



EasyWay

DATEX II User Forum 20/21 March 2012 - Stockholm

ESG1 – ESG2

**The User Experience: Using DATEX II Profiles in
Traffic Information and Management Deployments**

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- **ESG1- ESG2 Deployment Guidelines**
- **ESG1- ESG2 DATEX II Requirements**
 - A common view
 - A different approach
- **ESG1 and ESG2 DATEX II requirements' exemples**
- **Conclusion**



ESG1 and ESG2 Deployment Guidelines

EasyWay 2: Deployment Guidelines 2012

ESG 1 - TIS Traveller Information Services

Forecast and
real time event
information

Traffic
condition and
travel time
information

Speed limit
information

Weather
information

Co-modal
traveller
information

TIS Deployment Guideline Annex: Reference Document

ESG 2 - TMS Traffic Management Services

Dynamic lane
management

Variable
speed limits

Ramp
metering

Hard shoulder
running

Incident
warning and
management

HGV
overtaking ban

Traffic
management
plan for corridors
and networks

ESG 3 – F&L Freight and Logistic Services

Intelligent truck
parking and
secure
truck parking

Access to
abnormal goods
Transport
regulations

Supporting Guidelines and Documents

ESG 4 – VMS Variable Message Signs

Variable
Message Signs
harmonisation
Part I

Variable
Message Signs
harmonisation
Part II

ESG 5 DATEXII

DATEX II

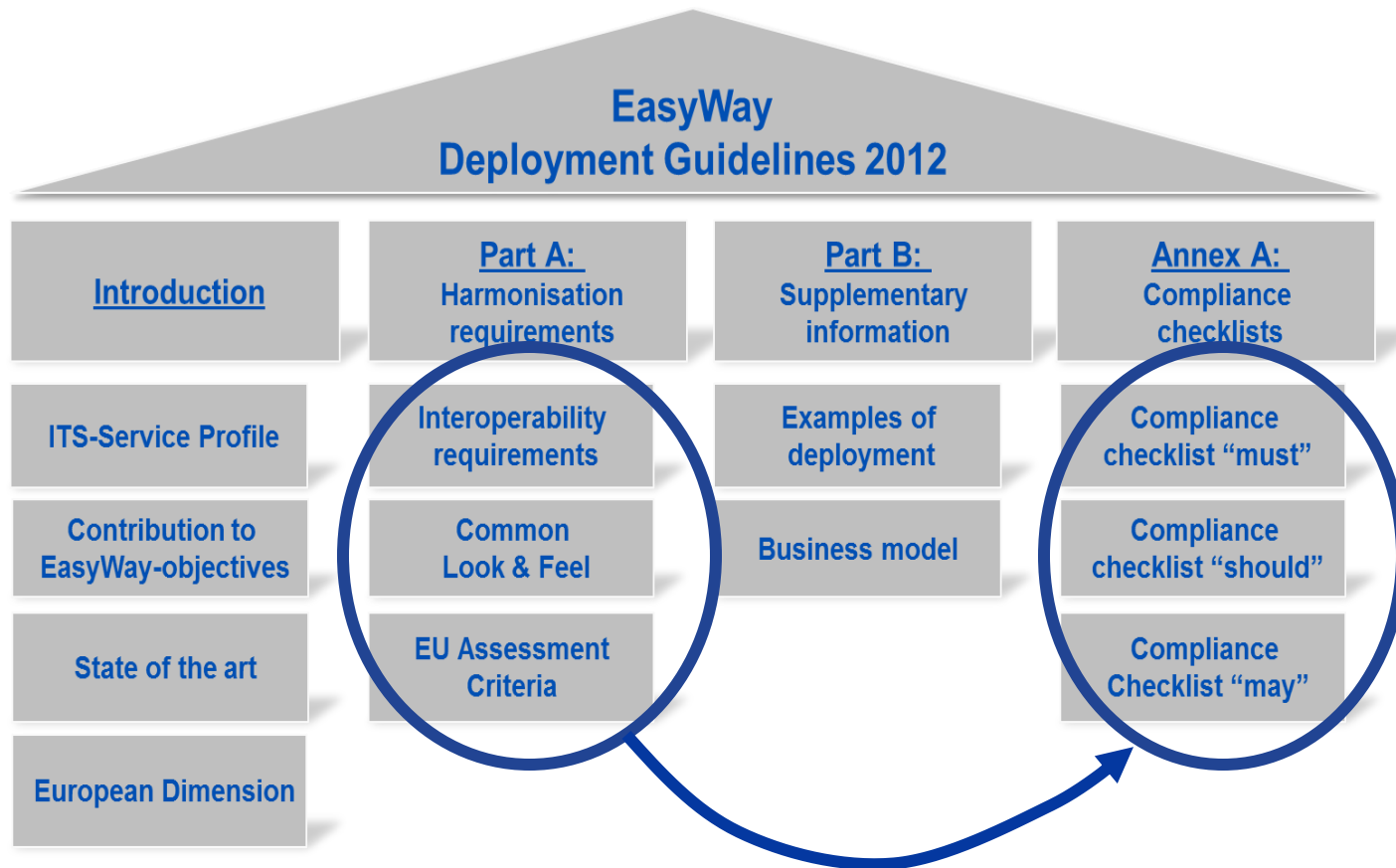
ESG 6 - ICT ICT Infrastructure

*EasyWay
Operating
Environments*

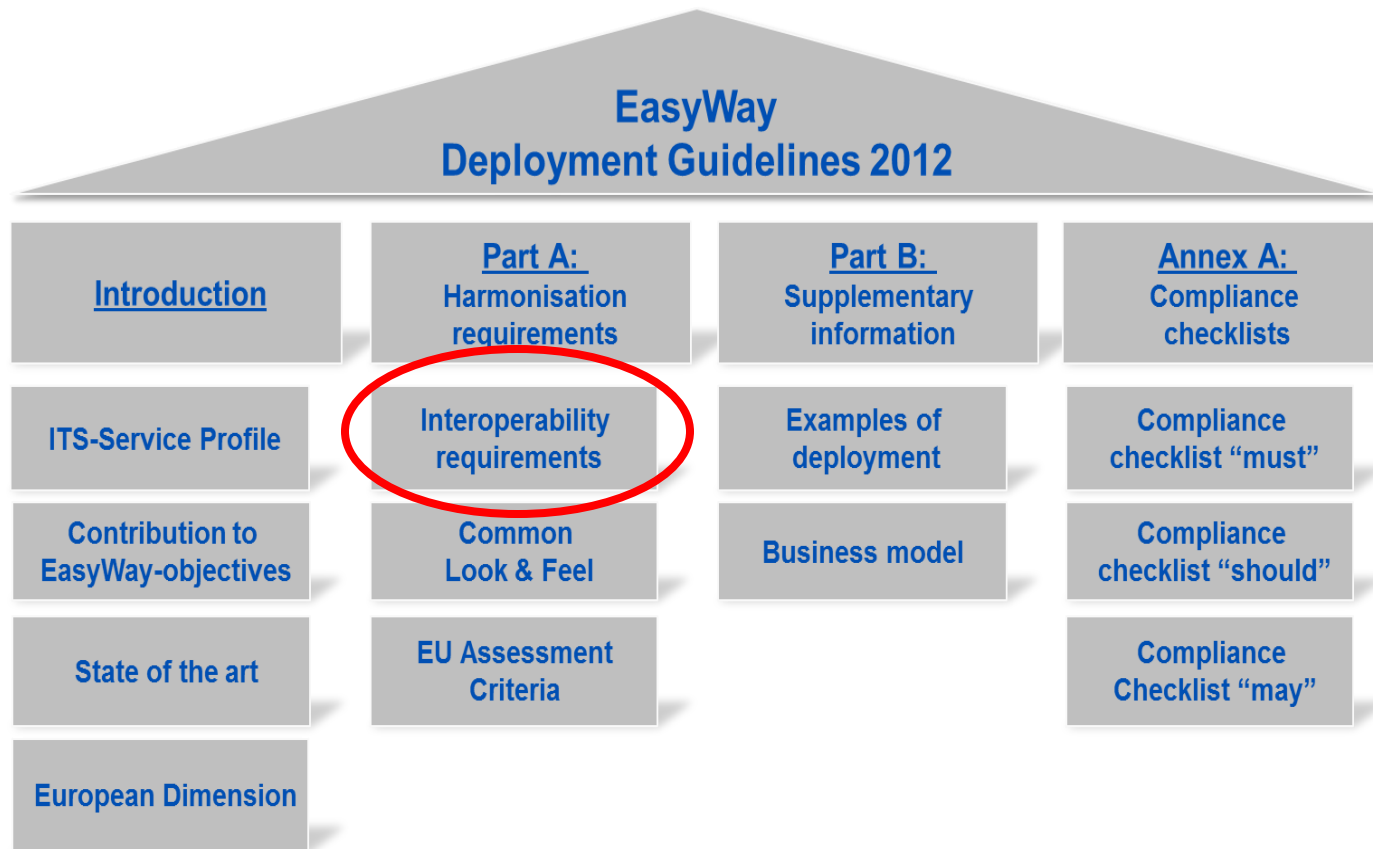


ESG1 and ESG2 Deployment Guidelines

Strong new orientations for 2012 DG with “part A” dedicated to specific requirements :



