JOURNEY PATTERN made up only of TIMING POINTs IN JOURNEY PATTERN.	TIMING PATTERN <i>same as TM6</i>	TIMING PATTERN <i>same as TM6</i>	
TIMING POINT	P2	x		S	S	TIMING POINT A POINT against which the timing information necessary to build schedules may be recorded.	TIMING POINT <i>same as TM6</i>	TIMING POINT <i>same as TM6</i>	
TIMING POINT IN JOURNEY PATTERN	P2	x		S	S	TIMING POINT IN JOURNEY PATTERN A POINT in a JOURNEY PATTERN which is a TIMING POINT.	TIMING POINT IN JOURNEY PATTERN <i>same as TM6</i>	TIMING POINT IN JOURNEY PATTERN <i>same as TM6</i>	
TOPOGRAPHIC PLACE	P1		TOPOGRAPHICAL PLACE	N	N	TOPOGRAPHIC PLACE A type of PLACE providing the topographical context when searching for or presenting travel information, for example as the origin or destination of a trip. It may be of any size (e.g. County,City, Town, Village) and of different specificity (e.g. Greater London, London, West End, Westminster, St James s).	TOPOGRAPHIC PLACE A geographical settlement which provides topographical context when searching for or presenting travel information, for example as the origin or destination of a trip. It may be of any size (e.g. County,City, Town, Village) and of different specificity e.g. Greater London, London, West End, Westminster, St James s.A TOPOGRAPHICAL PLACE must always have a canonical gazetteer name. It may be necessary to use the hierarchical topographical relationships of the TOPOGRAPHICAL PLACE to establish a unique context with which to distinguish between two TOPOGRAPHICAL PLACES with the same name.		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TOPOGRAPHICAL DATA SYSTEM	A		x	A	A				TOPOGRAPHICAL DATA SYSTEM An extended Gazetteer of PLACES within a geographical area labelled in a consistent manner so as to be suitable for use in different contexts in customer facing services. Will include associations representing topographical relationships such as hierarchy, adjacency.
TOPOGRAPHICAL PLACE	re-named		x	A	A	TOPOGRAPHIC PLACE	TOPOGRAPHIC PLACE		TOPOGRAPHICAL PLACE A geographical settlement which provides topographical context when searching for or presenting travel information, for example as the origin or destination of a trip. It may be of any size (e.g. County, City, Town, Village) and of different specificity e.g. Greater London, London, West End, Westminster, St James's. A TOPOGRAPHICAL PLACE may be associated with a PLACE (including a STOP PLACE), but not all PLACES are TOPOGRAPHICAL PLACES. TOPOGRAPHICAL PLACES may be organised through hierarchical containment and disjoint adjacency relationships. A TOPOGRAPHICAL PLACE must always have a canonical gazetteer name. It may be necessary to use the hierarchical topographical relationships of the TOPOGRAPHICAL PLACE to establish a unique context with which to distinguish between two TOPOGRAPHICAL PLACES with the same name.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TRACE	P1	x		S	S	TRACE A way to record the context of the changes occurred in a given ENTITY instance, as regards the authors, the causes of the changes, etc., possibly accompanied by a descriptive text.	TRACE <i>same as TM6</i>	TRACE <i>same as TM6.</i>	
TRAFFIC CONTROL POINT	P2	x		S	S	TRAFFIC CONTROL POINT A POINT where the traffic flow can be influenced. Examples are: traffic lights (lanterns), barriers.	TRAFFIC CONTROL POINT <i>same as TM6</i>	TRAFFIC CONTROL POINT <i>same as TM6</i>	
TRAIN	P1	x		Md	Md	TRAIN (as VEHICLE TYPE) A VEHICLE TYPE composed of TRAIN ELEMENTs in a certain order, i.e. of wagons assembled together and generally propelled by a locomotive or one of the wagons.	TRAIN (as VEHICLE TYPE) A VEHICLE TYPE composed of TRAIN ELEMENTs in a certain order, i.e. of wagons assembled together and propelled by a locomotive or one of the wagons.	TRAIN A vehicle composed of TRAIN ELEMENTs in a certain order, i.e. of wagons assembled together and propelled by a locomotive or one of the wagons.	
