

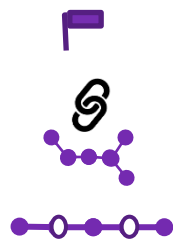
# National NeTEx Profile

## Profile Element Summary



Summary of Profile elements  
August 2020  
Nicholas knowles

# Irish NeTEx Profile – Timetable Related Elements



## ○ **Network:**

1. Stops,
2. Connections
3. Lines & Routes,
4. Service Patterns

## ○ **Timetables:**

1. Service Journeys
2. Passing Times,
3. Interchanges
4. Day Types, Service Calendars:
5. Groups of Journeys, Facilities
6. Journey Parts, Coupled Journeys

## ○ **Ancilliary**

1. Operators
2. Modes
3. Notices /Footnotes
4. Accessibility:

# Outline Scope - Everything you need to exchange a timetable like this..

**Expressway**  
www.expressway.ie

**22**

1850 836611  
08.30-18.00  
7 DAYS A WEEK

expressway.ie



@expresswayIRE

Temporary Timetable Effective From 7th June 2020

## ROUTE 22 DUBLIN to BALLINA

DAILY (including Public Holidays)

SuO

DUBLIN AIRPORT	ATRIUM RD ZONE 13 STOP 11	DEP.	-	1230	1530	1800	-	-
DUBLIN	BUSÁRAS		1000	1300P	1600P	1830P	2100	2300
DUBLIN	NORTH WALL QUAY 3 ARENA		1005P					2305P
DUBLIN AIRPORT	ATRIUM RD ZONE 13 STOP 11		1020P					2320P
DUBLIN	OPP HEUSTON STATION			1305P	1605P	1835P	2105P	
LIFFEY VALLEY	LUCAN ROAD			1315P	1615P	1845P	2115P	
LUCAN	SPA HOTEL		1040P					2340P
MAYNOOTH	67A TERMINUS		1050A	1330A	1630A	1900A	2130P	2350A
MULLINGAR	N4 SERVICE AREA - ESSO						2206D	0026D
MULLINGAR	CASTLE STREET		1132					
MULLINGAR	OPPOSITE REGIONAL HOSPITAL		1135					
BALLINALACK	MULLIGANS		1149	1419	1719	1949	2219	0039
RATHOWEN	GARDA STATION		1153	1423	1723	1953	2223	0043
EDGEWORTHSTOWN	POUND ST WESTBOUND		1200	1430	1730	2000	2230	0050
LONGFORD	DUBLIN ROAD - ST JOSEPHS		1212	1442	1742	2012	2242	0102
LONGFORD	RAIL STATION	ARR.	1215	1445	1745	2015		
LONGFORD	RAIL STATION	DEP.	1220	1450	1750	2020		
LONGFORD	COURTHOUSE - MAIN ST						2245	0105
TARMONBARRY	GARDA STATION		1230	1500	1800	2030	2255	0115
STROKESTOWN	PERCY FRENCH HOTEL		1240	1510	1810	2040	2305	0125
TULSK	CONWAYS		1255	1525	1825	2055	2320	0135
BALLINAGARE	N5 WESTBOUND STOP		1305	1535	1835	2105	2330	0145
FRENCHPARK	POST OFFICE		1309	1539	1839	2109	2334	0149
BALLAGHADERREEN	HANLEYS		1319	1549	1849	2119	2344	0159
CARRACASTLE CHURCH				1600		2130		
CHARLESTOWN	MARKET SQUARE - GARVEYS		1335	1607	1905	2137	0000	0215D
SWINFORD	CARDS & GIFTS SHOP		1346	1618	1916	2148	0011	0226D
FOXFORD	BROWNS MONUMENT		1358	1630	1928	2200	0023	0238D
BALLINA	BUS STATION	ARR.	1415	1647	1945	2217	0040	0250

P = Pick-up stop only.  
D = Drop-off stop only.  
A = Will carry passengers from Dublin Airport to Maynooth, but may not carry passengers from city centre to Maynooth.  
SuX = Operates Monday to Saturday only - does not operate on Public Holidays

SuO = Operates Sundays and Public Holidays only.

During College terms only, the following extra services will operate:

Thursday & Friday only 0930 ex Ballina to Dublin Airport; Friday only 1230 ex Ballina to Dublin Airport.

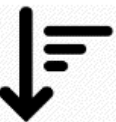
Thursday & Friday only 1530 ex Dublin Airport to Ballina; Friday only 1800 ex Dublin Airport to Ballina; Friday only 1900 ex Maynooth (67A Terminus) to Longford (Rail Station).

FOR SERVICES STOPPING AT LONGFORD RAIL STATION, THERE WILL BE A SHORT COMFORT STOP. TOILET FACILITIES ARE AVAILABLE.

NO SERVICES ON CHRISTMAS DAY. ENQUIRE ABOUT ST. STEPHEN'S DAY SERVICES.

<https://expressway.ie/Route-22-dublin-airport-to-ballina>

Or this.....



12:00

Dublin Heuston

S 1

2h 02m

0 changes

14:02

Mallow

[Hide details -](#)

If this train is an **InterCity** service it is sold out. Please select an alternative. To purchase **DART** or **Commuter** tickets, please go to your local station.

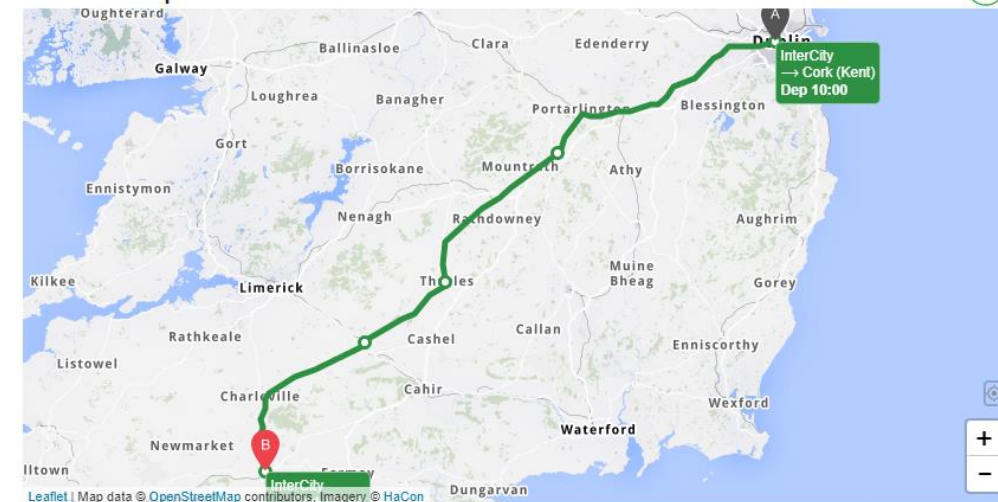
↑↓ JOURNEY DETAILS

Close

InterCity to Cork (Kent)	12:00 Dep	Dublin Heuston	<a href="#">Close</a>	S 1
	12:41 Arr	Portlaoise		
	12:41 Dep			
	13:13 Arr	Thurles		
	13:13 Dep			
	13:30 Arr	Limerick Junction		
	13:30 Dep			
	14:02 Arr	Mallow		

[Print](#)
[Show Map](#)

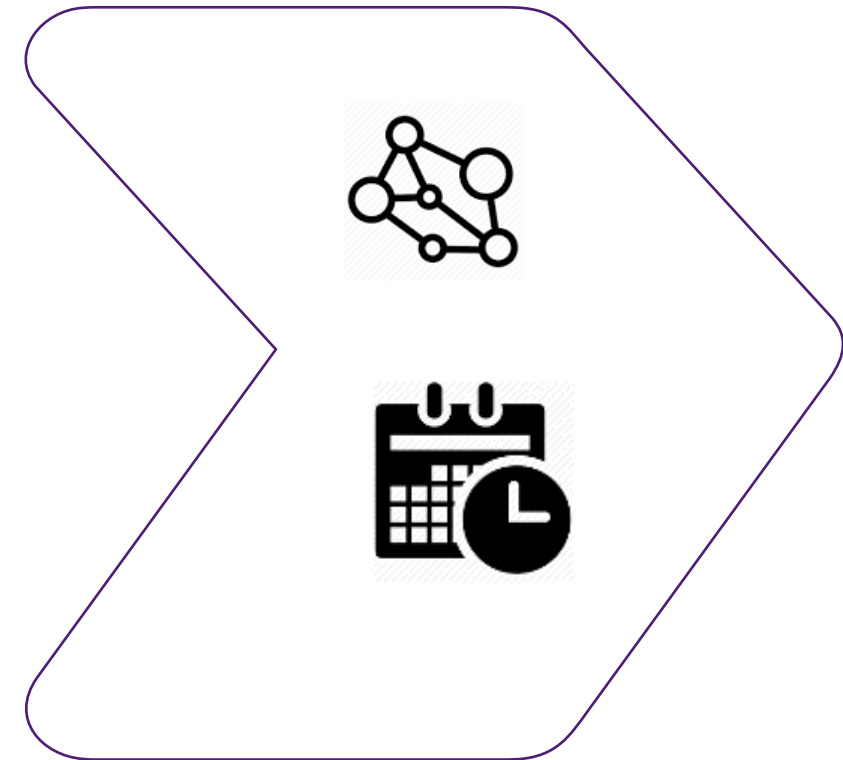
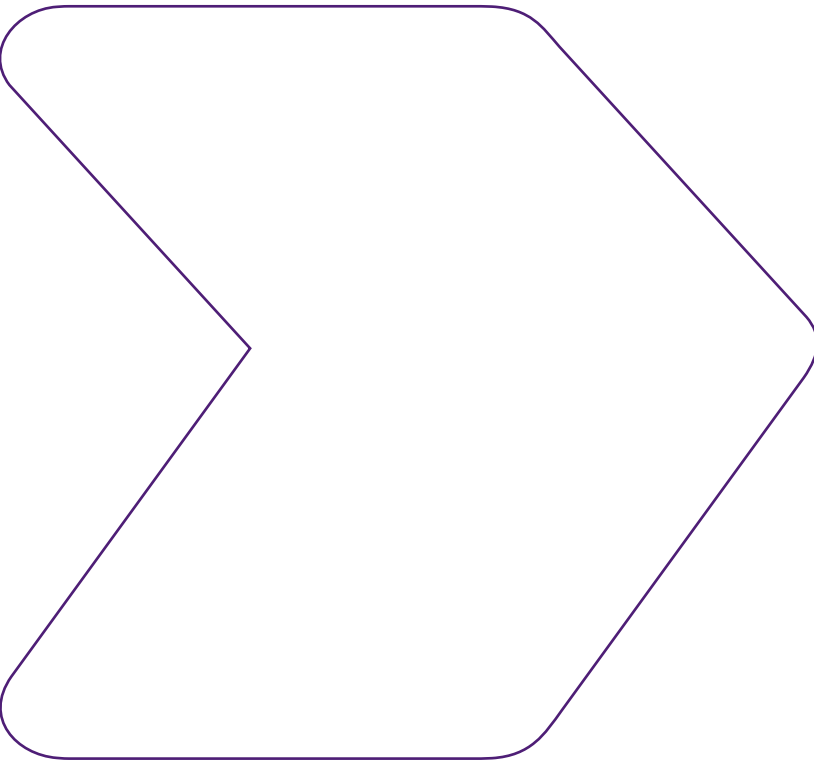
### Route Map