DATEX II has been considered as a main Interoperability technical requirement

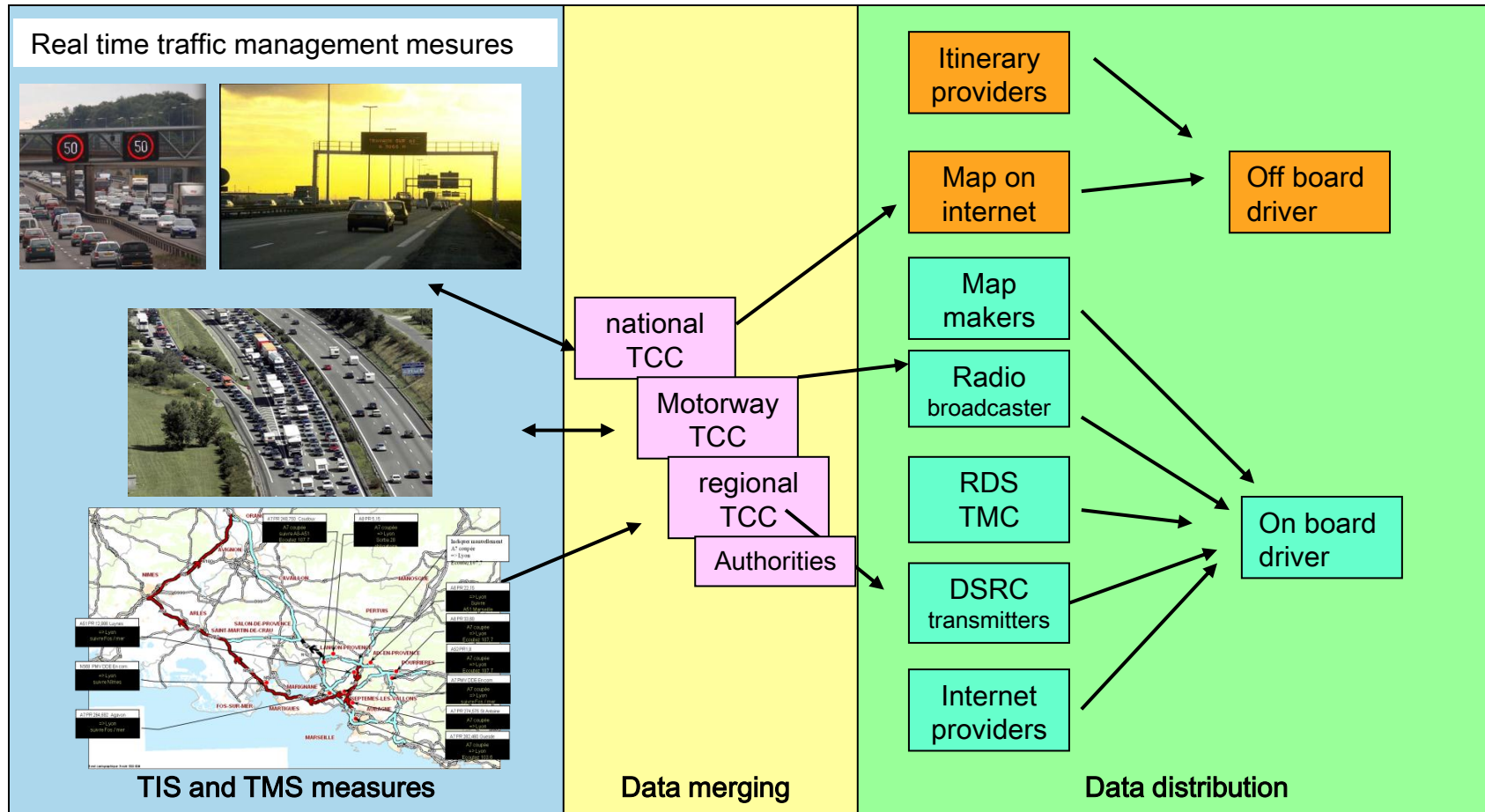


A Common view

- **Identify DII profile**
 - *a solid dimension in terms of service standardisation and harmonisation*
- **Provide requirements for DII use : “must requirements”**