TRAIN BLOCK	A	x		A	S	COMPOUND BLOCK	TRAIN BLOCK A composite train formed of several BLOCKs coupled together during a certain period. Any coupling or separation action marks the start of a new TRAIN BLOCK.	TRAIN BLOCK <i>same as NeTeX</i>	
TRAIN BLOCK PART	A	x		A	S	BLOCK PART	TRAIN BLOCK PART The position of a vehicle BLOCK within a TRAIN BLOCK.	TRAIN BLOCK PART <i>same as NeTeX</i>	
TRAIN COMPONENT	P1	x		S	S	TRAIN COMPONENT A specification of the order of TRAIN ELEMENTs in a TRAIN.	TRAIN COMPONENT <i>same as TM6</i>	TRAIN COMPONENT <i>same as TM6</i>	
TRAIN COMPONENT LABEL ASSIGNMENT	P3			N	N	TRAIN COMPONENT LABEL ASSIGNMENT The allocation of an advertised designation for a vehicle or vehicle element for passengers.	TRAIN COMPONENT LABEL ASSIGNMENT <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TRAIN ELEMENT	P1	x		S	S	TRAIN ELEMENT An elementary component of a TRAIN (e.g. wagon, locomotive).	TRAIN ELEMENT <i>same as TM6</i>	TRAIN ELEMENT <i>same as TM6</i>	
TRAIN IN COMPOUND TRAIN	P1			N	N	TRAIN IN COMPOUND TRAIN The specification of the order of TRAINS in a COMPOUND TRAIN.	TRAIN IN COMPOUND TRAIN <i>same as TM6</i>		
TRAIN NUMBER	P3			N	N	TRAIN NUMBER Specification of codes assigned to particular VEHICLE JOURNEYS when operated by TRAINS or COMPOUND TRAINS according to a functional purpose (passenger information, operation follow-up, etc)	TRAIN NUMBER <i>same as TM6</i>		
TRAIN STOP ASSIGNMENT	P2		TRAIN STOP POINT ASSIGNMENT	N	N	TRAIN STOP ASSIGNMENT The association of a TRAIN COMPONENT at a SCHEDULED STOP POINT with a specific STOP PLACE and also possibly a QUAY and BOARDING POSITION.	TRAIN STOP ASSIGNMENT <i>same as TM6</i>		
TRAIN STOP POINT ASSIGNMENT	re-named and re-vised		x	A	A	TRAIN STOP ASSIGNMENT			TRAIN STOP POINT ASSIGNMENT The association of a TRAIN, TRAIN BLOCK PART or TRAIN ELEMENT at a SCHEDULED STOP POINT with a specific STOP PLACE and also possibly a QUAY and BOARDING POSITION.
TRANSFER	P1			N	N	TRANSFER A couple of POINTs located sufficiently near that it may represent for a passenger a possibility to reach one of these POINTs when starting at the other one in a timescale which is realistic when carrying out a trip, e.g. ACCESS.	TRANSFER A couple of POINTs located sufficiently near that it may represent for a passenger a possibility to reach one of these POINTs when starting at the other one in a timescale which is realistic when carrying out a trip, e.g. CONNECTION, ACCESS.		
TRANSFER END	P1			N	N	TRANSFER END End point of a TRANSFER.	TRANSFER END <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TRANSFER RESTRICTION	P2			N	N	TRANSFER RESTRICTION A CONSTRAINT that can be applied on a CONNECTION or INTERCHANGE between two SCHEDULED STOP POINT, preventing or forbidding the passenger to use it.	TRANSFER RESTRICTION A CONSTRAINT that can be applied on a CONNECTION or INTERCHANGE between two SCHEDULED STOP POINT, preventing or forbidding the passenger to use it		
TRANSPORT MODE	re-placed and re-named	x		A	A	MODE	MODE	TRANSPORT MODE A characterisation of the operation according to the means of transport (bus, tram, metro, train, ferry, ship).	
TRAVEL AGENT	P1			N	N	TRAVEL AGENT Specialisation of ORGANISATION for TRAVEL AGENT	TRAVEL AGENT <i>same as TM6</i>		
TRAVELATOR EQUIPMENT	P2			N	N	TRAVELATOR EQUIPMENT Specialisation of PLACE ACCESS EQUIPMENT for travelators (provides travelator properties like speed, etc.).	TRAVELATOR EQUIPMENT Specialisation of PLACE EQUIPMENT for travelators (provides travelator properties like speed, etc.).		
TROLLEY STAND EQUIPMENT	P2			N	N	TROLLEY STAND EQUIPMENT Specialisation of STOP PLACE EQUIPMENT for trolley stands.	TROLLEY STAND EQUIPMENT <i>same as TM6</i>		
TURN STATION	P2	x		S	A	TURN STATION A place (often a terminus) where a vehicle can reverse its direction (from a ROUTE to another of opposite DIRECTION).		TURN STATION <i>same as TM6</i>	
TURNAROUND TIME LIMIT	P3	x		S	S	TURNAROUND TIME LIMIT The maximum time for which a vehicle may be scheduled to wait at a particular TIMING POINT (often included in a TURN STATION) without being returned to a PARKING POINT. A minimum time for a vehicle to turn its direction may also be recorded. This may be superseded by a DEAD RUN.	TURNAROUND TIME LIMIT <i>same as TM6</i>	TURNAROUND TIME LIMIT <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
TYPE OF ACCESS FEATURE	P2			N	N	TYPE OF ACCESS FEATURE A Classification of ACCESS FEATURE for CHECK CONSTRAINT (e.g. barrier, narrow entrance, confined space, queue management, etc.)	TYPE OF ACCESS FEATURE <i>same as TM6</i>		
TYPE OF ACCESSIBILITY LIMITATION	P1			N	N	TYPE OF ACCESSIBILITY LIMITATION A classification for ACCESSIBILITY LIMITATIONS, e.g. audio, visual, step free, etc.	TYPE OF ACCESSIBILITY LIMITATION <i>same as TM6</i>		
TYPE OF ACCESSIBILITY TOOLS	P2			N	N	TYPE OF ACCESSIBILITY TOOLS A classification of ACCESSIBILITY TOOLS used by or available from ASSISTANCE SERVICE (e.g. wheelchair, walking stick, audio navigator, visual navigator, etc.)	TYPE OF ACCESSIBILITY TOOLS <i>same as TM6</i>		
TYPE OF ACTIVATION	P2	x		S	S	TYPE OF ACTIVATION A classification of real-time processes that are activated when vehicles passes an ACTIVATION POINT or an ACTIVATION LINK.	TYPE OF ACTIVATION <i>same as TM6</i>	TYPE OF ACTIVATION <i>same as TM6</i>	
TYPE OF ASSISTANCE SERVICE	P2			N	N	TYPE OF ASSISTANCE SERVICE A classification of ASSISTANCE SERVICE (e.g. boarding assistance, onboard assistance, portorage, foreign language, sign language translation, etc.).	TYPE OF ASSISTANCE SERVICE <i>same as TM6</i>		
TYPE OF BOARDING POSITION	P2			N	N	TYPE OF BOARDING POSITION A classification for BOARDING POSITIONS.	TYPE OF BOARDING POSITION <i>same as TM6</i>		
TYPE OF CATERING SERVICE	P2			N		TYPE OF CATERING SERVICE A classification of CATERING SERVICE (e.g. beverage vending machine, buffet, food vending machine, restaurant, snacks, trolley service, no beverages available, no food available).			