<https://journeyplanner.irishrail.ie/>

# Irish NeTEx Profile

## Profile Elements for Stops, Routes and Timetables

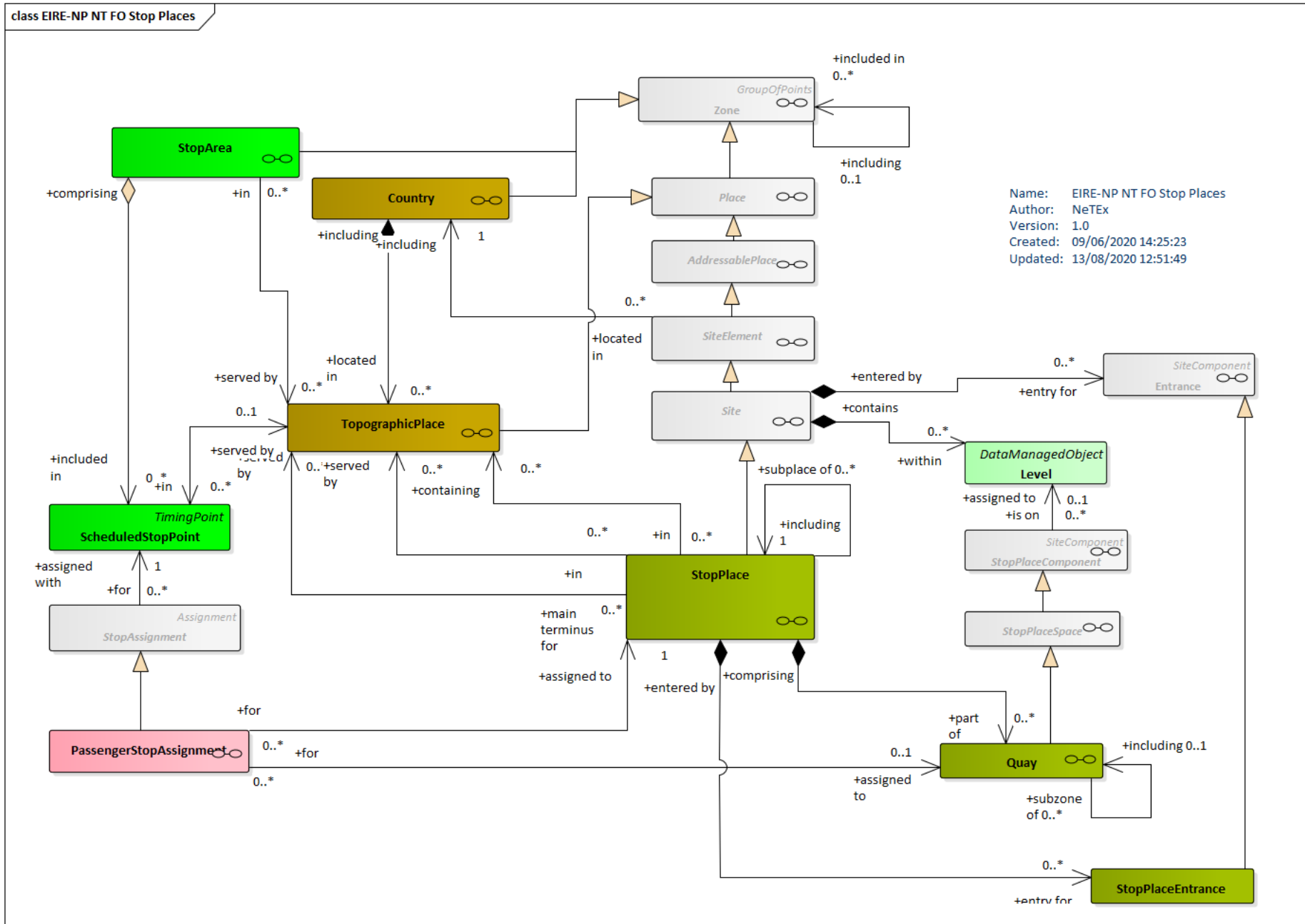




# Irish NeTEx Profile

## → Stops

Similar to NPTG  
NaPTAN, but  
distinguishes  
between physical  
and timetable use

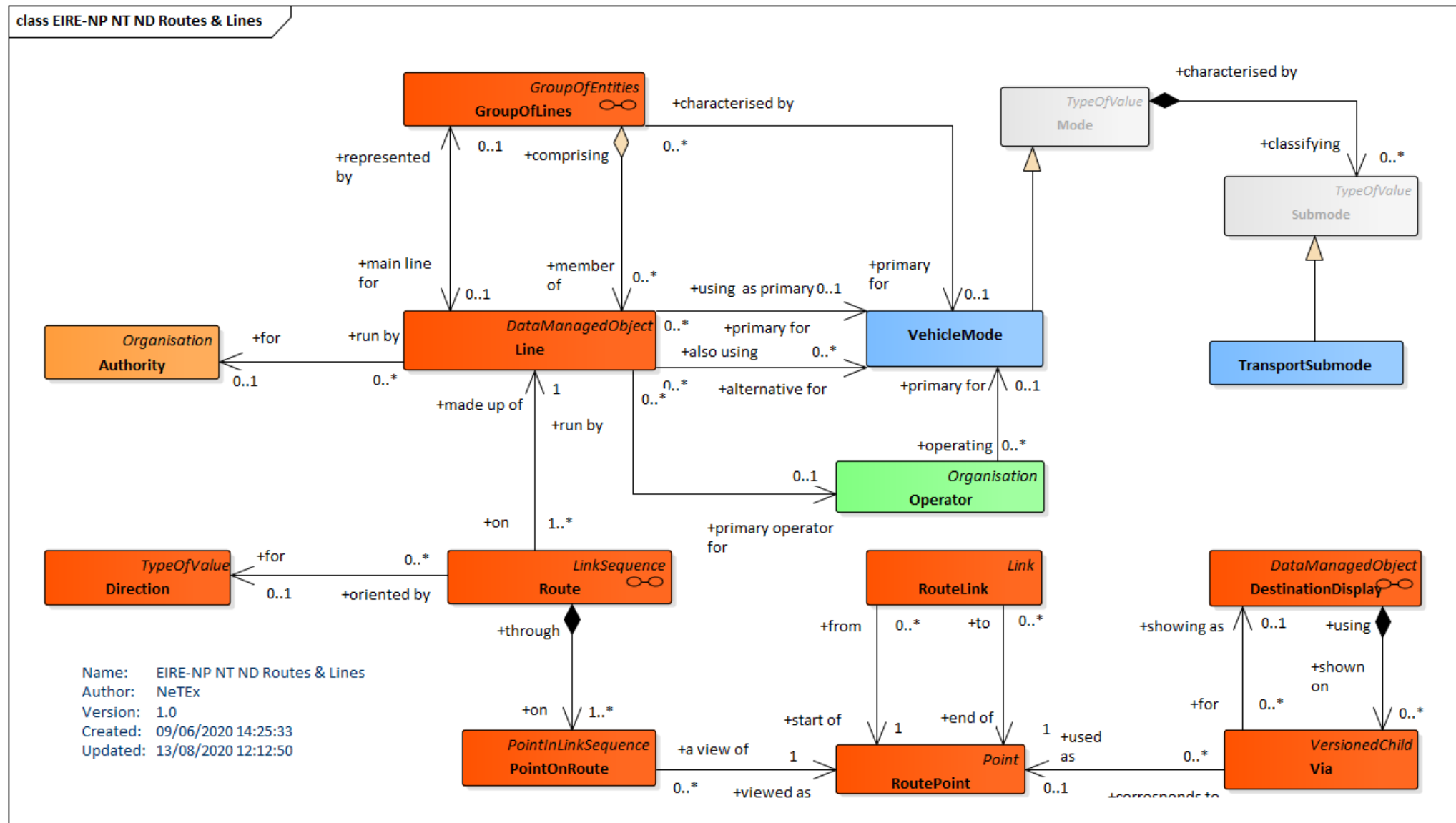




# Irish NeTEx Profile → Lines and Routes

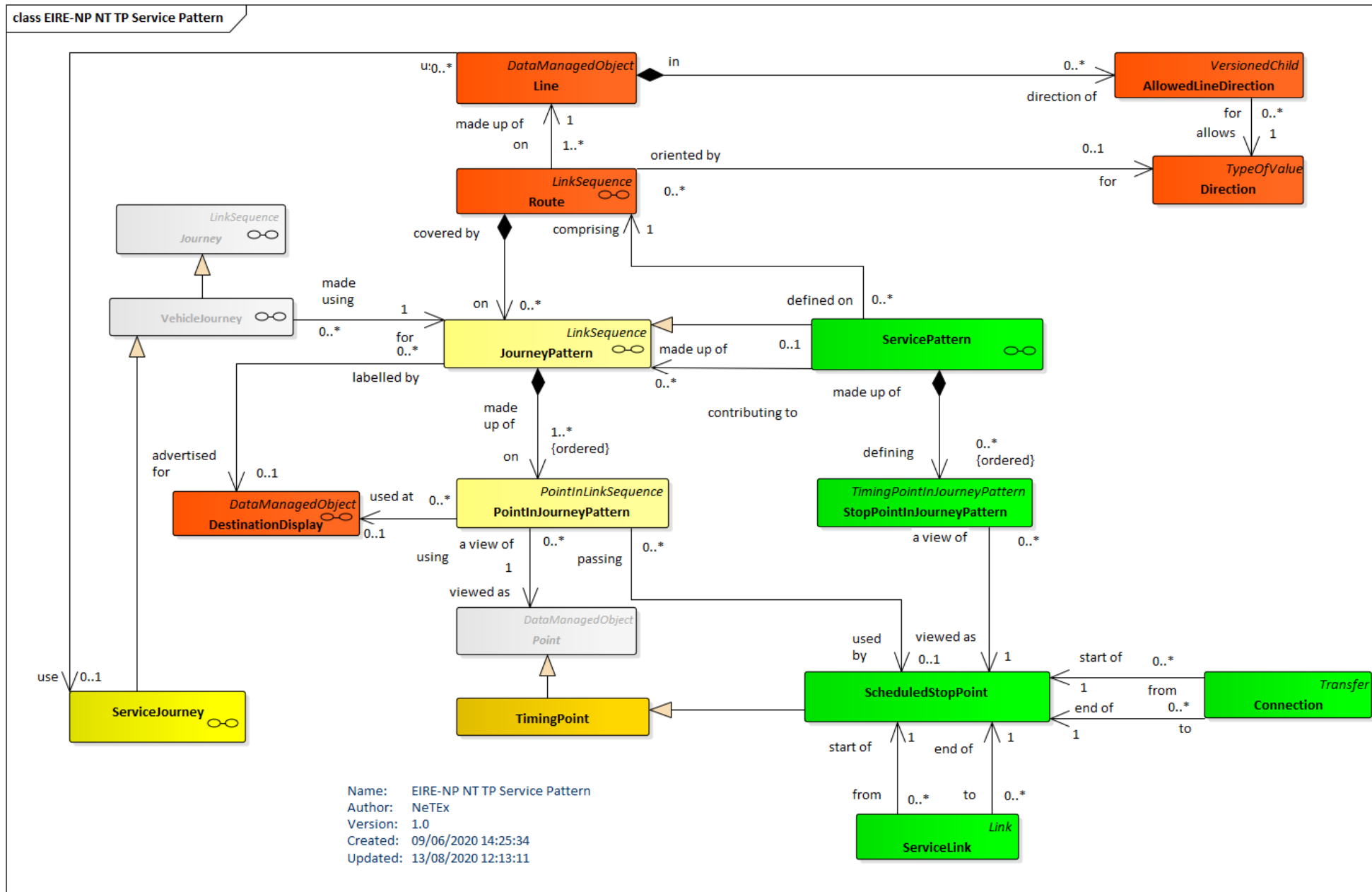
Similar to VDV452,  
GTFS

Name: EIRE-NP NT ND Routes & Lines  
Author: NeTEx  
Version: 1.0  
Created: 09/06/2020 14:25:33  
Updated: 13/08/2020 12:12:50