 - *Respect profiles when implementing services*
 - *Commit to publish the information according to DII publications*

ESG1 and ESG2 DATEX II Requirements

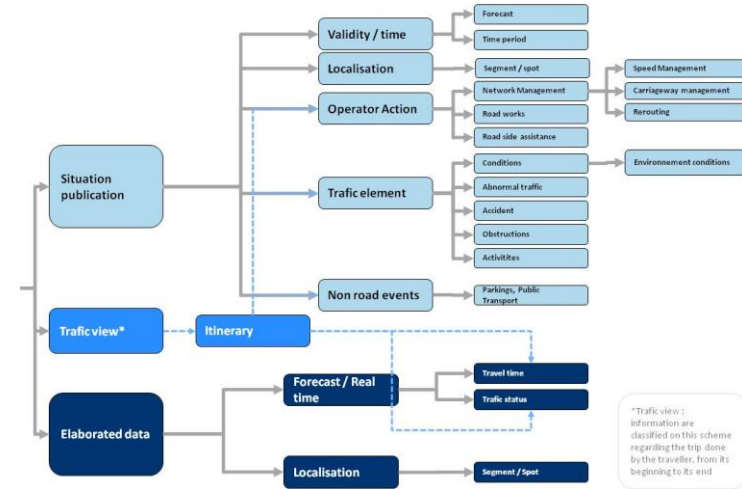
Use of DATEX II profile will guarantee coherence between real time TIS & TMS measures and dissemination of information