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TYPE OF CHECK CONSTRAINT	P2			N	N	TYPE OF CHECK CONSTRAINT A classification of CHECK CONSTRAINT (e.g. ticket collection, ticket purchase, baggage check-in, incoming customs, outgoing customs, tax refunds, etc.)	TYPE OF CHECK CONSTRAINT <i>same as TM6</i>		
TYPE OF COMMUNICATION SERVICE	P2			N	N	TYPE OF COMMUNICATION SERVICE A classification of COMMUNICATION SERVICE (e.g. free wifi, public wifi, phone, mobile coverage, internet, video entertainment, audio entertainment, post box, post office, business services).	TYPE OF COMMUNICATION SERVICE <i>same as TM6</i>		
TYPE OF CONGESTION	P2			N	N	TYPE OF CONGESTION A typology of congestions resulting from CHECK CONSTRAINT (e.g. no waiting, queue, crowding, full).	TYPE OF CONGESTION <i>same as TM6</i>		
TYPE OF COUPLING	P3			N	N	TYPE OF COUPLING A classification for COUPLING of BLOCK PARTs.	TYPE OF COUPLING <i>same as TM6</i>		
TYPE OF CYCLE STORAGE EQUIPMENT	P2			N	N	TYPE OF CYCLE STORAGE EQUIPMENT A classification of CYCLE STORAGE EQUIPMENT (e.g. racks, bars, railings, etc.)	TYPE OF CYCLE STORAGE EQUIPMENT <i>same as TM6</i>		
TYPE OF DELIVERY VARIANT	P1			N	N	TYPE OF DELIVERY VARIANT A classification of a DELIVERY VARIANT. The way of delivering a NOTICE: by vocal announcement, by visual display, issuing printed material	TYPE OF DELIVERY VARIANT <i>same as TM6</i>		
TYPE OF DIRECTION OF USE	P2			N	N	TYPE OF DIRECTION OF USE Direction in which EQUIPMENT. can be used. (e.g. up, down, level, one way, both way, etc.).	TYPE OF DIRECTION OF USE <i>same as TM6</i>		



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TYPE OF EMERGENCY SERVICE	P2			N	N	TYPE OF EMERGENCY SERVICE A typology of emergency services (e.g. police, first aid, sos point, cctv).	TYPE OF EMERGENCY SERVICE <i>same as TM6</i>		
TYPE OF ENTITY	P1			N	N	TYPE OF ENTITY Classification of ENTITIES, for instance according to the domain in which they are defined or used.	TYPE OF ENTITY <i>same as TM6</i>		
TYPE OF EQUIPMENT	P1	x		S	S	TYPE OF EQUIPMENT A classification of equipment items to be installed at stop points or onboard vehicles, for instance.	TYPE OF EQUIPMENT <i>same as TM6</i>	TYPE OF EQUIPMENT <i>same as TM6</i>	
TYPE OF FACILITY	P1			N		TYPE OF FACILITY A classification of a FACILITY or a FACILITY SET.			