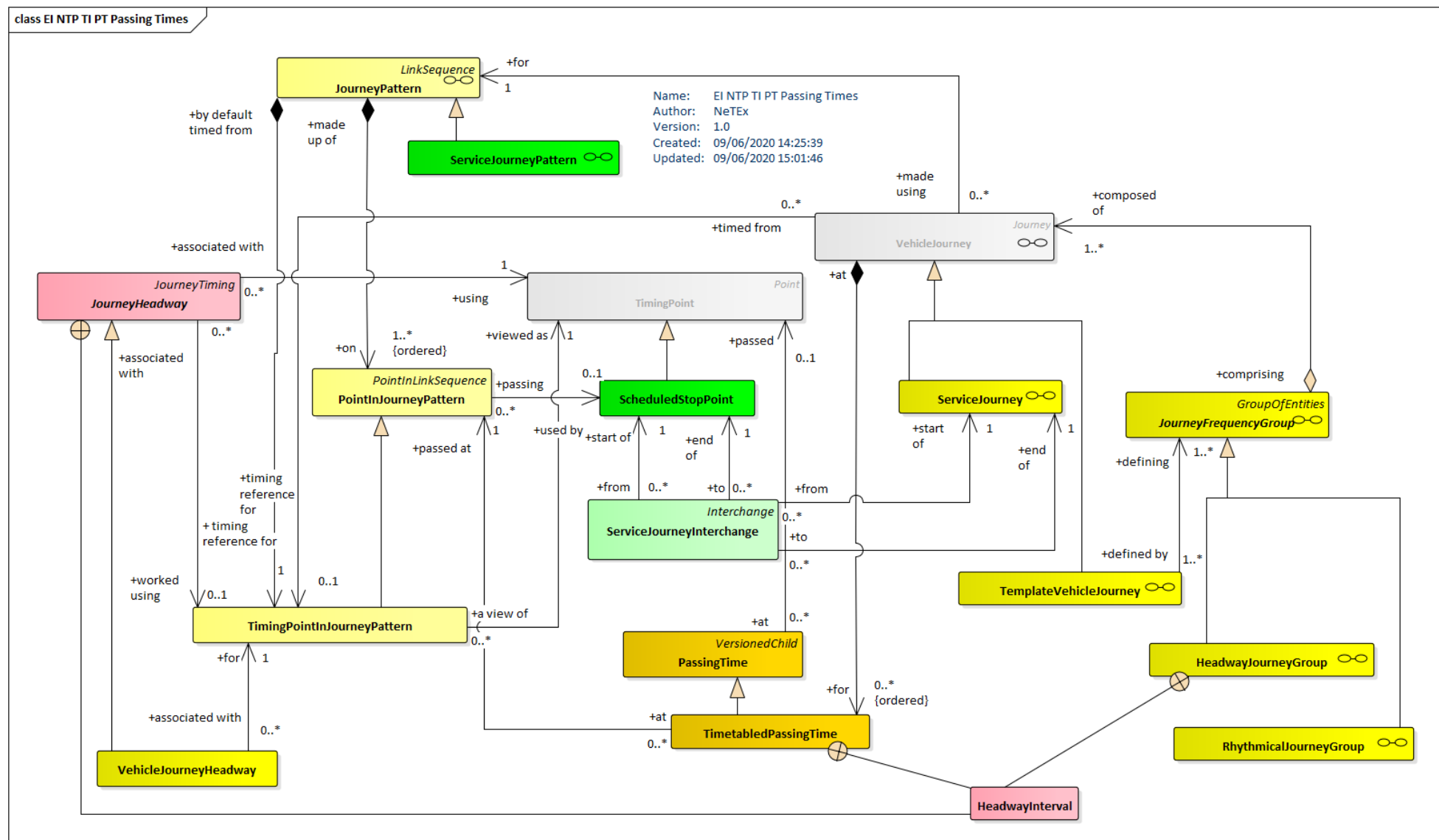
Similar to VDV452,  
POINT / LINK  
representation





## #2.4

## → Journeys, Passing Times, interchanges

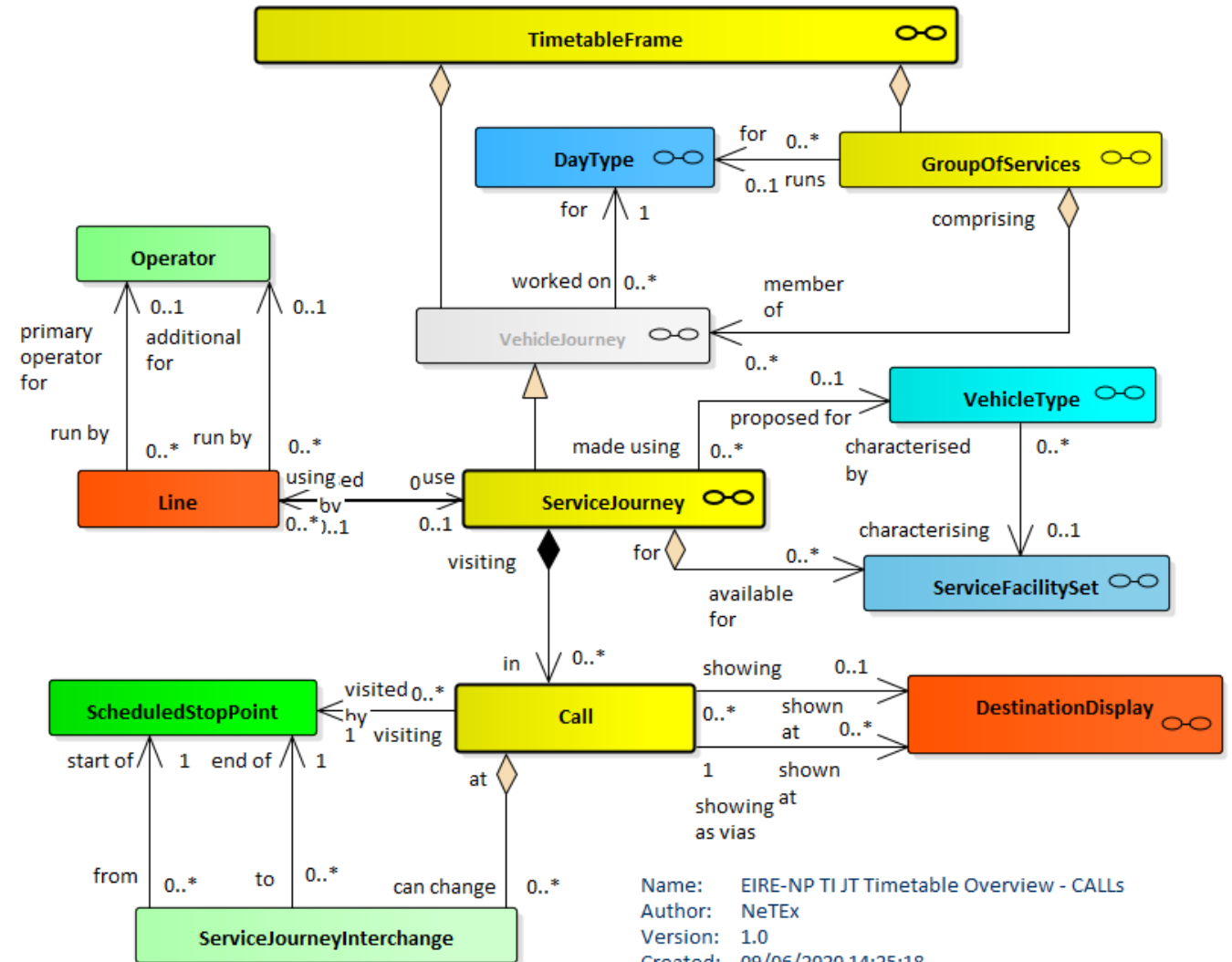


# Journeys using CALLs

## Irish NeTEx Profile → Journeys, Calls interchanges

- A CALL is a view element that assembles derived attributes a POINT IN PATTERN, PASSING TIMES, etc into a single element
  - similar to GTFS stop\_times