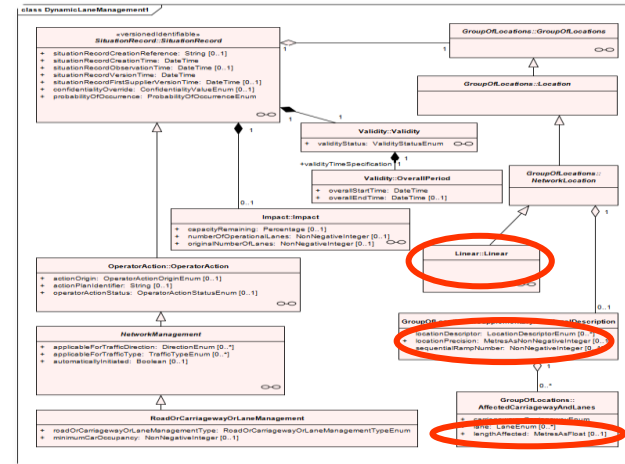
ESG1 and ESG2 DATEX II Requirements

A different approach

ESG1: Proposal of a simplistic DII scheme



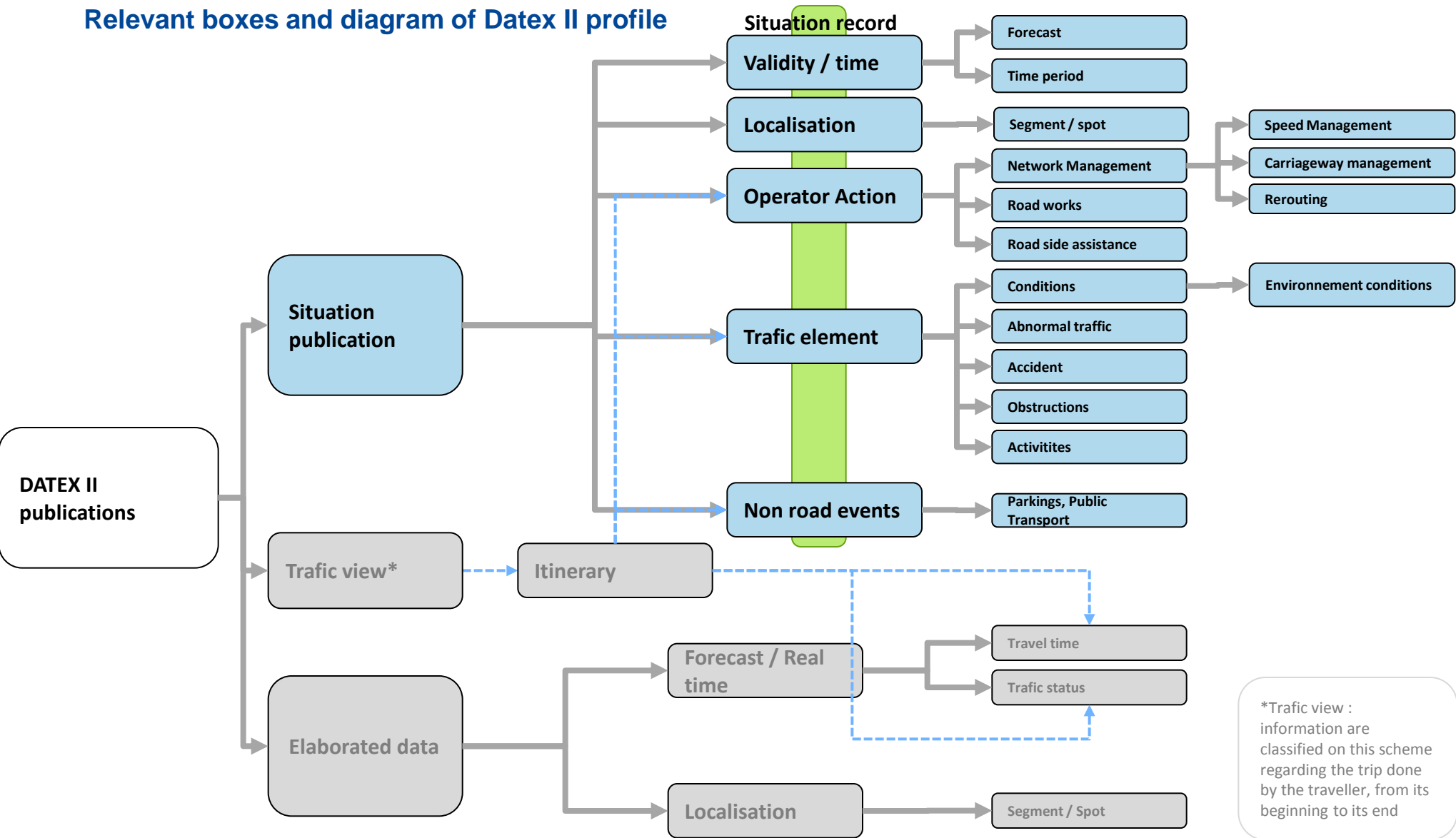
ESG2: Use of DII Model for identifying classes / attributes and type enum