TYPE OF FARE CLASS	P1			N	N	TYPE OF FARE CLASS A classification for fare classes (e.g. first class, second class, business class, etc).	TYPE OF FARE CLASS A classification for FARE CLASSES		
TYPE OF FLEXIBLE SERVICE	P3			N	N	TYPE OF FLEXIBLE SERVICE A typology of flexible services: •Virtual line service •Flexible service with main route •Corridor service •Fixed stop area-wide flexible service •Free area-wide flexible service •Mixed types of flexible service (not at POINT level) The type of flexibility can be defined at JOURNEY PATTERN level or at POINT IN JOURNEY PATTERN level in case of mixed types of flexible service inside the same JOURNEY PATTERN	TYPE OF FLEXIBLE SERVICE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
TYPE OF FRAME	P1	x		S	S	TYPE OF FRAME A classification of VERSION FRAMEs according to a common purpose. E.g. line descriptions for line versions, vehicle schedules, operating costs. A TYPE OF FRAME is ruled by a unique TYPE OF VALIDITY.	TYPE OF FRAME <i>same as TM6</i>	TYPE OF FRAME <i>same as TM6</i>	
TYPE OF GENDER LIMITATION	P2			N	N	TYPE OF GENDER LIMITATION A classification for GENDER LIMITATIONs (mainly for SANITARY EQUIPMENT, e.g. male only, female only, both).	TYPE OF GENDER LIMITATION <i>same as TM6</i>		
TYPE OF HANDRAIL	P2			N	N	TYPE OF HANDRAIL A classification of HANDRAIL (one side, both sides).	TYPE OF HANDRAIL <i>same as TM6</i>		
TYPE OF HIRE SERVICE	P2			N	N	TYPE OF HIRE SERVICE A classification of HIRE SERVICEs (e.g. car hire, motor cycle hire, cycle hire, recreational device hire).	TYPE OF HIRE SERVICE <i>same as TM6</i>		
TYPE OF JOURNEY PATTERN	P2	x		S	S	TYPE OF JOURNEY PATTERN A classification of JOURNEY PATTERNs used to distinguish other categories of JOURNEY PATTERN than SERVICE JOURNEY PATTERN and DEAD RUN PATTERN.	TYPE OF JOURNEY PATTERN <i>same as TM6</i>	TYPE OF JOURNEY PATTERN <i>same as TM6</i>	
TYPE OF LINE	P2			N	N	TYPE OF LINE A classification for LINEs.	TYPE OF LINE <i>same as TM6</i>		
TYPE OF LINK	P1	x		S	S	TYPE OF LINK A classification of LINKs to express the different functional roles of a LINK.	TYPE OF LINK <i>same as TM6</i>	TYPE OF LINK <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTEx	TM6	NeTEx	DEFINITION	DEFINITION
TYPE OF LINK SEQUENCE	P1	x		S	S	TYPE OF LINK SEQUENCE A classification of LINK SEQUENCES used to define the different functions a LINK SEQUENCE may be used for. E.g. ROUTE, road, border line etc.	TYPE OF LINK SEQUENCE A classification of LINK SEQUENCES used to define the different functions a LINK SEQUENCE may be used for. E.g. ROUTE, JOURNEY PATTERN, road, TRIP PATTERN, border line etc.	TYPE OF LINK SEQUENCE <i>same as NeTEx</i>	
TYPE OF LOCAL SERVICE	P2			N	N	TYPE OF LOCAL SERVICE A generic (abstract) classification of LOCAL SERVICES.	TYPE OF LOCAL SERVICE <i>same as TM6</i>		
TYPE OF LUGGAGE LOCKER	P2			N	N	TYPE OF LUGGAGE LOCKER A classification for LUGGAGE LOCKER EQUIPMENT (e.g. left luggage, lockers, bike carriage, portorage, free trolleys, paid trolleys)	TYPE OF LUGGAGE LOCKER <i>same as TM6</i>		
TYPE OF MONEY SERVICE	P2			N	N	TYPE OF MONEY SERVICE A classification of MONEY SERVICE (e.g. cash machine, bank, insurance, bureau de change)	TYPE OF MONEY SERVICE <i>same as TM6</i>		
TYPE OF NOTICE	P1			N	N	TYPE OF NOTICE A classification for a NOTICE.	TYPE OF NOTICE <i>same as TM6</i>		
TYPE OF OPERATION	P1			N	N	TYPE OF OPERATION A classification of OPERATIONS to express the different functional roles of a DEPARTMENT.	TYPE OF OPERATION <i>same as TM6</i>		
TYPE OF ORGANISATION	P1			N	N	TYPE OF ORGANISATION A classification for the ORGANISATIONS according to their activity, e.g. a public transport company, an IT company, etc).	TYPE OF ORGANISATION <i>same as TM6</i>		
TYPE OF PASSAGE	P2			N	N	TYPE OF PASSAGE A classification for spaces to express how the space can be used as a passage (e.g. pathway, corridor, overpass, underpass, tunnel, etc.).	TYPE OF PASSAGE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TYPE OF PASSENGER INFORMATION EQUIPMENT	P2	TYPE OF PI FACILITY		N	N	TYPE OF PASSENGER INFORMATION EQUIPMENT A classification for PASSENGER INFORMATION EQUIPMENT (e.g. next stop indicator, stop announcements, passenger information facility).	TYPE OF PASSENGER INFORMATION EQUIPMENT <i>same as TM6</i>		
TYPE OF PAYMENT METHOD	P1			N	N	TYPE OF PAYMENT METHOD A classification for payment method (e.g. cash, credit card, debit card, travel card, contactless travel card, mobile phone, token, etc.).	TYPE OF PAYMENT METHOD <i>same as TM6</i>		
TYPE OF PI FACILITY	re-placed and re-named	x				TYPE OF PASSENGER INFORMATION EQUIPMENT		TYPE OF PI FACILITY A classification of PI FACILITIES (e.g. stand-alone terminal, information desk, printed leaflet, etc.).	
TYPE OF PLACE	P1			N	N	TYPE OF PLACE A classification for PLACES.	TYPE OF PLACE <i>same as TM6</i>		
TYPE OF POINT	P1	x		S	S	TYPE OF POINT A classification of POINTs according to their functional purpose.	TYPE OF POINT <i>same as TM6</i>	TYPE OF POINT <i>same as TM6</i>	
TYPE OF POINT OF INTEREST SPACE	P2			N	N	TYPE OF POINT OF INTEREST SPACE A classification for POINT OF INTEREST SPACES.	TYPE OF POINT OF INTEREST SPACE <i>same as TM6</i>		
TYPE OF PRODUCT CATEGORY	P3			N	N	TYPE OF PRODUCT CATEGORY A classification for VEHICLE JOURNEYS to express some common properties of journeys for marketing and fare products	TYPE OF PRODUCT CATEGORY <i>same as TM6</i>		
TYPE OF PROJECTION	P1	x		S	S	TYPE OF PROJECTION A classification of the projections according to their functional purpose, the source and target layers.	TYPE OF PROJECTION <i>same as TM6</i>	TYPE OF PROJECTION <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TYPE OF QUAY	P2			N		TYPE OF QUAY A classification for QUAYS.			