class EIRE-NP TI JT Timetable Overview - CALLs



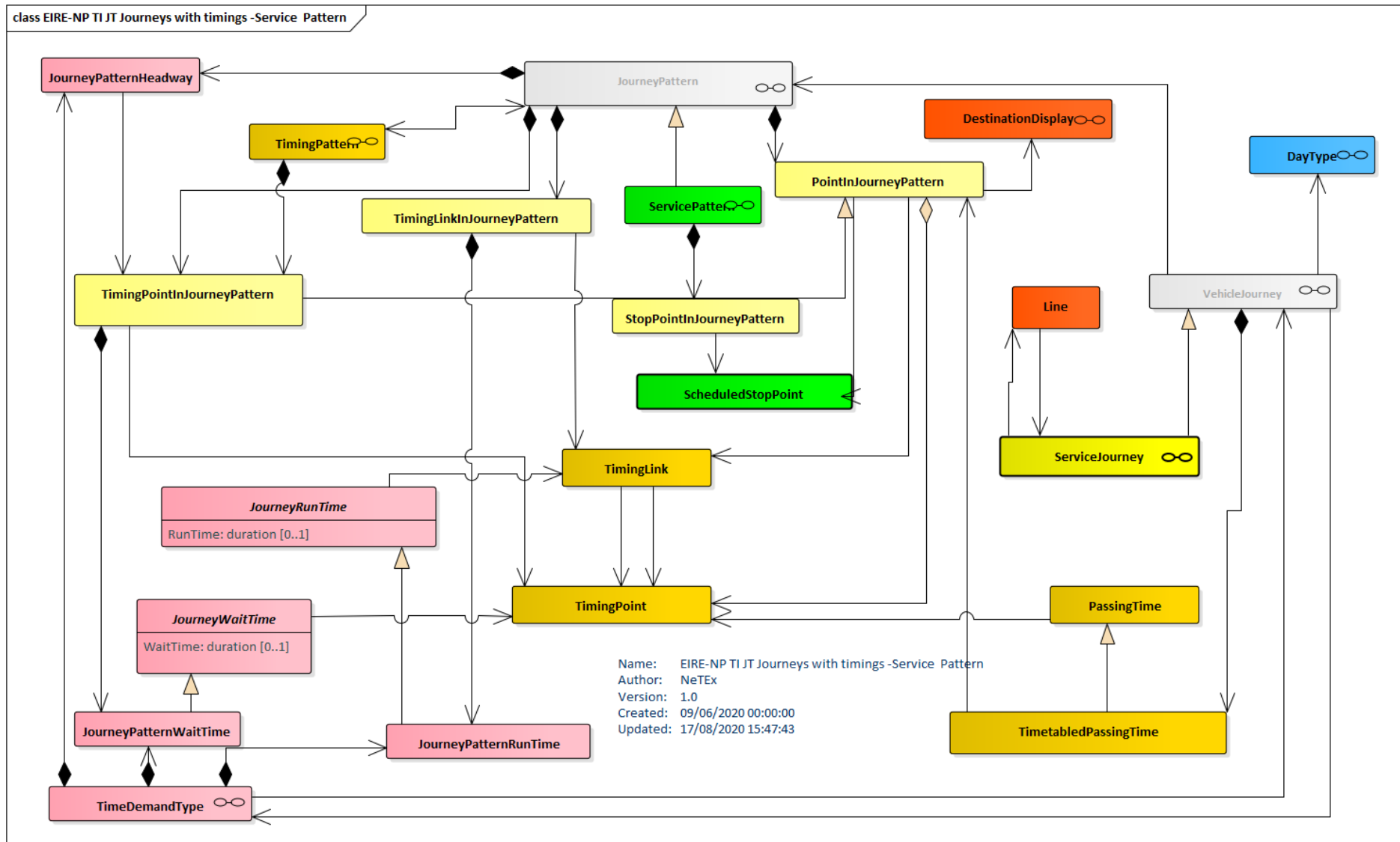


#3.2

## Irish NeTEx Profile

## Journey Timings Service Pattern Run Times & Wait Times

- Useful for Real-time prediction and for schedule creation



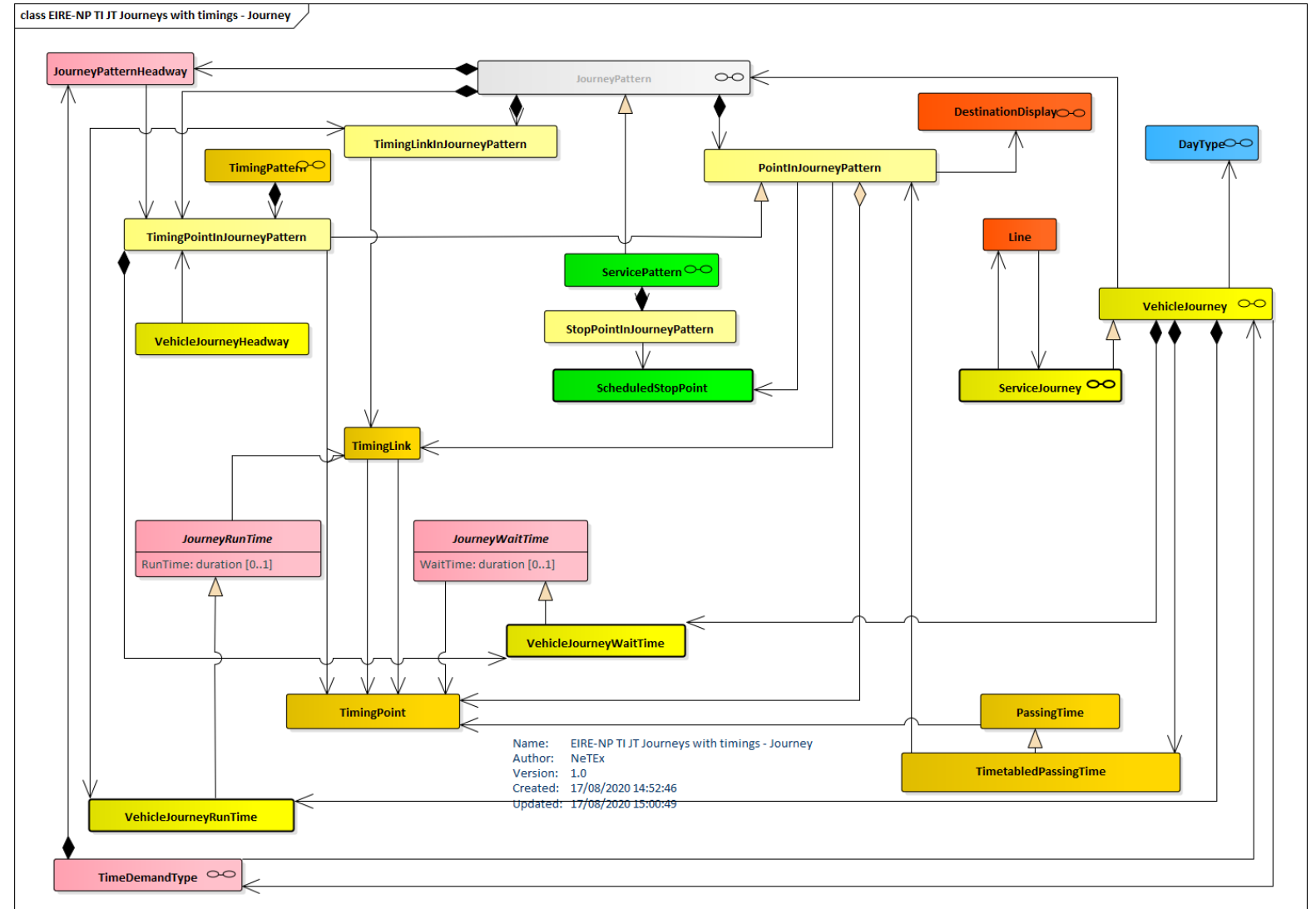


#3.3

## Irish NeTEx Profile

## Journey Timings Service Journey Run Times & WaitTimes

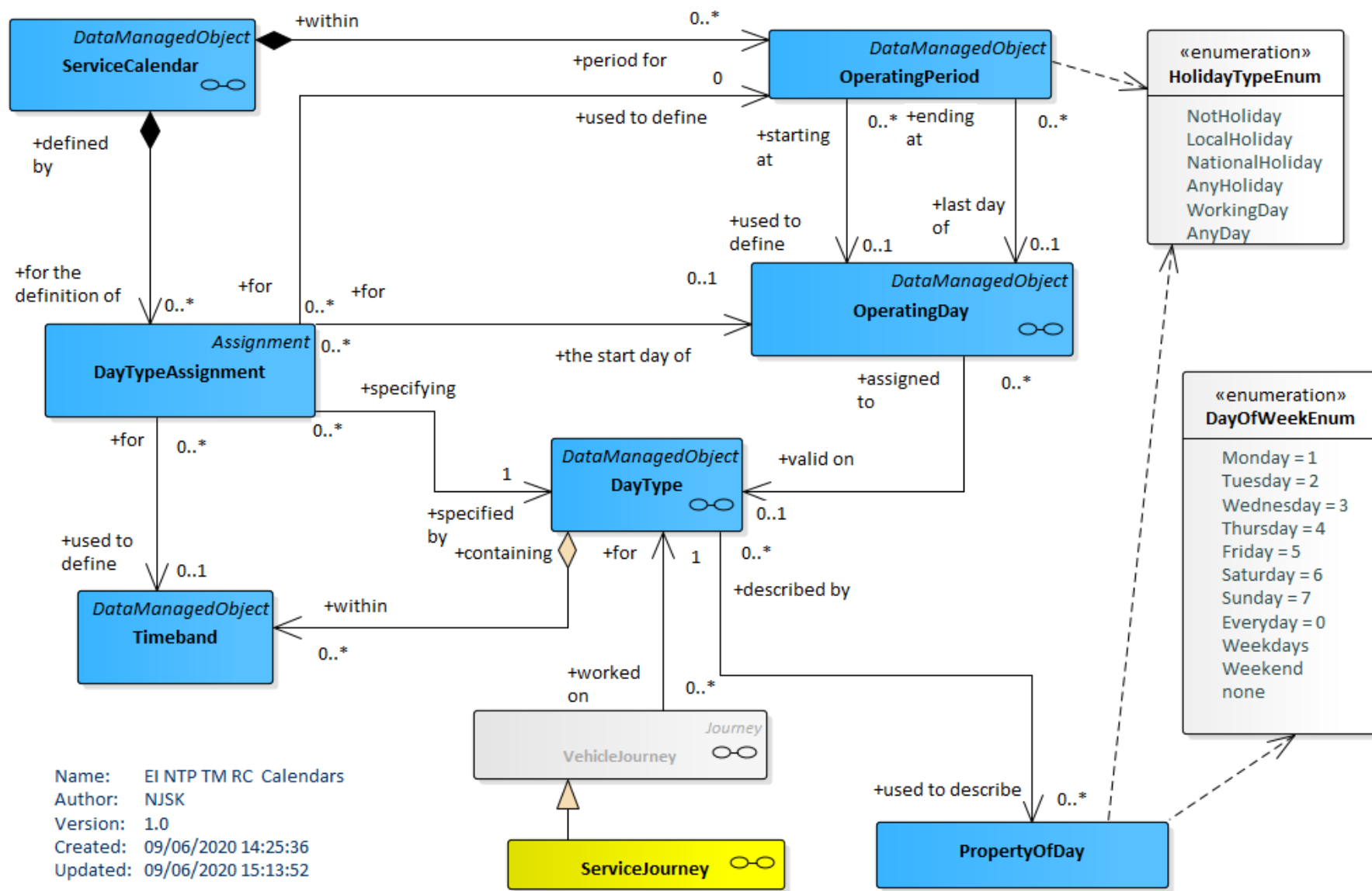
- Useful for Real-time prediction and for schedule creation



