

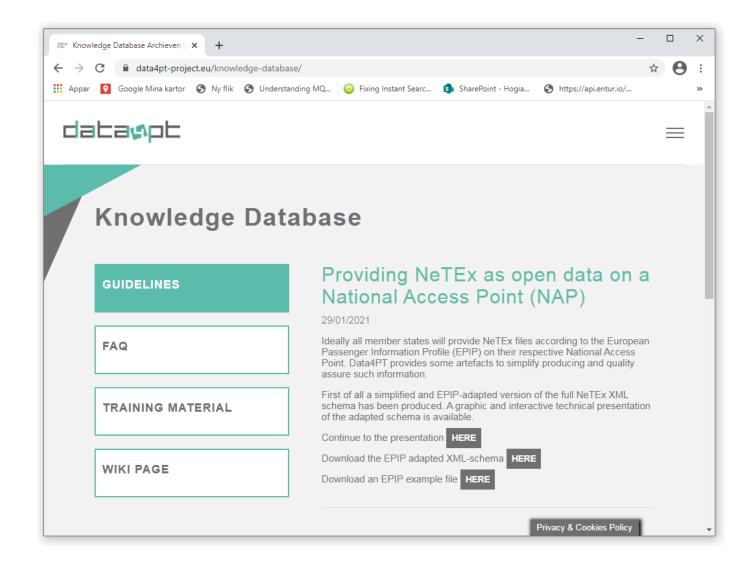
**EPIP – XSD/artefacts** 

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## Data4PT website...







## Some assets available on Data4PT website...

- oA set of adapted XSD files implementing the NeTEx European Passenger Information Profile (EPIP)
- A set of adapted XSD files that covers many real-world NeTEx use-cases
- OA first simple EPIP example file based on a modified Luxemburg export





# Using Data4PT adapted NeTEx XSD-files:

# Assisting with EPIP compliance Simplifying C# code generation

 Experience shows that it is challenging to try to start from the full NeTEx schema.

- Possible to auto generate C#-code such as Microsoft standard tools and open-source tools such as mgaNSS
- Data4 PT provides two sets of adapted NeTEx XSD-files (partly identical).





## Two sets of XSD-files

lame	Date modified	Туре	Size
_content_NeTEx_EPIP.xsd	2021-01-15 11:18	W3C XML Schema	464 KB
gml_combo_v3_2_1_simplified.xsd	2021-01-15 11:17	W3C XML Schema	16 KB
NeTEx_publication_EPIP.xsd	2021-01-15 13:04	W3C XML Schema	423 KB
MeTEx_publication_EPIP-NoConstraint.xsd	2021-01-15 13:04	W3C XML Schema	6 KB
lame	Date modified	Туре	Size
	Date modified 2021-01-29 16:32	Type W3C XML Schema	Size 598 KB
ame		1 **	
amecontent_NeTEx_reduced.xsd	2021-01-29 16:32	W3C XML Schema	598 KB

- Reduced to four files in one directory respectively
- An unfair comparison: Full NeTEx is 379 files in 31 directories





# Set 1: EPIP XSD that is adapted to the TS

 Elements and attributes removed and set as mandatory according to CEN/TS 16614-4:2020





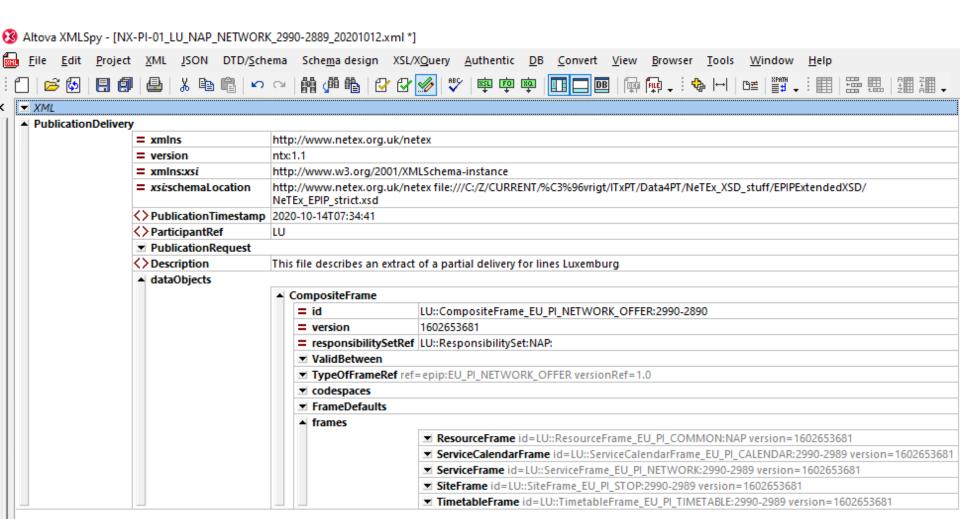
## Set 2: A wider XSD for code generation

- Excluding part 3 for now
- Adds VehicleScheduleFrame, and many constructions not included in EPIP such as Calls etcetera.
- OMethod: Analysed a number of XML-files from Norway, Netherlands and other countries to try to see what parts are of interest to be covered.
- o"Flattened" into four files. Copied parts from full schema, Removed certain complexity and rewrote certain constructions.
- Used verification XML-files to assure that XML-files valid according to this XSD are also valid according to the official XSD





# A simple first EPIP example document







### How to create and validate EPIP XML

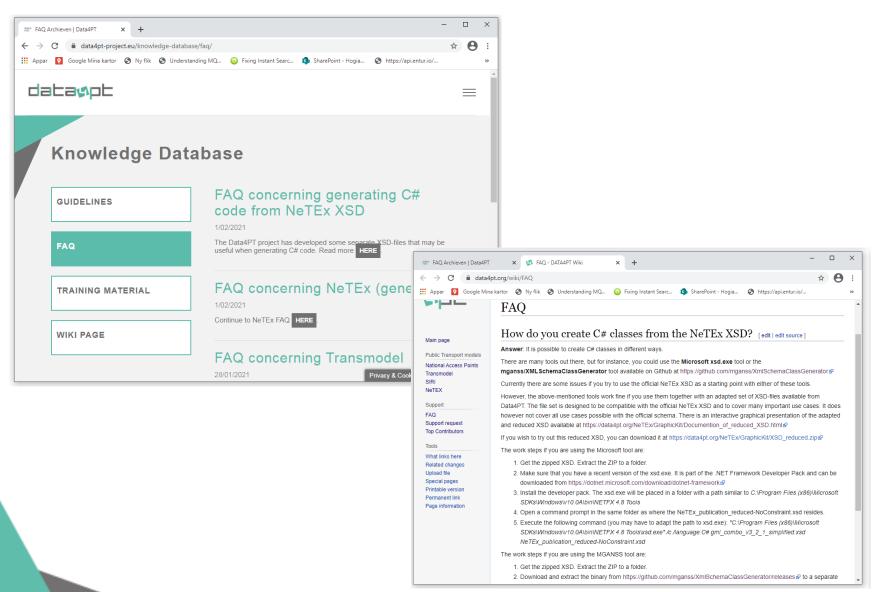
oWhen creating EPIP XML it will be easier to use this XSD as a starting point compared with using the full schema.

- OAfter an EPIP-file is created it should:
  - Firstly, be validated towards the official NeTEx\_publication.xsd
  - Secondly, be validated towards the EPIP xsd.
  - Thirdly, additional tools could be used for advanced validation





#### Data4PT website and WIKI...







Thank you for your attention