TYPE OF RELATION TO VEHICLE	P2			N	N	TYPE OF RELATION TO VEHICLE A classification of the way a VEHICLE STOPPING POSITION is used (e.g. front left, front right, back left, back right, driver left, driver right).	TYPE OF RELATION TO VEHICLE <i>same as TM6</i>		
TYPE OF RESPONSIBILITY ROLE	P1			N	N	TYPE OF RESPONSIBILITY ROLE A classification of RESPONSIBILITY ROLES, e.g. data ownership.	TYPE OF RESPONSIBILITY ROLE <i>same as TM6</i>		
TYPE OF RETAIL SERVICE	P2			N	N	TYPE OF RETAIL SERVICE A classification of RETAIL SERVICE (e.g. food, newspaper tobacco, health hygiene beauty, fashion accessories, bank finance insurance, tourism, photo booth)	TYPE OF RETAIL SERVICE <i>same as TM6</i>		
TYPE OF SANITARY FACILITY	P2			N	N	TYPE OF SANITARY FACILITY A classification for SANITARY EQUIPMENT (e.g. toilet, wheelchair access toilet, shower, baby change, wheelchair baby change)	TYPE OF SANITARY FACILITY <i>same as TM6</i>		
TYPE OF SEATING EQUIPMENT	P2			N	N	TYPE OF SEATING EQUIPMENT A classification for SEATING EQUIPMENT.	TYPE OF SEATING EQUIPMENT <i>same as TM6</i>		
TYPE OF SERVICE	P3	x		S	S	TYPE OF SERVICE A classification for VEHICLE JOURNEYS and SPECIAL SERVICES to express some common properties of journeys to be taken into account in the scheduling and/or operations control process.	TYPE OF SERVICE <i>same as TM6</i>	TYPE OF SERVICE <i>same as TM6</i>	
TYPE OF SERVICE NATURE	P2			N	N	TYPE OF SERVICE NATURE A classification for service available for a CHECK CONSTRAINT (e.g. self-service machine, counter service).	TYPE OF SERVICE NATURE <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TYPE OF SHELTER	P2			N	N	TYPE OF SHELTER A classification for SHELTERS	TYPE OF SHELTER <i>same as TM6</i>		
TYPE OF SITE	A	x		A	A			TYPE OF SITE A classification of SITES.	
TYPE OF STAFFING	P2			N	N	TYPE OF STAFFING A classification for the availability of the STAFF associated with an ASSISTANCE SERVICE (e.g. full time, part time)	TYPE OF STAFFING <i>same as TM6</i>		
TYPE OF STOP PLACE	P2		x	Md	Md	TYPE OF STOP PLACE A classification for STOP PLACES (e.g. complex, simple, multimodal, etc).	TYPE OF STOP PLACE <i>same as TM6</i>		TYPE OF STOP PLACE A classification of STOP PLACES, indicating in particular the mode of transport (rail station, airport etc).
TYPE OF STOP POINT	P2	x		Md	Md	TYPE OF STOP POINT A classification of SCHEDULED STOP POINTS, used for instance to characterize the equipment to be installed at stops (post, shelter, seats, etc.).	TYPE OF STOP POINT <i>same as TM6</i>	TYPE OF STOP POINT A classification of STOP POINTS, used for instance to characterize the equipment to be installed at stops (post, shelter, seats, etc.).	
TYPE OF SUITABILITY	P1			N	N	TYPE OF SUITABILITY A classification for SUITABILITY, i.e. assessments as regards a possible SUITABILITY of access according to USER NEEDS.	TYPE OF SUITABILITY <i>same as TM6</i>		
TYPE OF SURFACE	P2			N	N	TYPE OF SURFACE A classification for ROUGH SURFACE types.	TYPE OF SURFACE <i>same as TM6</i>		
TYPE OF TICKET	P1			N	N	TYPE OF TICKET A classification for tickets available at a TICKETING EQUIPMENT (e.g. standard, concession, promotion, group, season, travel card, etc.)	TYPE OF TICKET <i>same as TM6</i>		
TYPE OF TICKETING	P1			N	N	TYPE OF TICKETING A classification for ticketing available at a TICKETING EQUIPMENT (e.g. purchase, collection, card top up, reservations).	TYPE OF TICKETING <i>same as TM6</i>		

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
TYPE OF TOPOGRAPHICAL PLACE	A		x	A	A				TYPE OF TOPOGRAPHICAL PLACE A classification of the TOPOGRAPHICAL PLACES according to their size and relevance for different types of journey planning.
TYPE OF TRAFFIC CONTROL POINT	P2	x		S	S	TYPE OF TRAFFIC CONTROL POINT A classification of TRAFFIC CONTROL POINTs.	TYPE OF TRAFFIC CONTROL POINT <i>same as TM6</i>	TYPE OF TRAFFIC CONTROL POINT <i>same as TM6</i>	
TYPE OF TRAIN ELEMENT	P1	x		S	S	TYPE OF TRAIN ELEMENT A classification of TRAIN ELEMENTs.	TYPE OF TRAIN ELEMENT <i>same as TM6</i>	TYPE OF TRAIN ELEMENT <i>same as TM6</i>	
TYPE OF TRANSFER	P1			N	N	TYPE OF TRANSFER A classification for TRANSFER.	TYPE OF TRANSFER <i>same as TM6</i>		
TYPE OF USER NEED	P1			N	N	TYPE OF USER NEED A classification of USER NEEDs.	TYPE OF USER NEED <i>same as TM6</i>		
TYPE OF VALIDITY	P1	x		Md	Md	TYPE OF VALIDITY A classification of the validity of TYPEs OF FRAME. E.g. frames for schedules designed for DAY TYPEs, for specific OPERATING DAYs.	TYPE OF VALIDITY <i>same as TM6</i>	TYPE OF VALIDITY A classification of the validity of TYPEs OF FRAME. E.g. VERSION FRAMES for schedules designed for DAY TYPEs; dated schedules.	