Exemple of DII Profiles identified within ESG1

DATEX II > TIS DG 02 Forecast and Real Time Events

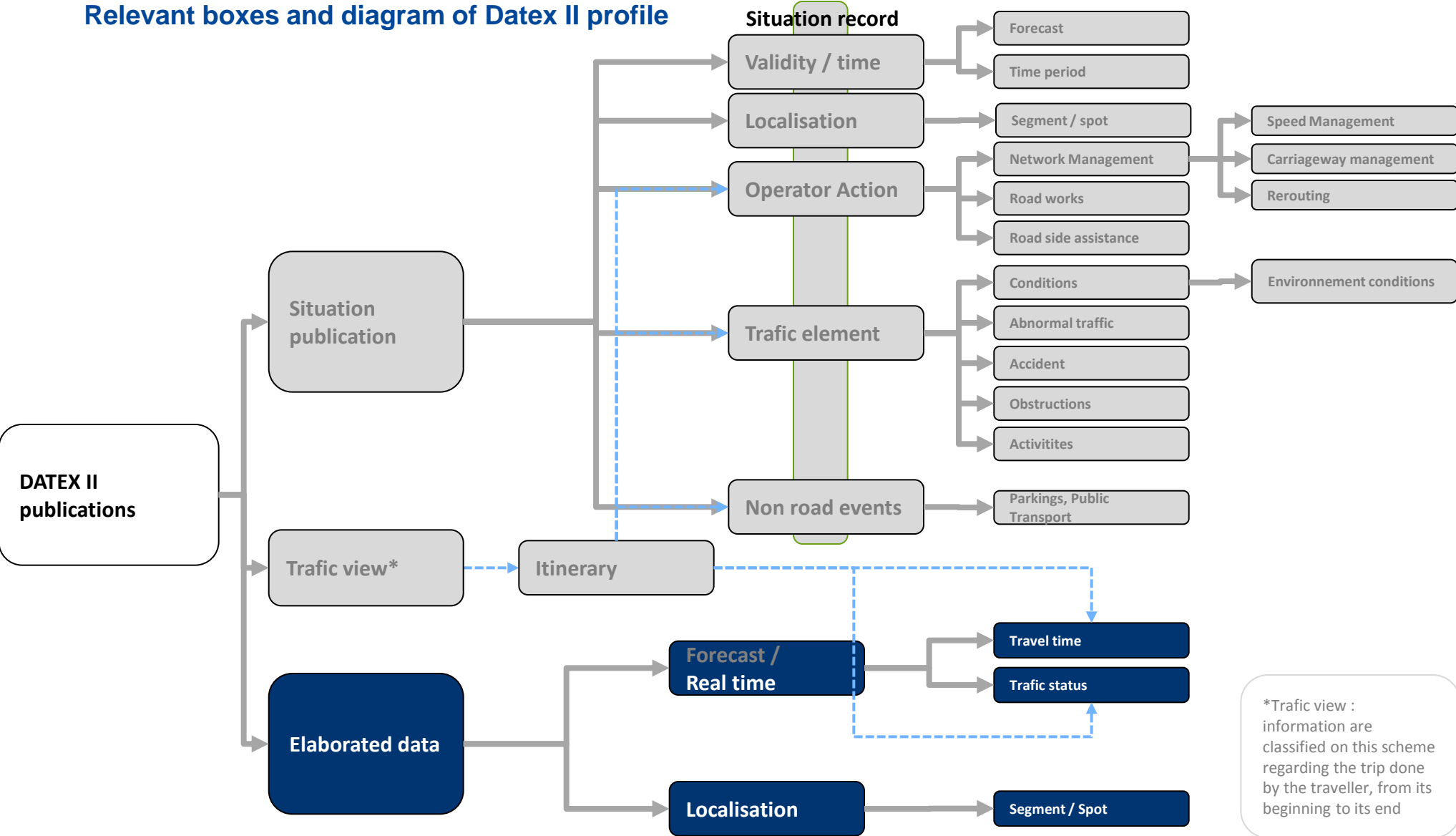
Relevant boxes and diagram of Datex II profile



*Traffic view : information are classified on this scheme regarding the trip done by the traveller, from its beginning to its end