# Irish NeTEx Profile

## → Day Types & Service Calendar

class EI NTP TM RC Calendars

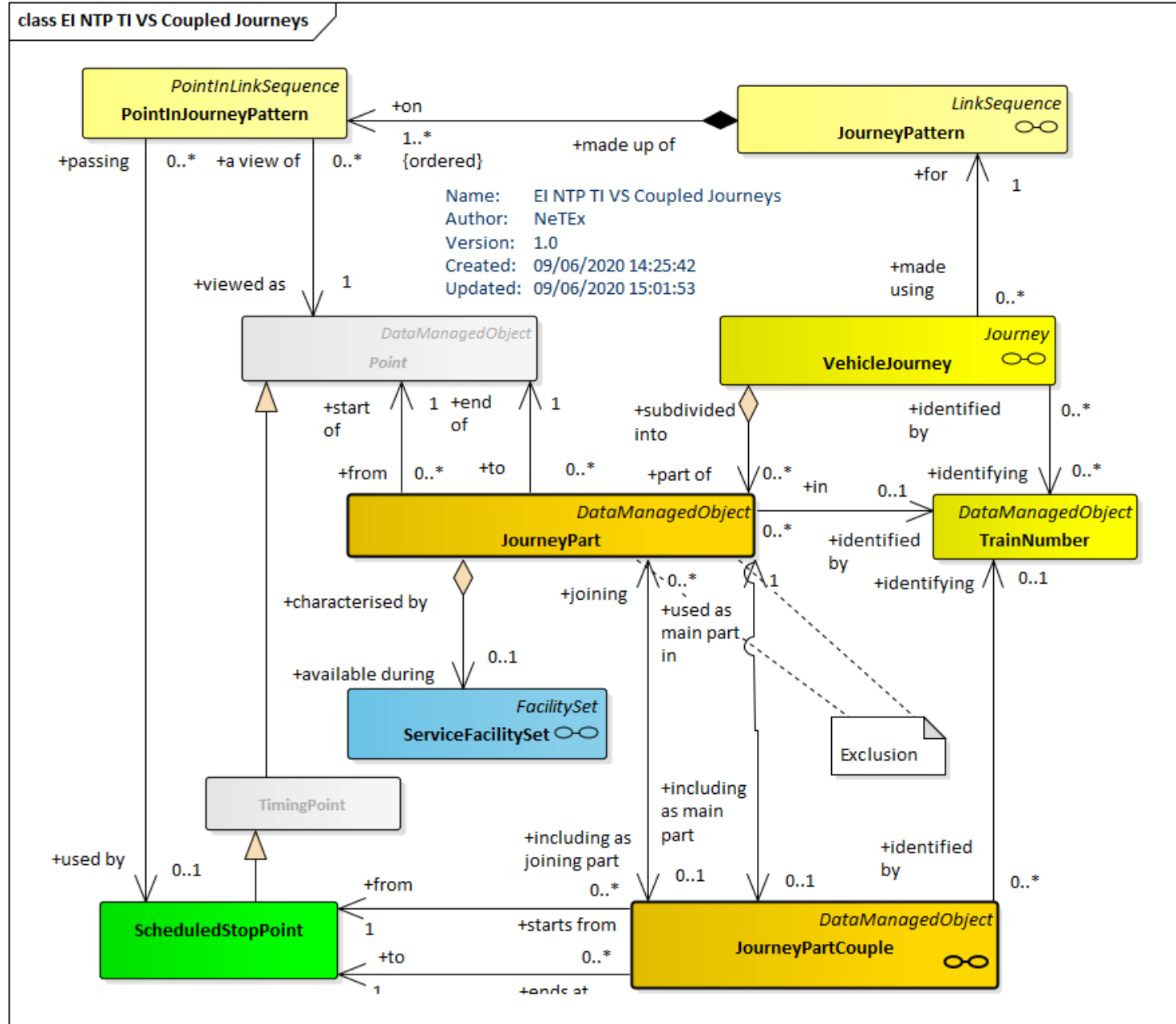


## #2.6

[illegible]