TYPE OF VERSION	P1	x		S	S	TYPE OF VERSION A classification of VERSIONs. E.g. shareability of ENTITies between several versions.	TYPE OF VERSION <i>same as TM6</i>	TYPE OF VERSION <i>same as TM6</i>	
TYPE OF WAITING ROOM	P2			N	N	TYPE OF WAITING ROOM A classification for WAITING ROOM EQUIPMENT.	TYPE OF WAITING ROOM <i>same as TM6</i>		
TYPE OF ZONE	P1	x		S	S	TYPE OF ZONE A classification of ZONEs. E.g. TARIFF ZONE, ADMINISTRATIVE ZONE.	TYPE OF ZONE <i>same as TM6</i>	TYPE OF ZONE <i>same as TM6</i>	
USER NEED	P1		x	Md	Md	USER NEED A user's need for a particular SUITABILITY.	USER NEED <i>same as TM6</i>		USER NEED An ACCESSIBILITY requirement of a passenger. For example, that they are unable to navigate stairs, or lifts, or have visual or auditory impairments.

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
VALIDITY CONDITION	P1	x		S	S	VALIDITY CONDITION Condition used in order to characterise a given VERSION of a VERSION FRAME. A VALIDITY CONDITION consists of a parameter (e.g. date, triggering event, etc.) and its type of application (e.g. for, from, until, etc.).	VALIDITY CONDITION <i>same as TM6</i>	VALIDITY CONDITION <i>same as TM6</i>	
VALIDITY RULE PARAMETER	P1	x		S	S	VALIDITY RULE PARAMETER A user defined VALIDITY CONDITION used by a rule for selecting versions. E.g. river level > 1,5 m and bad weather.	VALIDITY RULE PARAMETER <i>same as TM6</i>	VALIDITY RULE PARAMETER <i>same as TM6</i>	
VALIDITY TRIGGER	P1	x		S	S	VALIDITY TRIGGER External event defining a VALIDITY CONDITION. E.g. exceptional flow of a river, bad weather, road closure for works.	VALIDITY TRIGGER <i>same as TM6</i>	VALIDITY TRIGGER <i>same as TM6</i>	
VEHICLE	P1	x		S	S	VEHICLE A public transport vehicle used for carrying passengers.	VEHICLE <i>same as TM6</i>	VEHICLE <i>same as TM6</i>	
VEHICLE ACCESS EQUIPMENT	P1			N	N	VEHICLE ACCESS EQUIPMENT Specialisation of VEHICLE EQUIPMENT dedicated to access vehicles providing information such as low floor, ramp, access area dimensions, etc.	VEHICLE ACCESS EQUIPMENT <i>same as TM6</i>		
VEHICLE CHARGING EQUIPMENT	P2			N		VEHICLE CHARGING EQUIPMENT Specialisation of PLACE EQUIPMENT for vehicle charging.			
VEHICLE ENTRANCE	P2			N	N	VEHICLE ENTRANCE A physical entrance or exit to/from a STOP PLACE for a VEHICLE. May be a door, barrier, gate or other recognizable point of access.	VEHICLE ENTRANCE <i>same as TM6</i>		



In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
VEHICLE EQUIPMENT PROFILE	P1	x		S	S	VEHICLE EQUIPMENT PROFILE Each instantiation of this entity gives the number of items of one TYPE OF EQUIPMENT a VEHICLE MODEL should contain for a given PURPOSE OF EQUIPMENT PROFILE. The set of instantiations for one VEHICLE MODEL and one purpose gives one complete 'profile'.	VEHICLE EQUIPMENT PROFILE <i>same as TM6</i>	VEHICLE EQUIPMENT PROFILE <i>same as TM6</i>	
VEHICLE JOURNEY	P3	x		S	S	VEHICLE JOURNEY The planned movement of a public transport vehicle on a DAY TYPE from the start point to the end point of a JOURNEY PATTERN on a specified ROUTE.	VEHICLE JOURNEY <i>same as TM6</i>	VEHICLE JOURNEY <i>same as TM6</i>	
VEHICLE JOURNEY HEADWAY	P3			N	N	VEHICLE JOURNEY HEADWAY Headway interval information that is available for a VEHICLE JOURNEY (to be understood as the delay between the previous and the next VEHICLE JOURNEY). This information must be consistent with HEADWAY JOURNEY GROUP if available (HEADWAY JOURNEY GROUP being a more detailed way of describing headway services).	VEHICLE JOURNEY HEADWAY <i>same as TM6</i>		
VEHICLE JOURNEY LAYOVER	P3	x		S	S	VEHICLE JOURNEY LAYOVER A time allowance at the end of a specified VEHICLE JOURNEY. This time supersedes any global layover or JOURNEY PATTERN LAYOVER.	VEHICLE JOURNEY LAYOVER <i>same as TM6</i>	VEHICLE JOURNEY LAYOVER <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTex	TM6	NeTex	DEFINITION	DEFINITION
