German Roadworks Data Profile (DATEX II)

Extension Summary

1. Overview

This document summarises the Level B extensions for the German Roadworks Profile in DATEX II, used for the German MDM (Mobility Data Market Place). Note that the original documentation of the profile is available in German language only.

It is intended to bring in these extensions into CEN standardisation for the current reviews of CEN/EN 16157.

2. Overall Situation

In Germany, motorway roadworks are usually clustered in several phases, distinguished for example by its time, by its location or by its lane management. They are modelled as SituationRecords.
And there is one overall logical item, that comprises all of them, i.e. one of the SituationRecords covers the complete time and the complete location of all other records.

Thus, there is the need to identify this special record as being the **overallSituation**.

Figure 1 shows the extension that introduces the new role 'overallSituation':
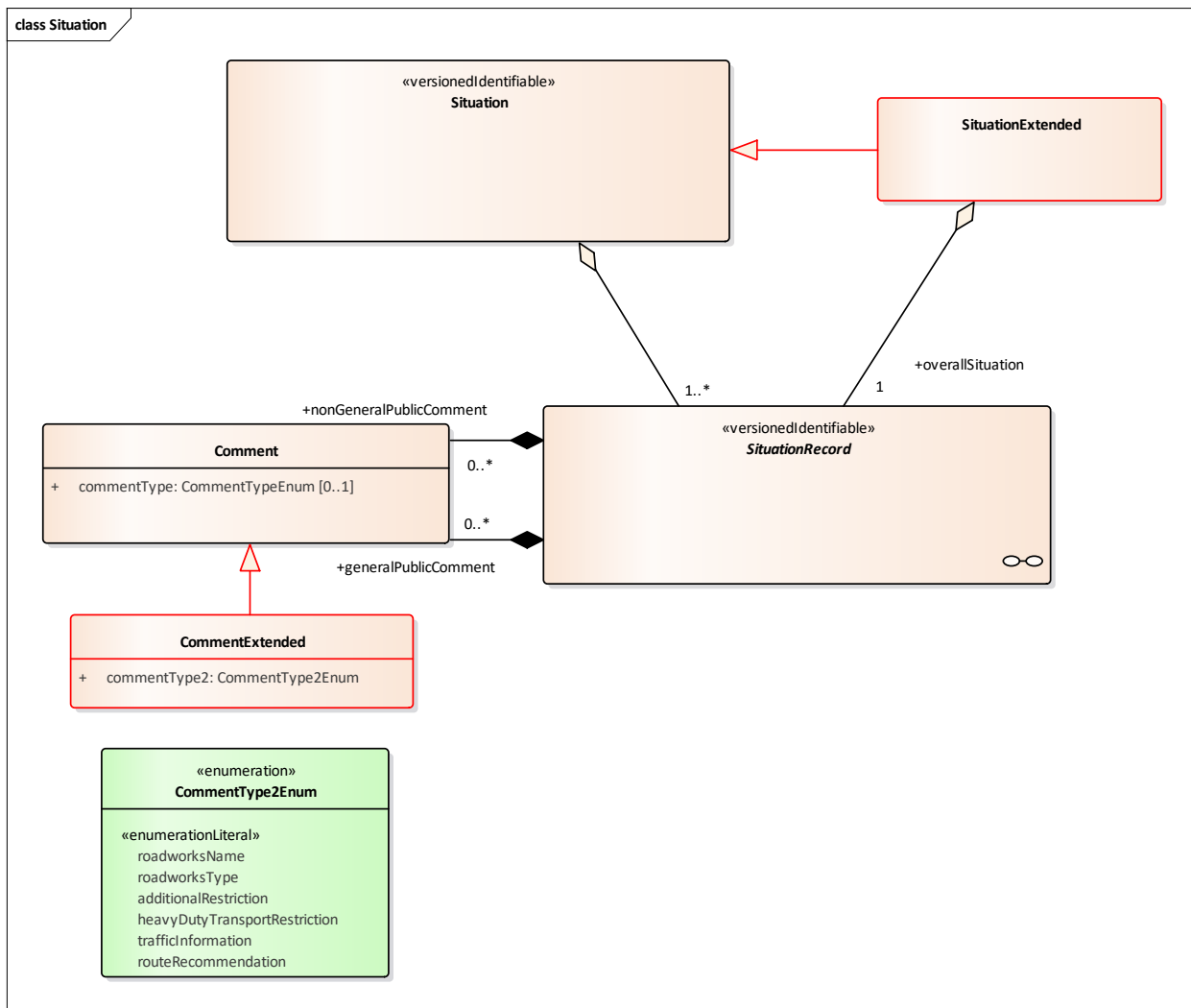

Figure 1: Extensions for Situation and Comment types

Definition proposal:
One identifiable versioned instance of a single record/element within a situation that summarises all other records in the situation (i.e. superset of all locations, superset of their validity information etc.).