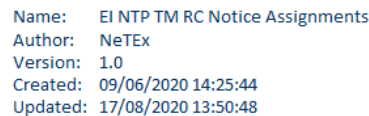
## #2.7

## → Journey Parts & Coupled Journeys



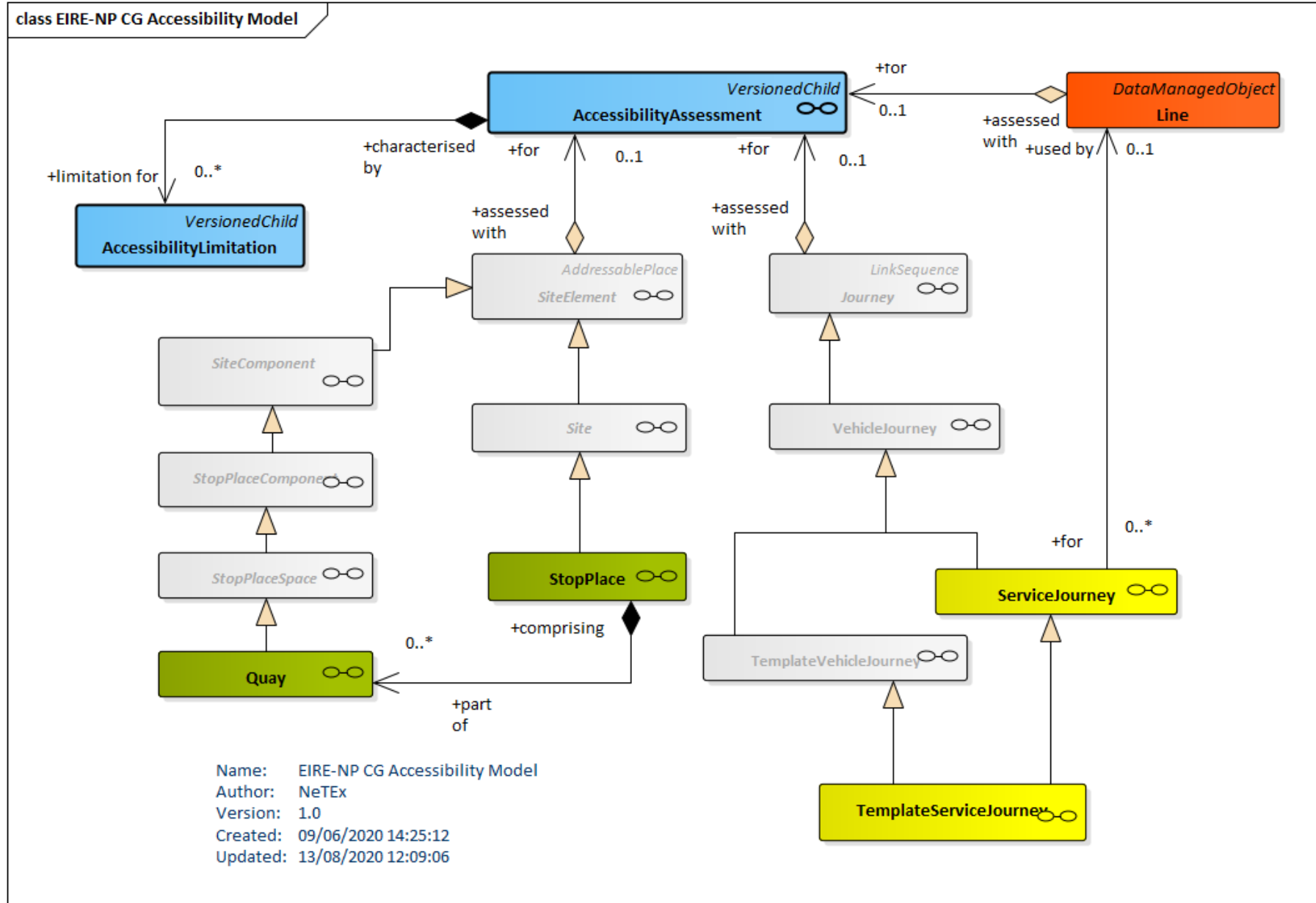


- Use to provide footnotes and annotations



## #2.10

# Irish NeTEx Profile → Accessibility



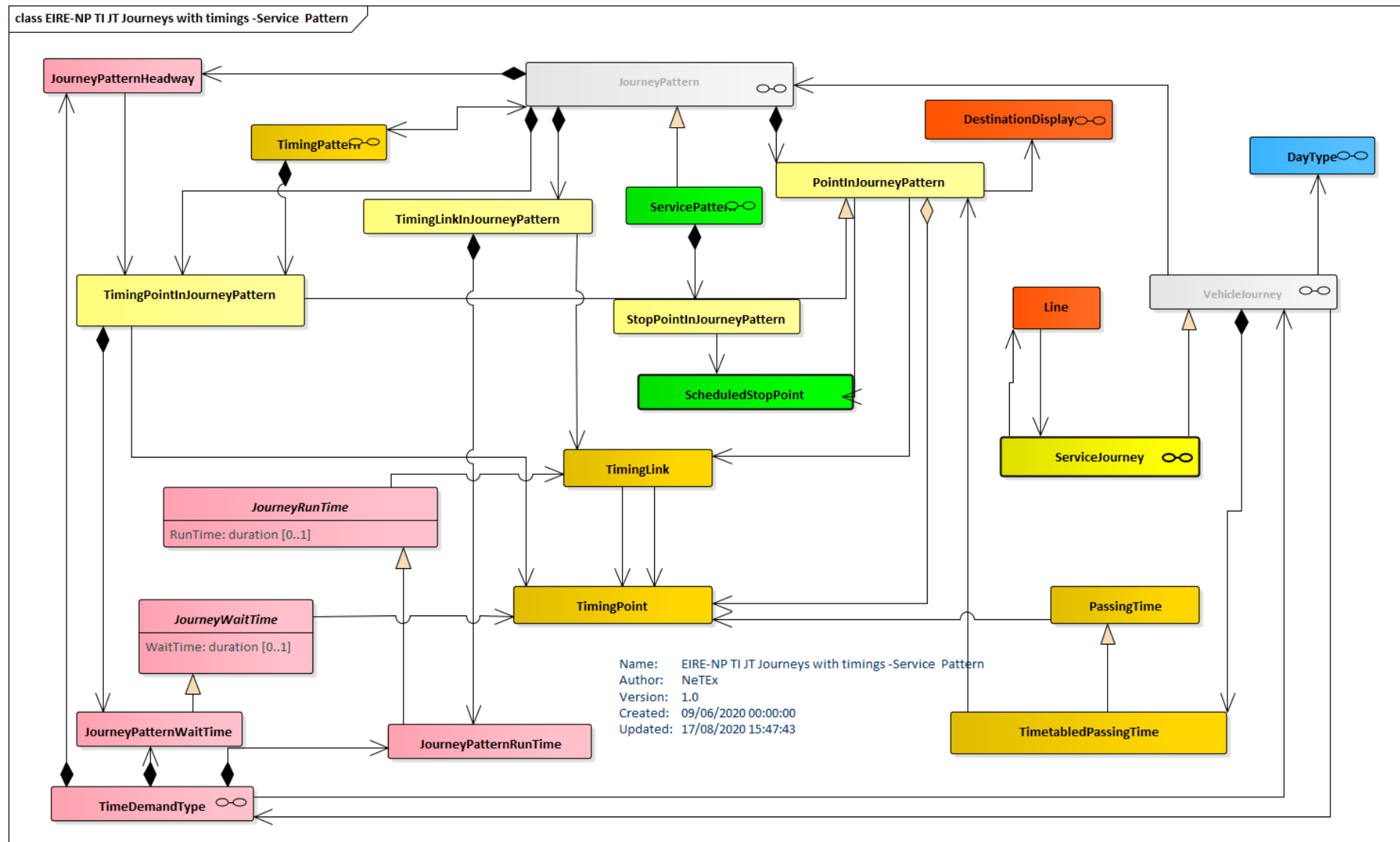


# Irish NeTeX Profile

## Service Pattern

### Run Times & WaitTimes

- Useful for Real-time prediction and for schedule creation

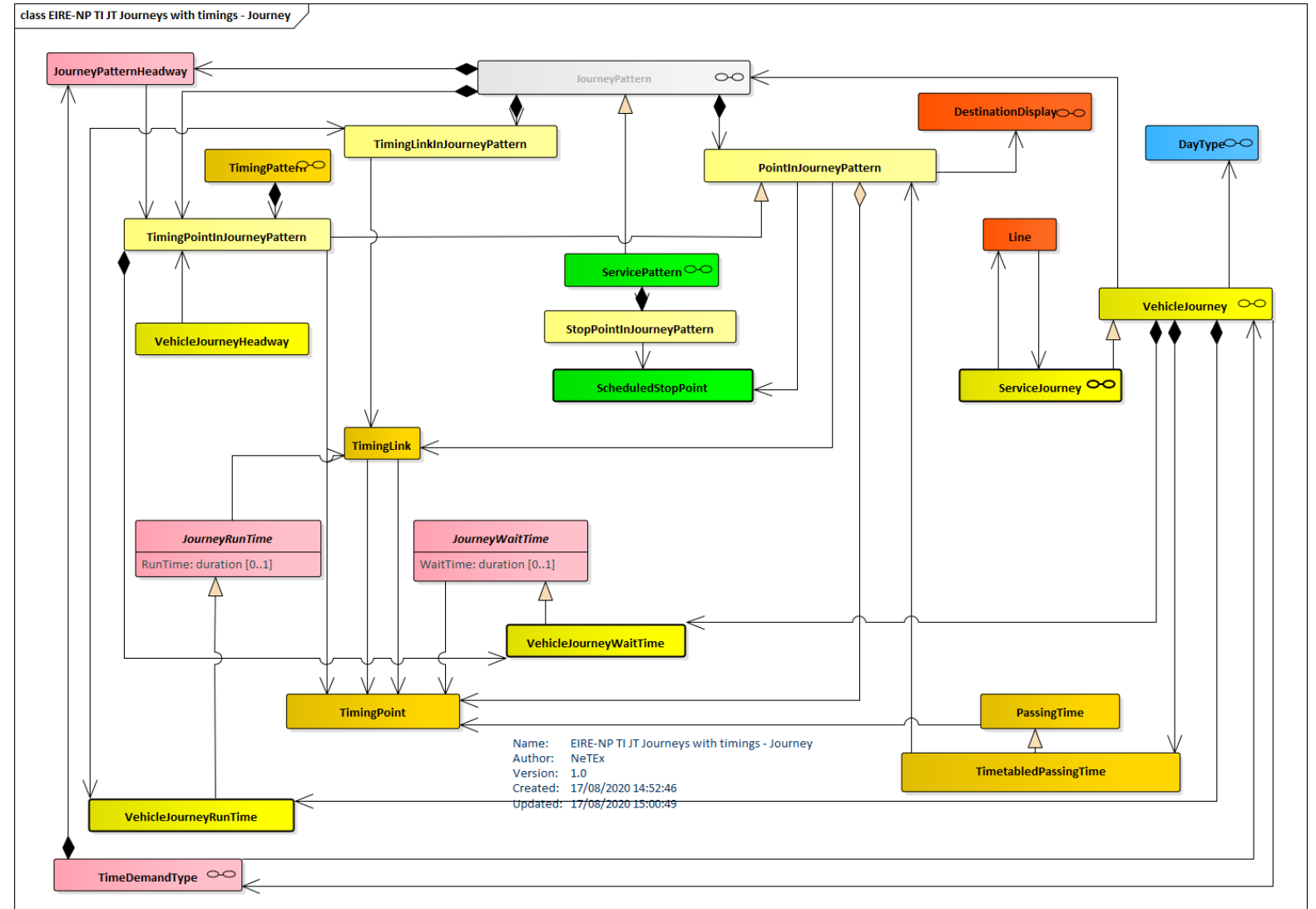




#3.3

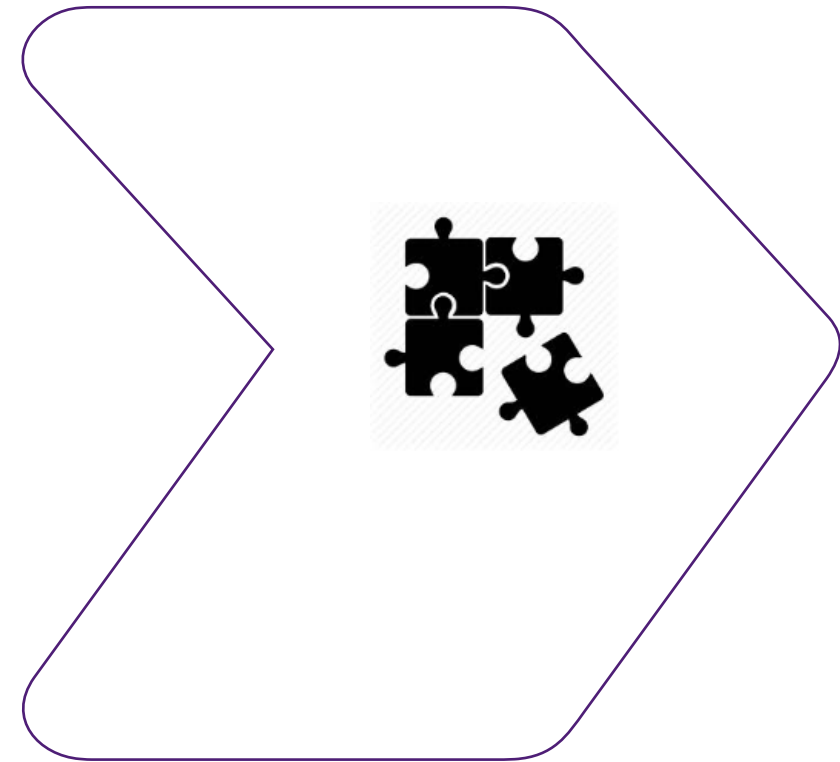
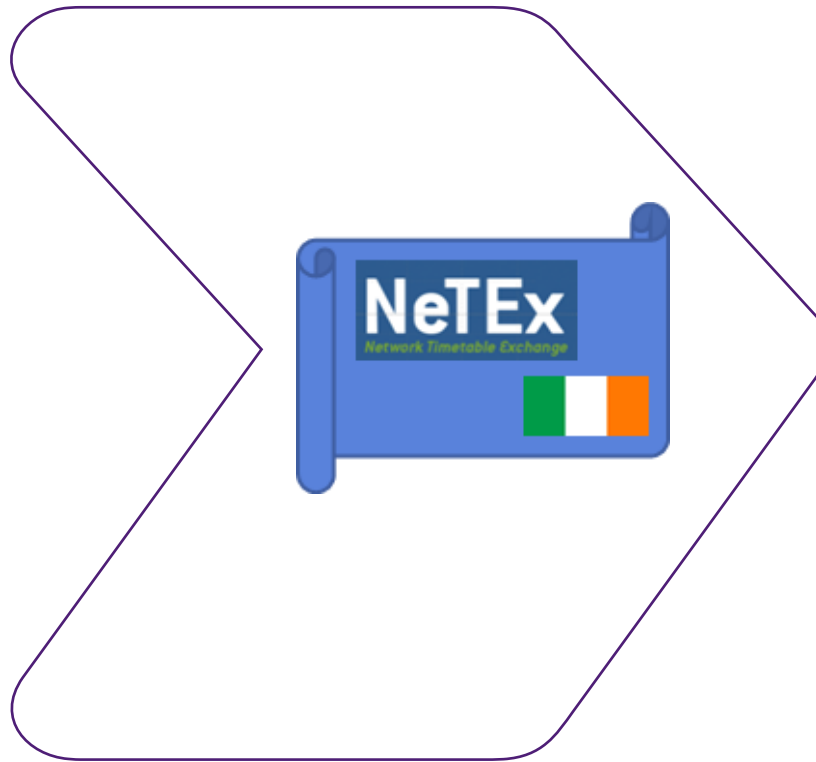
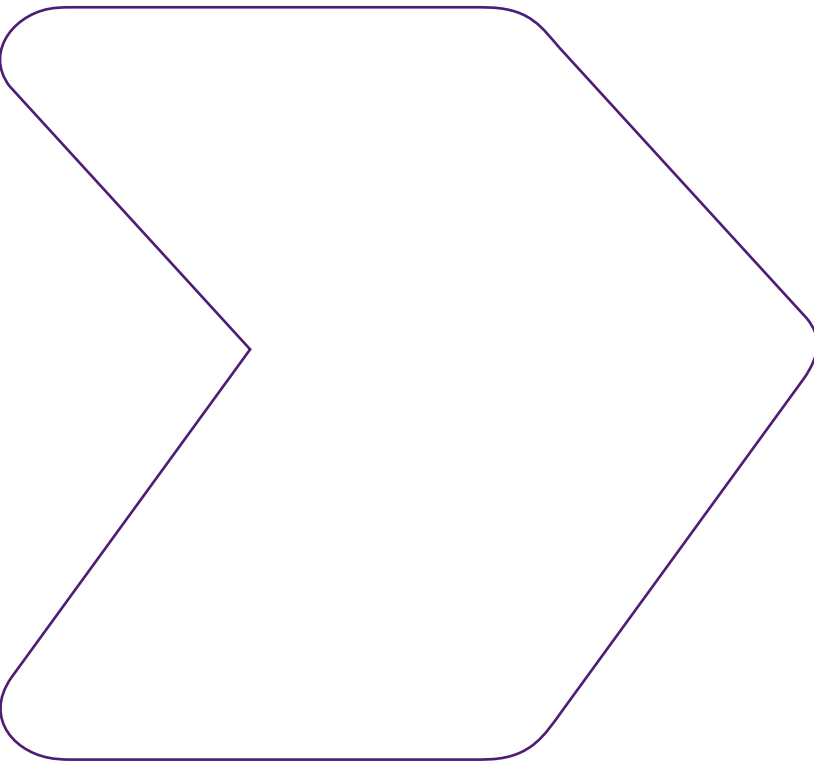
## Irish NeTEx Profile Service Journey Run Times & WaitTimes