VEHICLE JOURNEY RUN TIME	P3	x		S	S	VEHICLE JOURNEY RUN TIME The time taken to traverse a specified TIMING LINK IN JOURNEY PATTERN on a specified VEHICLE JOURNEY. This gives the most detailed control over times and overrides the DEFAULT SERVICE JOURNEY RUN TIME and JOURNEY PATTERN RUN TIME and the DEFAULT DEAD RUN RUN TIME.	VEHICLE JOURNEY RUN TIME <i>same as TM6</i>	VEHICLE JOURNEY RUN TIME <i>same as TM6</i>	
VEHICLE JOURNEY WAIT TIME	P3	x		S	S	VEHICLE JOURNEY WAIT TIME The time for a vehicle to wait at a particular TIMING POINT IN JOURNEY PATTERN on a specified VEHICLE JOURNEY. This wait time will override the JOURNEY PATTERN WAIT TIME.	VEHICLE JOURNEY WAIT TIME <i>same as TM6</i>	VEHICLE JOURNEY WAIT TIME <i>same as TM6</i>	
VEHICLE MODE	P1			N	N	VEHICLE MODE A characterisation of the public transport operation according to the means of transport (bus, tram, metro, train, ferry, ship).	VEHICLE MODE <i>same as TM6</i>		
VEHICLE MODEL	P1	x		S	S	VEHICLE MODEL A classification of public transport vehicles of the same VEHICLE TYPE, e.g. according to equipment specifications or model generation.	VEHICLE MODEL <i>same as TM6</i>	VEHICLE MODEL <i>same as TM6</i>	
VEHICLE POSITION ALIGNMENT	P2		x	S	S	VEHICLE POSITION ALIGNMENT The alignment of a particular BOARDING POSITION with the entrance of a VEHICLE as the result of positioning the VEHICLE at a particular VEHICLE STOPPING PLACE.	VEHICLE POSITION ALIGNMENT <i>same as TM6</i>		VEHICLE POSITION ALIGNMENT <i>same as TM6</i>

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
VEHICLE QUAY ALIGNMENT	P2		x	S	S	VEHICLE QUAY ALIGNMENT The alignment of a particular QUAY with a vehicle as the result of positioning a VEHICLE at a particular VEHICLE STOPPING PLACE.	VEHICLE QUAY ALIGNMENT <i>same as TM6</i>		VEHICLE QUAY ALIGNMENT <i>same as TM6</i>
VEHICLE SCHEDULE FRAME	P3	VEHICLE SCHEDULE VERSION		N	N	VEHICLE SCHEDULE FRAME A coherent set of BLOCKS, COMPOUND BLOCKS, COURSES of JOURNEY and VEHICLE SCHEDULES to which the same set of VALIDITY CONDITIONS have been assigned.	VEHICLE SCHEDULE FRAME <i>same as TM6</i>		
VEHICLE SCHEDULE VERSION	A	x		A	A	VEHICLE SCHEDULE FRAME	VEHICLE SCHEDULE FRAME	VEHICLE SCHEDULE VERSION The set of all BLOCKS defined for a specific DAY TYPE to which the same VALIDITY CONDITIONS have been assigned (usually defined for a specific GROUP OF LINES).	
VEHICLE SERVICE	P3	x		Md	S	VEHICLE SERVICE A workplan for a vehicle for a whole day, planned for a specific DAY TYPE.	VEHICLE SERVICE <i>same as TM6</i>	VEHICLE SERVICE A workplan for a vehicle for a whole day, planned for a specific DAY TYPE. A VEHICLE SERVICE includes one or several VEHICLE SERVICE PARTS.	
VEHICLE SERVICE PART	P3	x		S	S	VEHICLE SERVICE PART A part of a VEHICLE SERVICE composed of one or more BLOCKS and limited by periods spent at the GARAGE managing the vehicle in question.	VEHICLE SERVICE PART <i>same as TM6</i>	VEHICLE SERVICE PART <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
VEHICLE STOPPING PLACE	P2		x	S	S	VEHICLE STOPPING PLACE A place on the vehicle track where vehicles stop in order for passengers to board or alight from a vehicle. A vehicle track is located on the respective INFRASTRUCTURE LINK for the MODE (RAILWAY ELEMENT of rail network, ROAD ELEMENT of road network, etc). A VEHICLE STOPPING PLACE may be served by one or more QUAYS.	VEHICLE STOPPING PLACE <i>same as TM6</i>		VEHICLE STOPPING PLACE A place on the vehicle trackway where vehicles stop in order for passengers to board or alight from a vehicle. A vehicle trackway is located on the respective INFRASTRUCTURE LINK for the MODE (RAILWAY ELEMENT of rail network, ROAD ELEMENT of road network, etc). A VEHICLE STOPPING PLACE may be served by one or more QUAYS.
VEHICLE STOPPING POINT ASSIGNMENT	A		x	A	A				VEHICLE STOPPING POINT ASSIGNMENT The association of a SCHEDULED STOP POINT (e.g. a STOP POINT of a SERVICE PATTERN or JOURNEY PATTERN) with a specific VEHICLE STOPPING PLACE, or VEHICLE STOPPING POSITION within a STOP PLACE. May be subject to a VALIDITY CONDITION.
