

Final Conference WP 1 Data model

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7 September 2022



UVAR data structure

- Delegated Regulation 2022/670 refers to CEN 16157 series or CEN/TS 17268 for encoding regulations and restrictions
- Based on the call-for-tender and the requirements to include the need for dynamic restrictions/activation, the UVAR Box project has created data profiles for the different types of UVARs based on CEN/TS 16157-11: *Publication of machine interpretable traffic regulations*
- This standard has already a model for Traffic Regulation Orders
- UVARs need an additional layers to cover the often complex UVAR specific information elements → Controlled Zone package
- The data model developed has already been forwarded to CEN TC278 as well as NAPCORE for inclusion in the DATEX II set of standards

The DATEX II UVAR datastructure

Supported use cases:

- Automated assessment of accessibility constraints for vehicle
- Transformable to human interpretable information



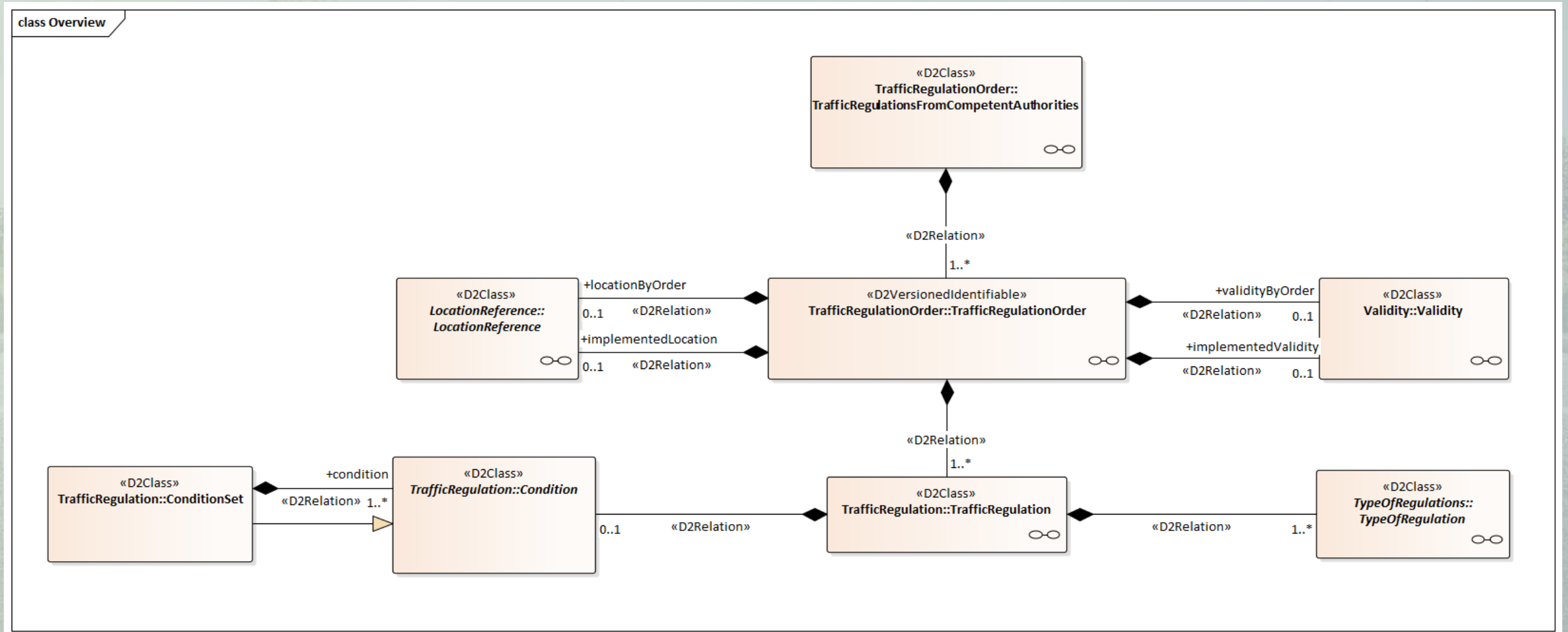
Supporting information with regard to:

- permits
- administrative info
- complementary information

Legal context of the UVAR

CEN/TS 16157-11 TrafficRegulation

➤ A substantial model for regulation types and applicability conditions

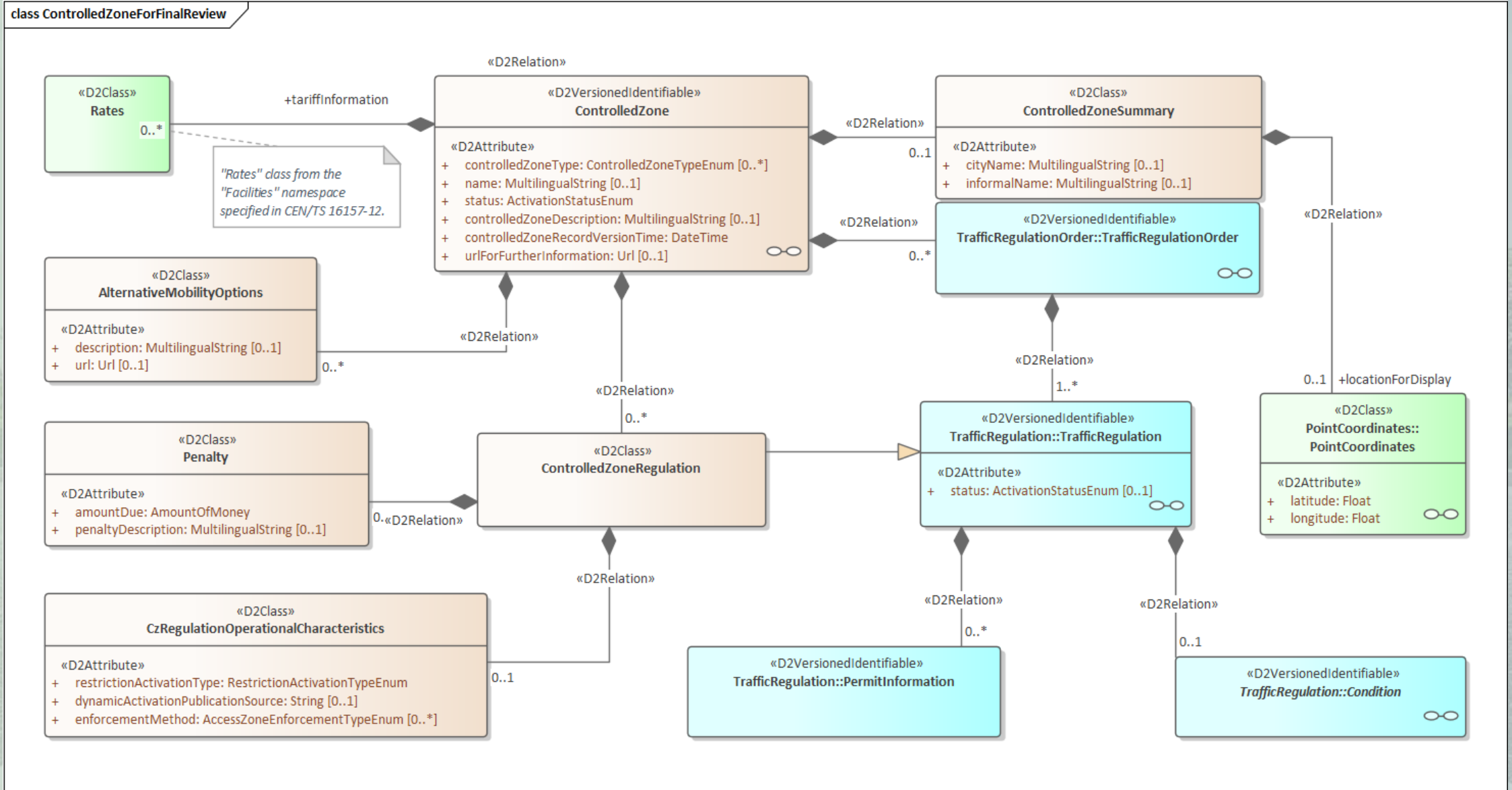


The Traffic Regulation model

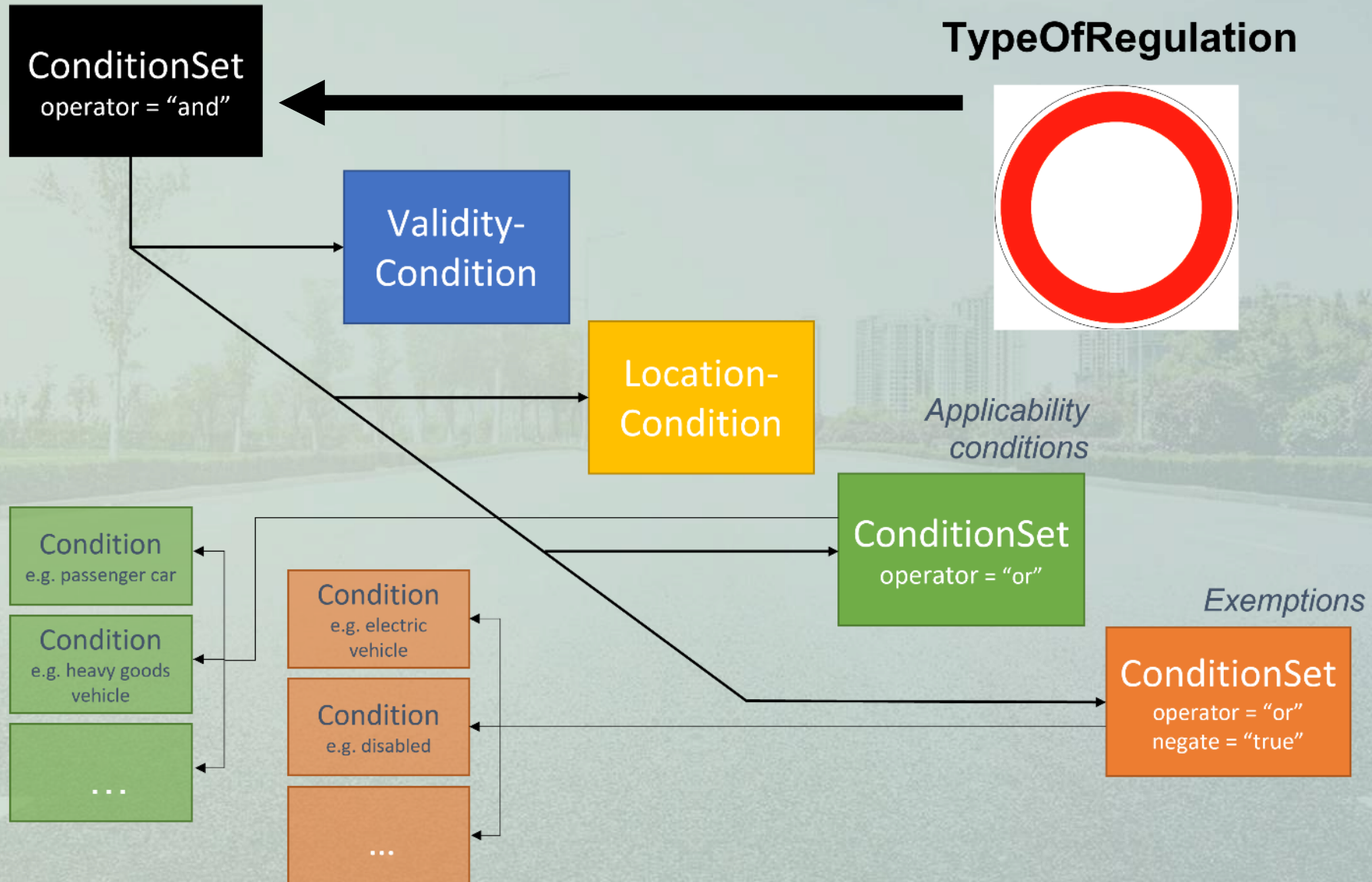
- Allows for complex TROs with many separate regulations e.g. long term roadworks on a motorway
- Allows diverging location for each regulation, plus the order itself (typically bounding)
- Uses an expressive model for time validity (“every Mon to Fri from 5pm to 7pm except for public holidays...”)
- Has a full Boolean expression model for complex conditions (AND, OR, NOT → NOTE: concept aligned with TN-ITS)
- Has a set of basic conditions and regulations taken out of concrete National street codes

- UVAR Box extended the model where needed and added a layer for ***Controlled Zones***

The Controlled Zone Model



Application of the model: Determine applicability



From the standard to deployment

- DATEX II has the concept of Profiling to create submodels that contain only the relevant information elements in a specific use case
 - UVARBox
 - EU profile per UVAR type:
 - Low emission zone
 - Congestion or urban road toll charges
 - Limited traffic zone
 - Parking regulations
 - Pedestrian zone
 - Also possible to restrict these further to national/regional profiles to apply in tool