3. Comment types

There are more comment types needed than those available in CommentTypeEnum. The green box in Figure 1 shows the additional elements needed.

4. Georeference

- OpenLR as well as GML-Linestring are used
- Atribute directionRelativeOnLinearSection is useful for nearly all Linear methods.
- Attributes roadName, roadNumber and roadDirection is useful for nearly all Linear methods.
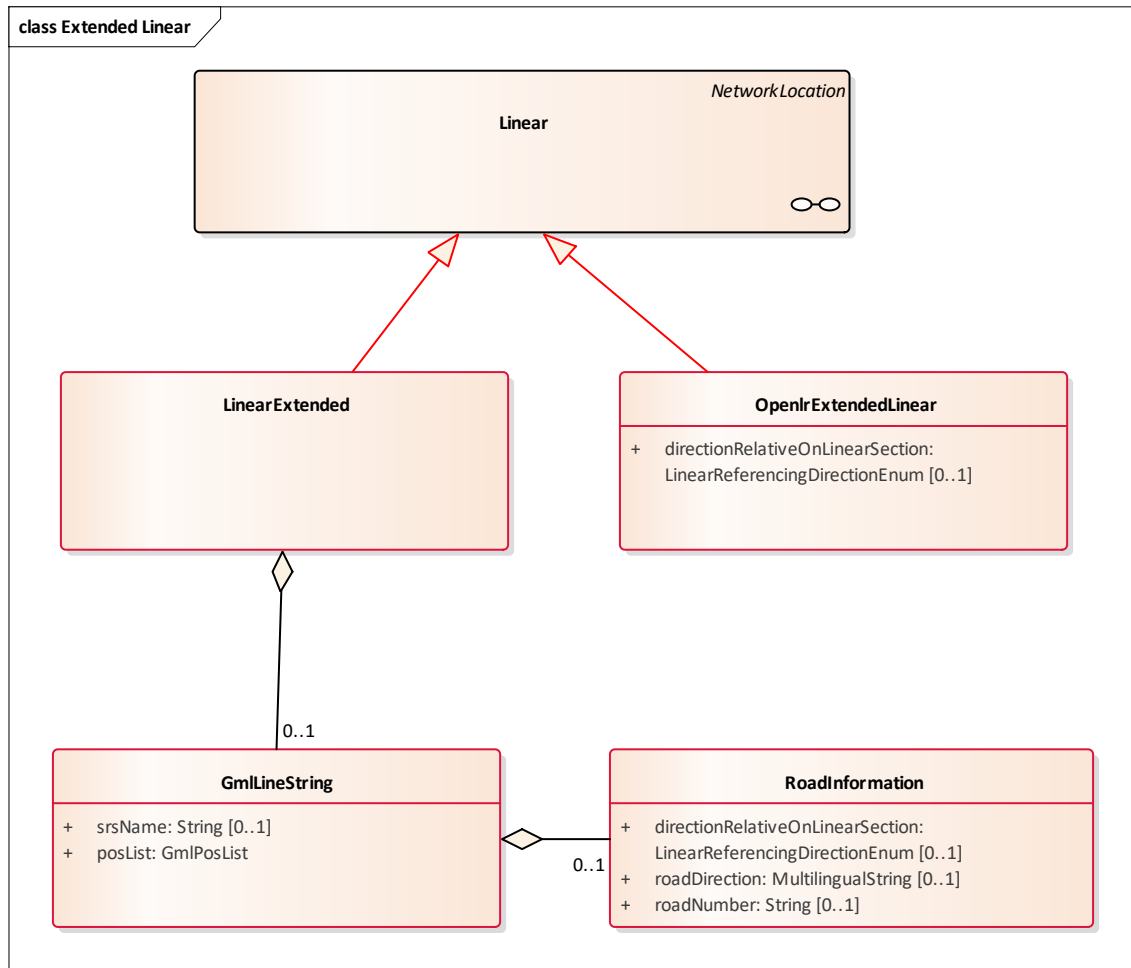
See Figure 2 for details.

Figure 2: Extensions for Linear

5. Roadworks

- It is not useful, to specify thresholds in the definitions of **RoadWorksDurationEnum** (currently: shortTerm <= 1 month). It should be phrased more generally, as it might vary in the different countries.
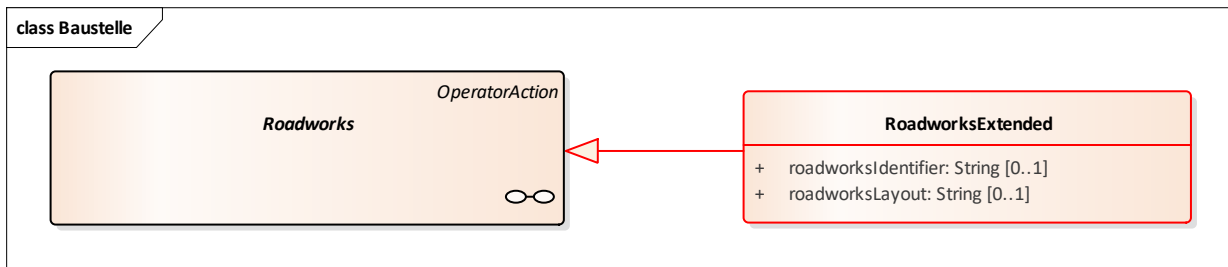- Two more String attributes for Roadworks: roadworksIdentifier and roadworksLayout.