- Useful for Real-time prediction and for schedule creation



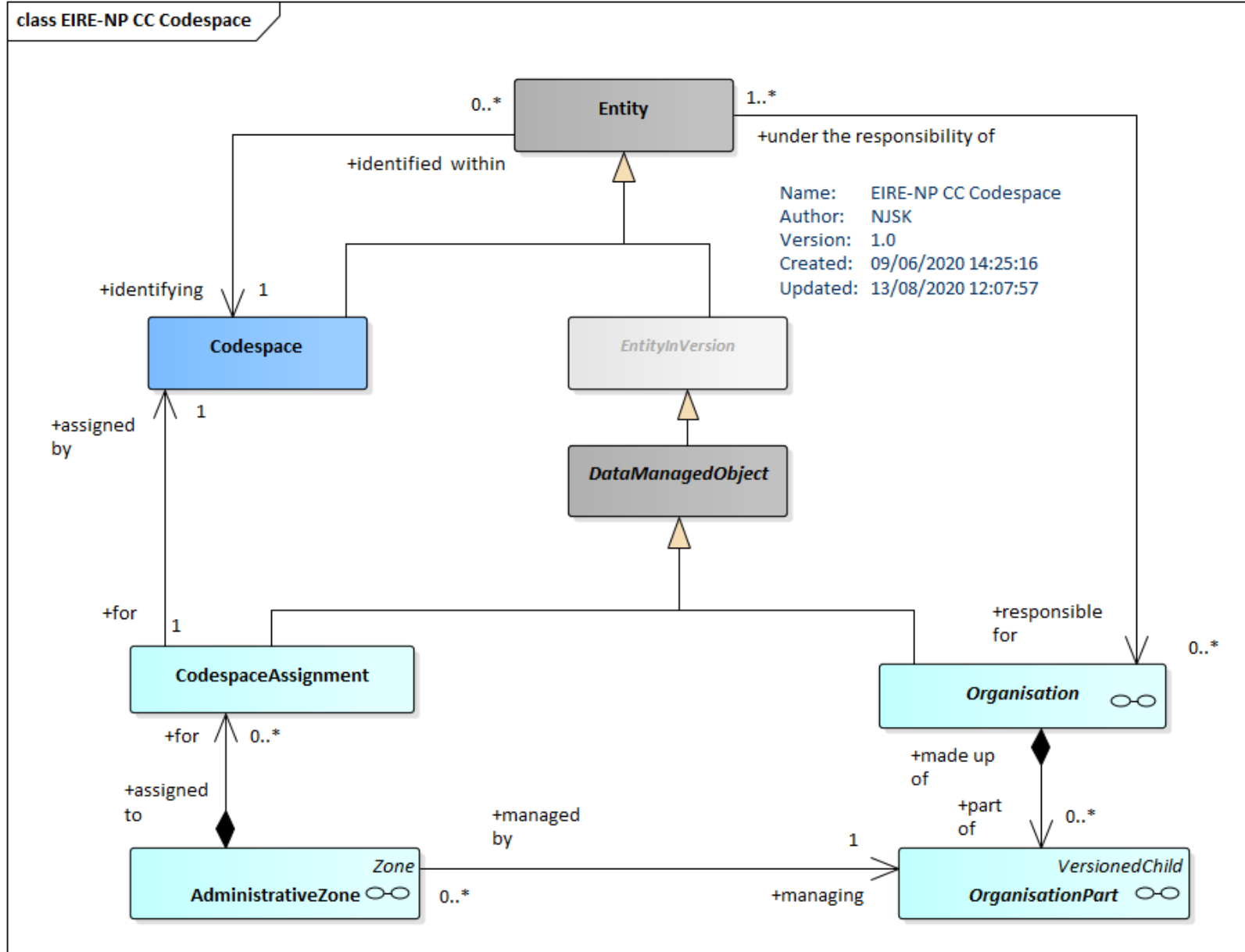
# Irish NeTEx Profile

## Common Profile Elements



# Irish NeTeX Profile Codespaces

- ▶ All objects have a CODESPACE for their identifier.
- ▶ Like W3 name- space – but for instance data:
  - A) Uniqueness scope
  - B) Code structure/ System
- ▶ Associate with a W3C domain to give global scope
- ▶ Can assign responsibility to allocate to a region and organisation or subdivision

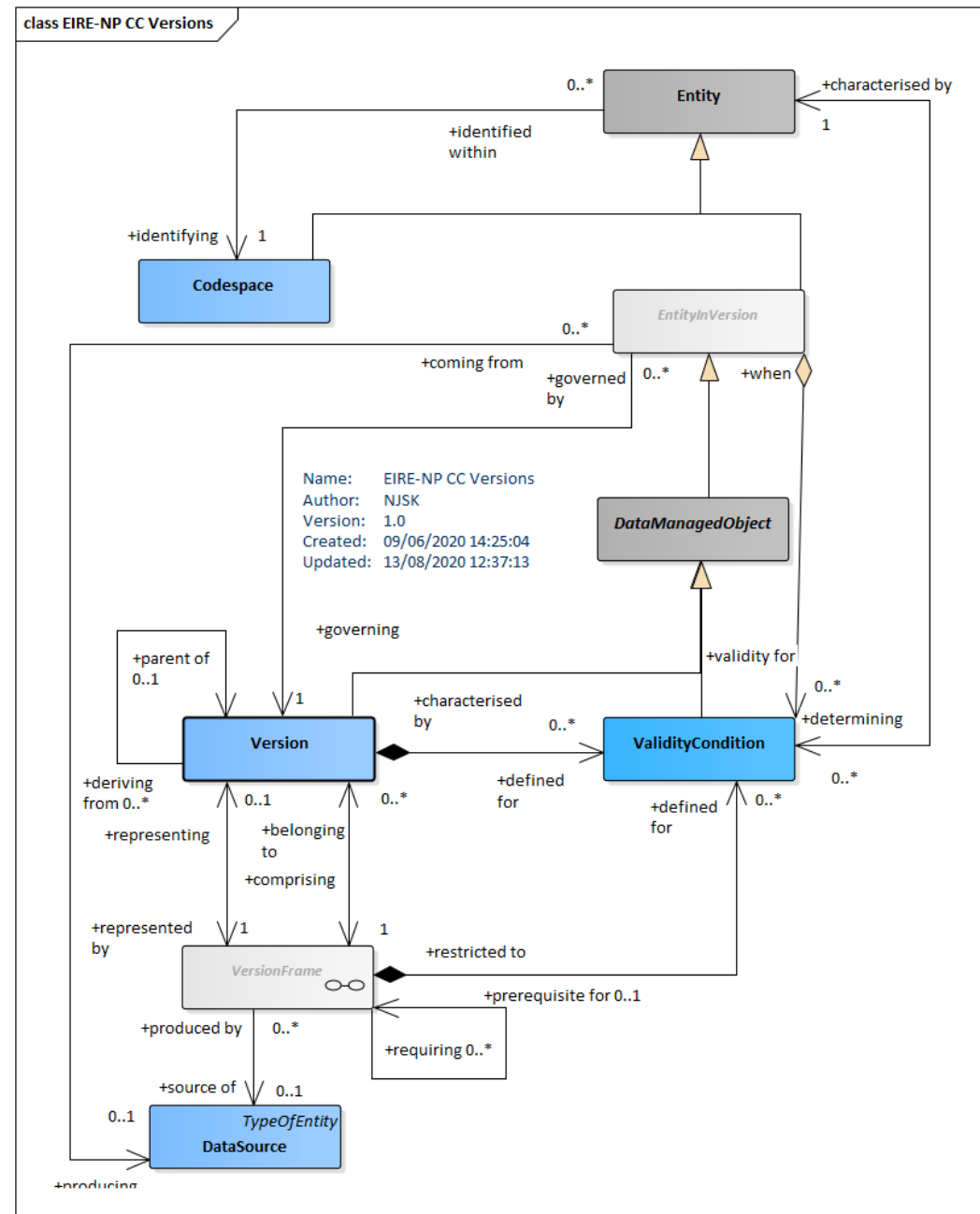


# Irish NeTEx Profile Versions



#1.2

- All entities can be versioned.
  - Fine grained or at frame level
  - EU PROFILE – Frame level only
- A NeTEx XML file contains specific versions of each entity
  - References are versioned
  - Can be dummy version “any”
- Can also have a Data SOURCE and a VALIDITY CONDITION



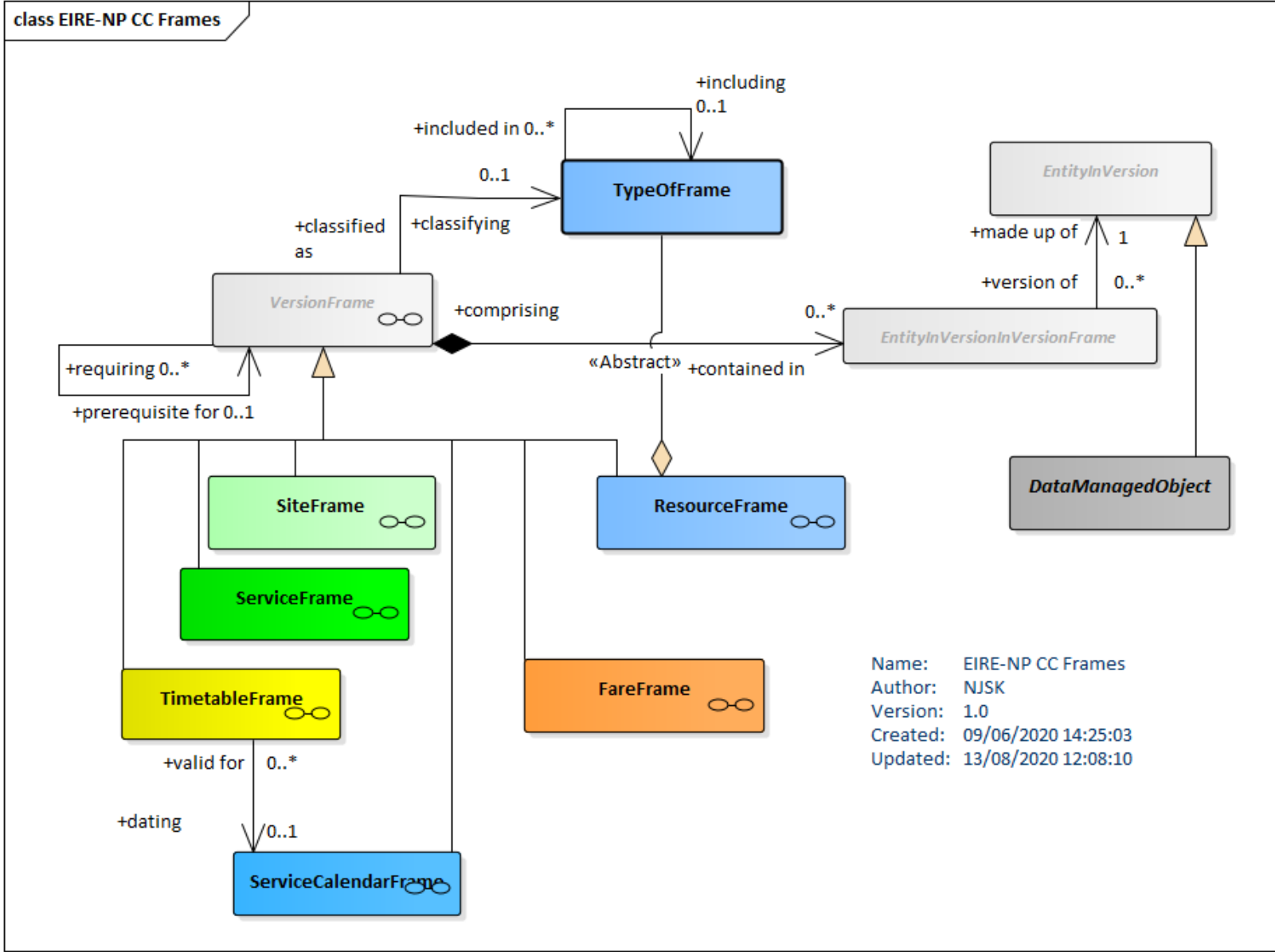


# Irish NeTEx Profile Specific Frames



#1.3

- All frames share common VERSION FRAME properties
- Each specific frame contains specific types of element, e.g. LINES, FARE PRODUCTS, etc
- The TYPE OF FRAME further restricts frame contents to a specific profile, e.g UK FXCP.
- A FRAME may state prerequisites FRAMES