Low emission zone in NL



- An environmental zone: No access for any diesel-powered vehicle

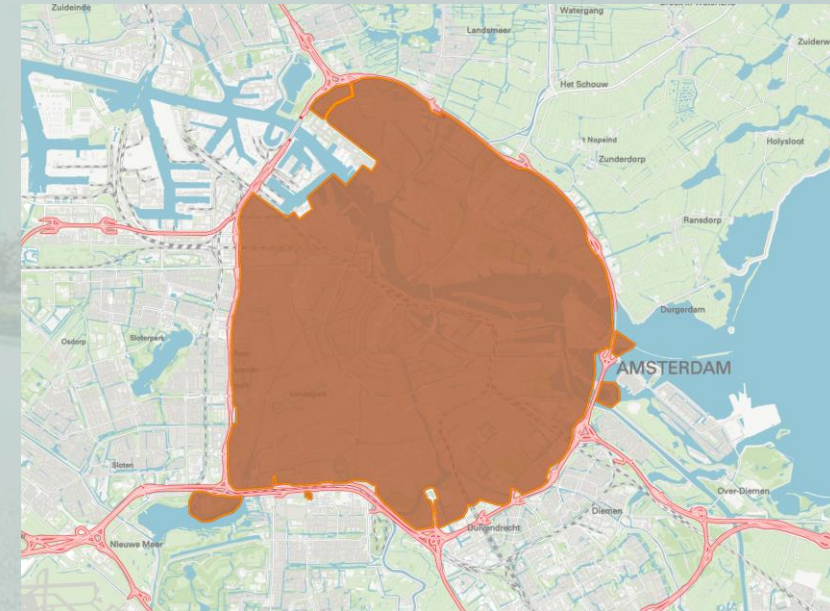
Exempted



- *Motor vehicles with at least four wheels designed and constructed for the carriage of passengers.*
- *Vehicles designed and constructed for the carriage of goods and having a maximum mass not exceeding 3,5 tonnes*
- *AND emissionclass 4, 5 or 6*



- *Vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum mass exceeding 5 tonnes.*
- *Vehicles designed and constructed for the carriage of goods and having a maximum mass above 3,5 tonnes*
- *AND emissionclass 4, 5 or 6*



Amsterdam:

- add geometry
- add validity
- add local exemptions

Additional Exemptions

- Vehicle age > 40
- Wheelchair accessible vehicle
- Campervan owned by resident of zone
- Taxis with a DFR > 1-1-2009

- Permitted exemptions in Amsterdam:
 - Bought a permitted vehicle to be delivered soon
 - Movers, circus and fair vehicles
 - Vehicles adapted for more than > € 500 to enable disabled persons to drive
 - Campervans traveling to or from 1 of the 2 innercity campingsites

The resulting DATEX II data

```

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Human readable information

- The EC launched the Single Digital Gateway (aka *Your Europe*) with the objective of making it easier for citizens and businesses to move within the European Union
- The experts from *Your Europe* analysed the UVAR Box XML data created with the UVAR Box tool
- They created a mockup site based on the LEZ Amsterdam
- The advantage of DATEX II being designed for language-independent encoding is well suited to be processed for SDG content in multiple languages
- Obviously, a continuous data flow will have to be implemented for operational data in the future
- The following slide contains screenshots from the mockup

Choose country:

- Austria
- Belgium
- Bulgaria
- Cro
- Cyp
- Cze
- Den
- Estc
- Finkl
- Still hav
- Search

- France
- Germany
- Greece
- Malta
- Netherlands
- Poland

Netherlands - Urban vehicle access rules in the EU

ON THIS PAGE

- Amsterdam
 - LEZ Amsterdam
 - Access restrictions centre Amsterdam
- Arnhem
 - LEZ Arnhem
 - Access restrictions centre Arnhem
- Den Haag
 - LEZ Den Haag
 - Access restrictions centre Den Haag

Допомога ЄС Україні

EU assistance to Ukraine

Select your type of vehicle and see what cities have restricted access.

- diesel cars
- commercial vehicles
- taxis
- buses
- mopeds
- motorcycles
- lorries

These are the cities that have restricted access in the Netherlands. Click on a title for more details.

Amsterdam

LEZ Amsterdam

Access restrictions centre Amsterdam

Arnhem

LEZ Arnhem

An official website of the European Union How do you know?

English EN Search

Your Europe > Citizens > Travel > Driving abroad > Urban vehicle access rules in the EU > Netherlands

Doing business >

Travel Work & Retirement Vehicles Residence formalities Education & Youth Health Family Consumers

Last checked: 04/08/2022

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Amsterdam

LEZ Amsterdam

These areas have restricted access: [View map](#)

These vehicles have restricted access: diesel cars, commercial vehicles, taxis, buses, mopeds, motorcycles and lorries

Where to get a permit? Read more here: <https://ontheflingen.amsterdam.nl/publiek/>

Special conditions/exceptions: When you have ordered a zero emission vehicle that is not delivered yet, you can apply for a temporary permit for entering the LEZ for the duration until the delivery date plus 1 month, with a maximum of 12 months. Conditions: your current vehicle has no access; the vehicle procured is zero emission. If the vehicle involved is a leased vehicle, the period should be at least 12 months

Read more here: [Milieuzones Nederland](#)