Figure 3: Extension for Roadworks

6. OperatorAction / Speedlimit

To specify speedlimit information directly within an OperationAction Record, two more attributes mainSpeedLimit and minimumSpeedLimit are introduced:
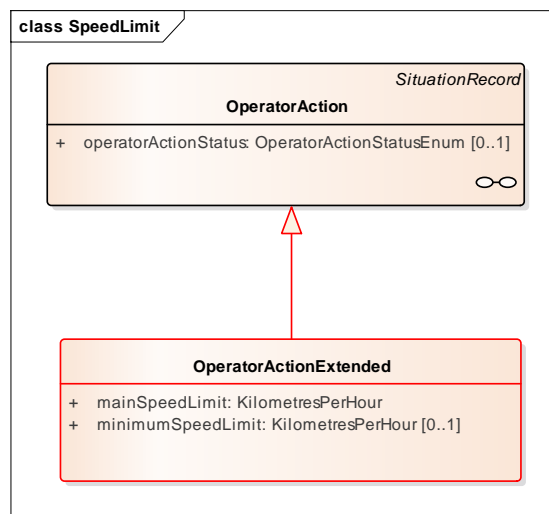

Figure 4: Extension for OperatorAction

7. Impact

The following attributes are added to the Impact class:

- lanesRestricted (which is a simple Boolean rather than the number of restricted lanes)
- closedLanes (which is an unlimited lanes enumeration)
- hardShoulderStatus (with literals as in the green box in Figure 5)
- laneStatusCoded (which is an individual code structure for the cross section of all lanes)
- residualHeight (in addition to residualRoadWith)

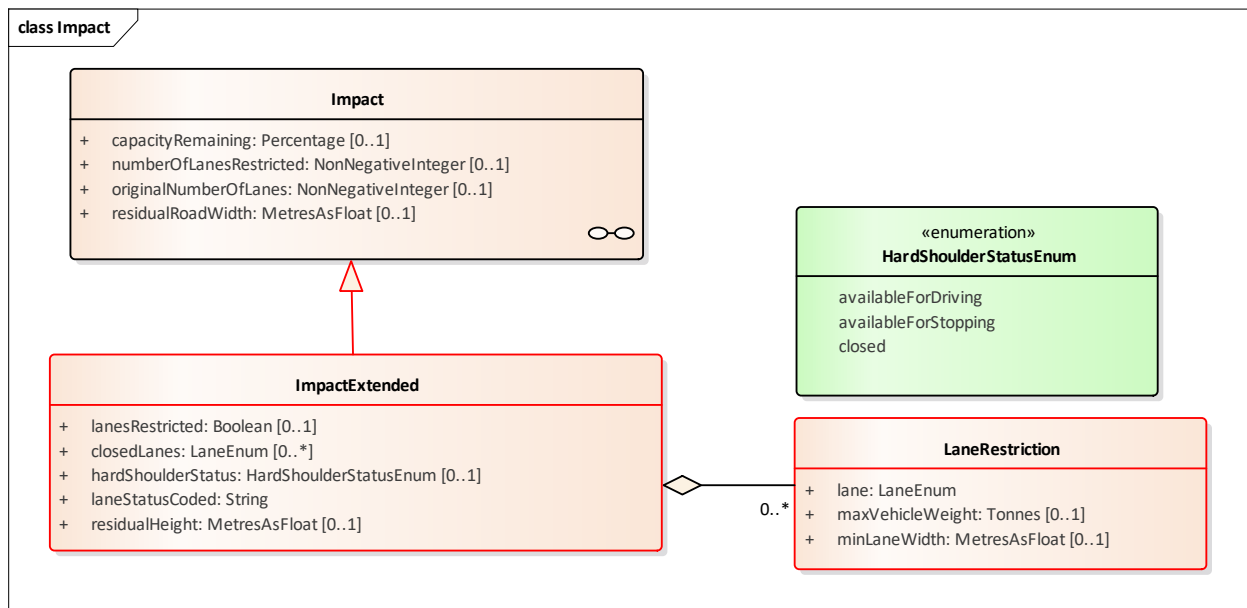For each lane, the information maxVehicleWeight and minLaneWidth can be specified using the new class LaneRestriction:

Figure 5: Extensions for Impact