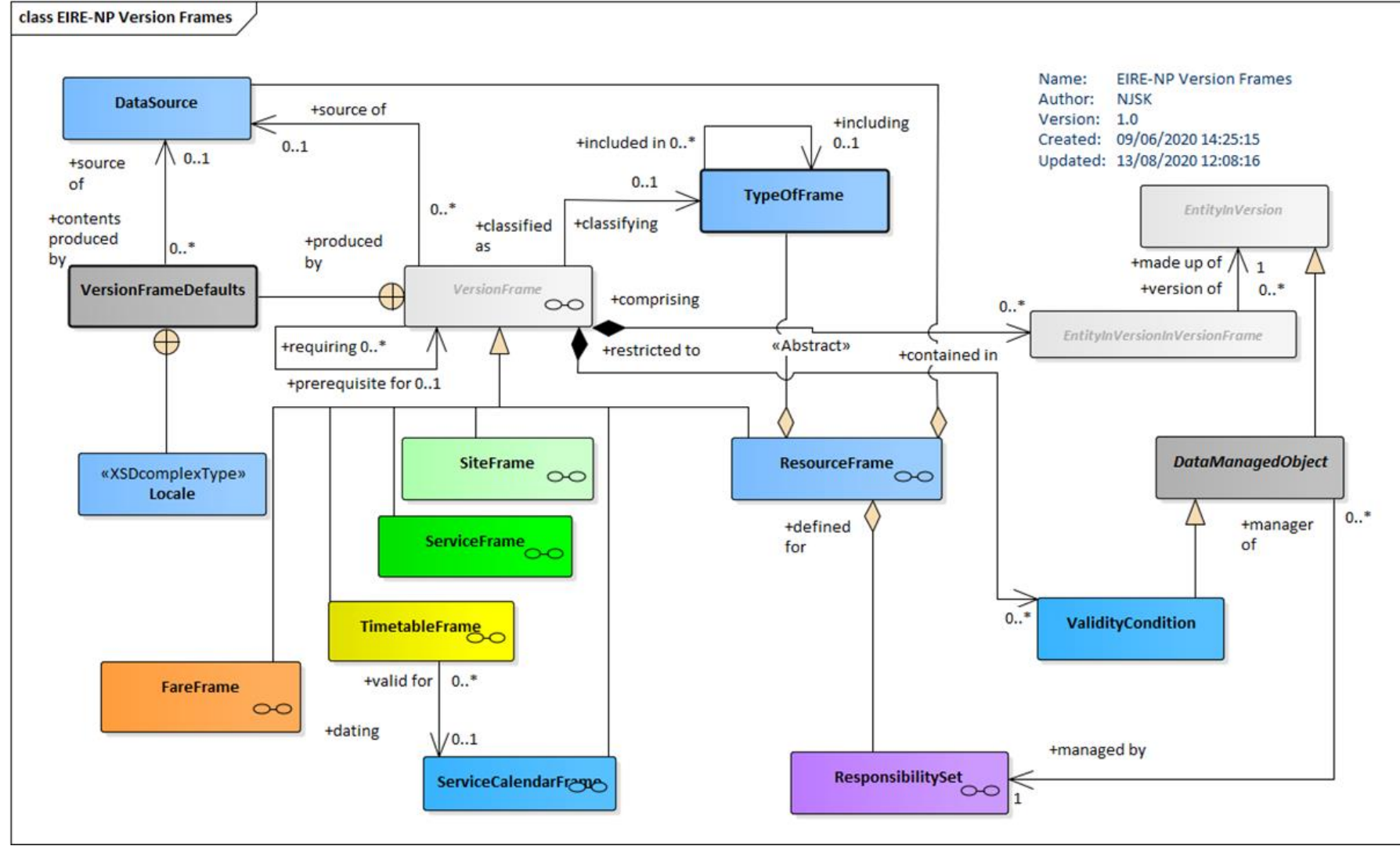


## Other Frame Level properties



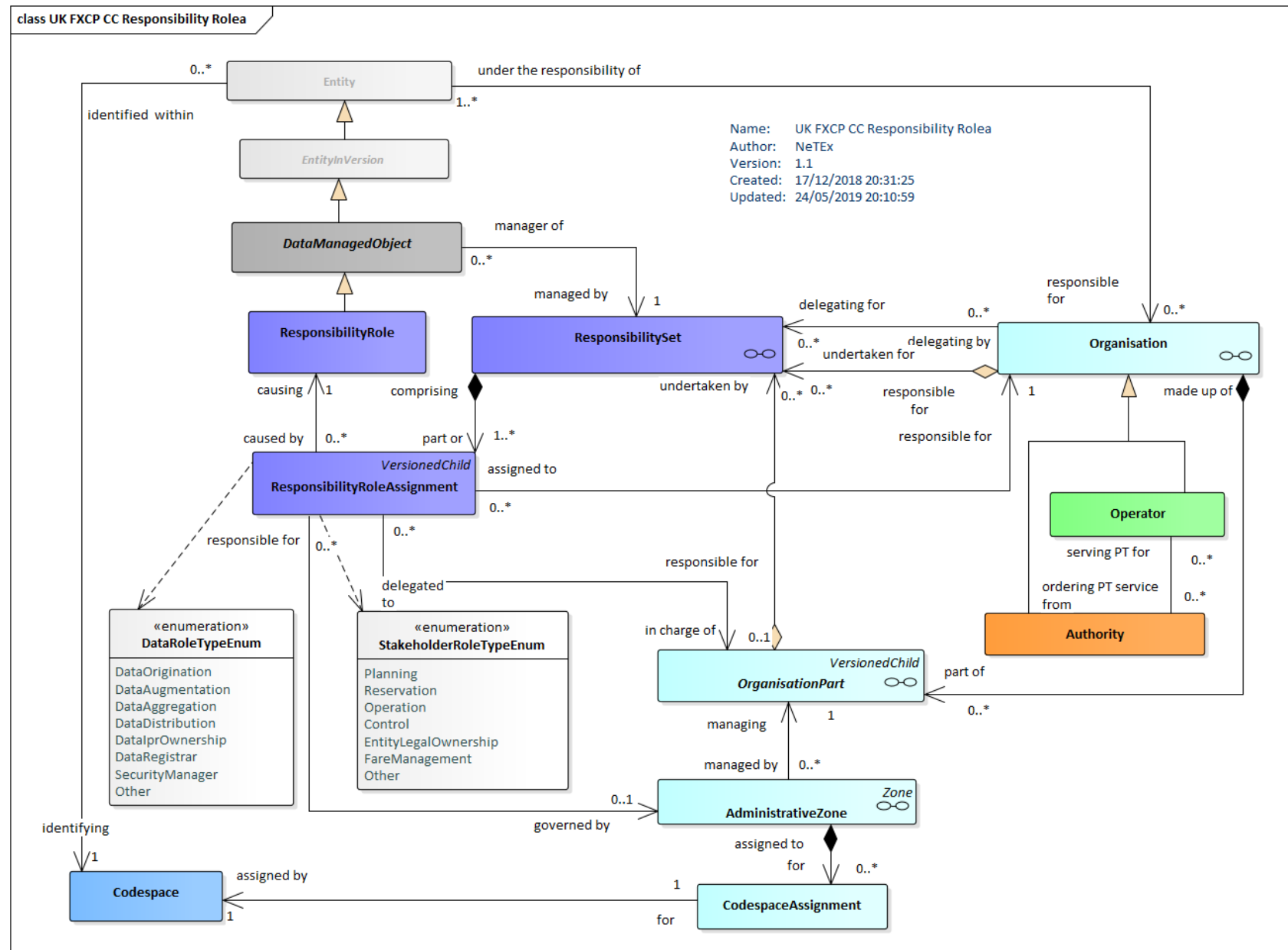
#1.4

- VALIDITY CONDITION
- DATA SOURCE
- Frame Defaults
- RESPONSIBILITY SET



Name: UK FXCP CC Responsibility Rolea  
Author: NeTex  
Version: 1.1  
Created: 17/12/2018 20:31:25  
Updated: 24/05/2019 20:10:59

- Irish NeTeX Profile Organisations,  
  
Operators,  
Authorities  
Responsibility Sets



# Codespaces for Irish Data Elements

Data Set	Content	NeTEx Element	Codespace	Preferred prefix
<b>Administrative Areas</b>	NPTG registrar data (Country, Region, District, AdministrativeArea)	ADMINISTRATIVE AREA, (+GENERAL ORGANISATION)	nptg.org.uk/admin	<i>nptgAdminArea:</i>
<b>Locations</b>	NPTG payload ( <b><i>NptgLocality</i></b> )	TOPOGRAPHICAL AREA	nptg.org.uk/locality	<i>nptgLocality:</i>
<b>NPTG profile data</b>	NPTG metadata	Fixed code values for classifying localities TYPE OF ZONE etc	nptg.org.uk/nptg	<i>nptg:</i>
<b>NaPTAN profile data</b>	NaPTAN metadata	Fixed code values for classifying stops TYPE OF ZONE etc	naptan.org.uk/napt	<i>napt:</i>
<b>Stops, Stop areas</b>	NaPTAN payload (StopPoint, StopArea)	SCHEDULED STOP POINT, STOP AREA	naptan.org.uk/stops	<i>naptStop:</i>
<b>Operators</b>	National Operator Code (NOC)	OPERATOR	nationaltransportauthori ty.ie/noc	<i>noc:</i>
<b>Timetable data</b>	Timetable content	SERVICE JOURNEY, LINE,	Individual operator	<i>op:</i>

# Granularity For exchanging data



Type Of Composite Frame	Stops	Timetables	Fares
<i>Stop_Offer</i>	Stops for Area		Stops & Tariff Zones for Area
<i>Line_Offer</i>	Stops for Line	Timetable for Line	Fares for Line
<i>Network_Offer</i>	Stops for Network	(Timetables for Network)	Fares for Network

Example file names:

EIX-PI-01\_IE\_PHBS\_LINE-OFFER \_L01\_20160302.xml

EIX-PI-01\_IE\_FCRK\_NETWORK-FARE\_FCRK-822+086+110\_20230909.xml

EIX-PI-01\_IE\_NTA\_NETWORK-OFFER\_NPTG-Localities\_20200705.xml



# Types Of Specific Frame: Irish NeTEx Profile

Type of Frame	Descriptiong	NetEx Contents
<b><i>IE_PI_STOP</i></b>	Objects necessary for STOP PLACE and SITE descriptions	STOP PLACES, QUAYS, ENTRANCES, POINTS OF INTEREST, etc.
<b><i>IE_PI_NETWORK</i></b>	Objects necessary for NETWORK descriptions	(LINEs, ROUTEs, JOURNEY PATTERNS, etc.
<b><i>IE_PI_TIMETABLE</i></b>	Objects related to timing information	VEHICLE JOURNEYS, PASSING TIMES, etc.
<b><i>IE_PI_CALENDAR</i></b>	objects related to calendars and types of Objects..	DAY TYPE, SERVICE CALENDAR etc
<b><i>IE_PI_COMMON</i></b>	Common and generic object types possibly used across multiple other frames	TYPE OF VALUE, OPERATOR, etc