VEHICLE STOPPING POSITION	P2			N	N	VEHICLE STOPPING POSITION The stopping position of a vehicle or one of its components as a location. May be specified as a ZONE corresponding to the bounding polygon of the vehicle, or one or more POINTs corresponding to parts of the vehicle such as a door. If given as a single point, indicates the position for the door relative to an indicated side of the vehicle.	VEHICLE STOPPING POSITION <i>same as TM6</i>		
VEHICLE TYPE	P1	x		S	S	VEHICLE TYPE A classification of public transport vehicles according to the vehicle scheduling requirements in mode and capacity (e.g. standard bus, double-deck, ...).	VEHICLE TYPE <i>same as TM6</i>	VEHICLE TYPE <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
VEHICLE TYPE AT POINT	P2	x		S	S	VEHICLE TYPE AT POINT The number of vehicles of a specified VEHICLE TYPE which may wait at a specified POINT at any one time. If the capacity is 0, then that type of vehicle may not stop there.	VEHICLE TYPE AT POINT <i>same as TM6</i>	VEHICLE TYPE AT POINT <i>same as TM6</i>	
VEHICLE TYPE PREFERENCE	P3	x		S	S	VEHICLE TYPE PREFERENCE The preference for the use of a particular VEHICLE TYPE for a SERVICE JOURNEY PATTERN, depending on the DAY TYPE and TIME DEMAND TYPE. The rank of preferences must be recorded. Different VEHICLE TYPES may be given the same rank.	VEHICLE TYPE PREFERENCE <i>same as TM6</i>	VEHICLE TYPE PREFERENCE <i>same as TM6</i>	
VEHICLE TYPE STOP ASSIGNMENT	P3			N	N	VEHICLE TYPE STOP ASSIGNMENT The allocation of a VEHICLE STOPPING POSITION of a VEHICLE TYPE for a particular VEHICLE JOURNEY.	VEHICLE TYPE STOP ASSIGNMENT <i>same as TM6</i>		
VERSION	P1	x		Md	S	VERSION A group of operational data instances which share the same VALIDITY CONDITIONS. A version belongs to a unique VERSION FRAME and is characterised by a unique TYPE OF VERSION.	VERSION A group of operational data instances which share the same VALIDITY CONDITIONS. A version belongs to a unique VERSION FRAME and is characterised by a unique TYPE OF VERSION. E.g. NETWORK VERSION for Line 12 starting from 2000-01-01.	VERSION <i>same as NeTeX</i>	
VERSION FRAME	P1	x		Md	Md	VERSION FRAME A set of VERSIONS referring to a same DATA SOURCE and belonging to the same TYPE OF FRAME. A FRAME may be restricted by VALIDITY CONDITIONS.	VERSION FRAME <i>same as TM6</i>	VERSION FRAME <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
VIA	P2			N	N	VIA A secondary heading relevant for a certain part of the JOURNEY PATTERN advertising an onward intermediate destination to supplement the advertised (final) destination of DESTINATION DISPLAY.	VIA A location (e.g. a ROUTE POINT) used to distinguish a ROUTE from another ROUTE. It may be used for DESTINATION DISPLAYs		
WAITING EQUIPMENT	P2			N	N	WAITING EQUIPMENT Specialisation of STOP PLACE EQUIPMENT for WAITING EQUIPMENTs (shelter, waiting room, etc.).	WAITING EQUIPMENT <i>same as TM6</i>		
WAITING ROOM EQUIPMENT	P2			N	N	WAITING ROOM EQUIPMENT Specialisation of WAITING EQUIPMENT for waiting rooms, classified by TYPE OF WAITING ROOM.	WAITING ROOM EQUIPMENT <i>same as TM6</i>		
WHEELCHAIR VEHICLE EQUIPMENT	P1			N	N	WHEELCHAIR VEHICLE EQUIPMENT Specialisation of VEHICLE EQUIPMENT for wheel chair accessibility on board a VEHICLE providing information such as the number of wheel chair areas and the access dimensions.	WHEELCHAIR VEHICLE EQUIPMENT <i>same as TM6</i>		
WIRE ELEMENT	P2	x		S	S	WIRE ELEMENT A type of INFRASTRUCTURE LINK used to describe a wire network.	WIRE ELEMENT <i>same as TM6</i>	WIRE ELEMENT <i>same as TM6</i>	
WIRE JUNCTION	P2	x		S	S	WIRE JUNCTION A type of INFRASTRUCTURE POINT used to describe a wire network	WIRE JUNCTION <i>same as TM6</i>	WIRE JUNCTION <i>same as TM6</i>	
ZONE	P1	x		S	S	ZONE A two-dimensional PLACE within the service area of a public transport operator (administrative zone, TARIFF ZONE, ACCESS ZONE, etc.).	ZONE <i>same as TM6</i>	ZONE <i>same as TM6</i>	

In TM6		Defined in		Evolved into				Transmodel v5.1	IFOPT
TERM	Relevant part	TM5.1	IFOPT	TM6	NeTeX	TM6	NeTeX	DEFINITION	DEFINITION
ZONE PROJECTION	P1	x		S	S	ZONE PROJECTION An oriented correspondence: from one ZONE in a source layer, onto a target entity : e.g. POINT, COMPLEX FEATURE, within a defined TYPE OF PROJECTION.	ZONE PROJECTION <i>same as TM6</i>	ZONE PROJECTION <i>same as TM6</i>	