DATEX II > TIS DG 03 Traffic Conditions

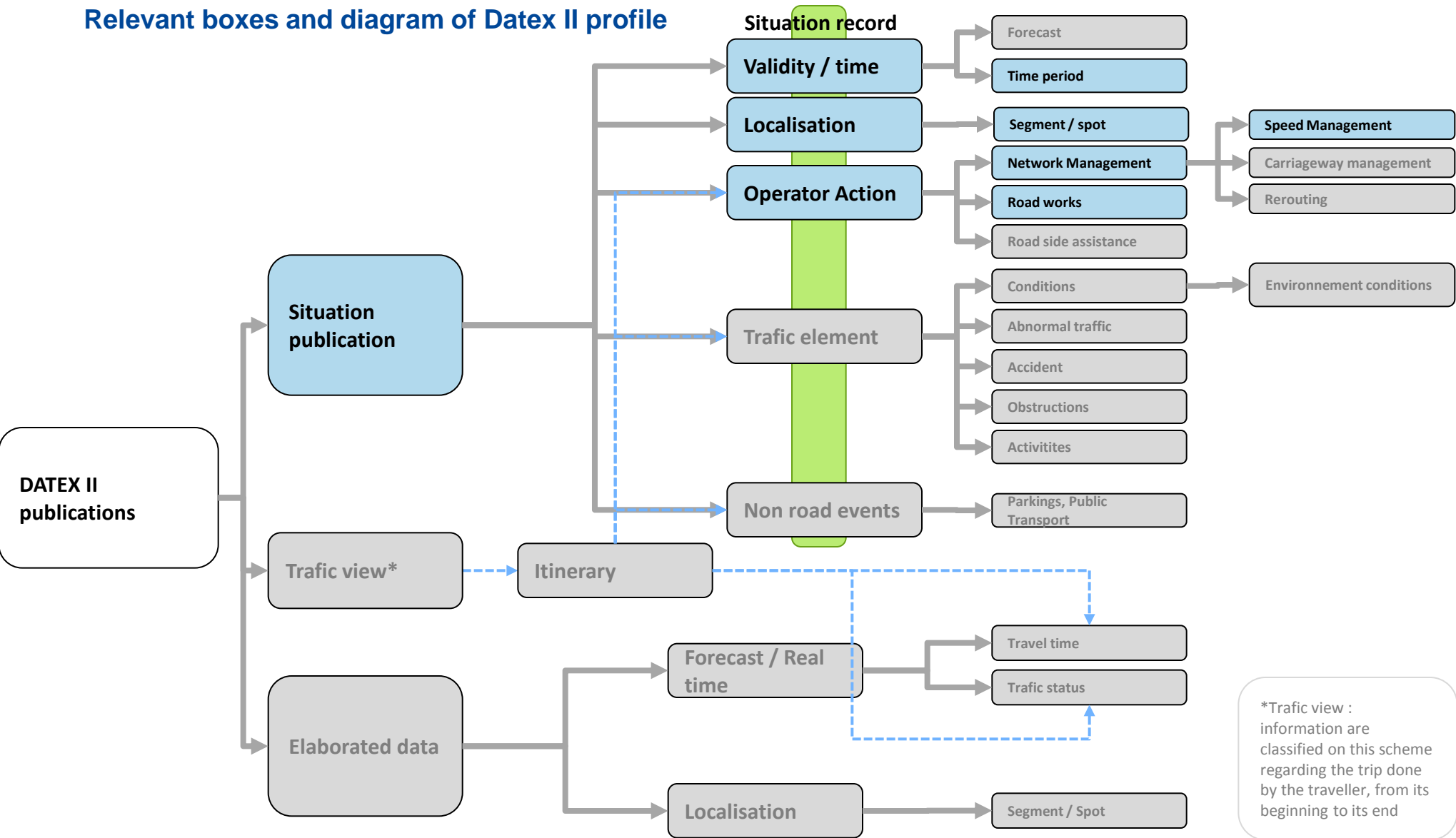
Relevant boxes and diagram of Datex II profile



*Traffic view : information are classified on this scheme regarding the trip done by the traveller, from its beginning to its end

DATEX II > TIS DG 04 Speed limit

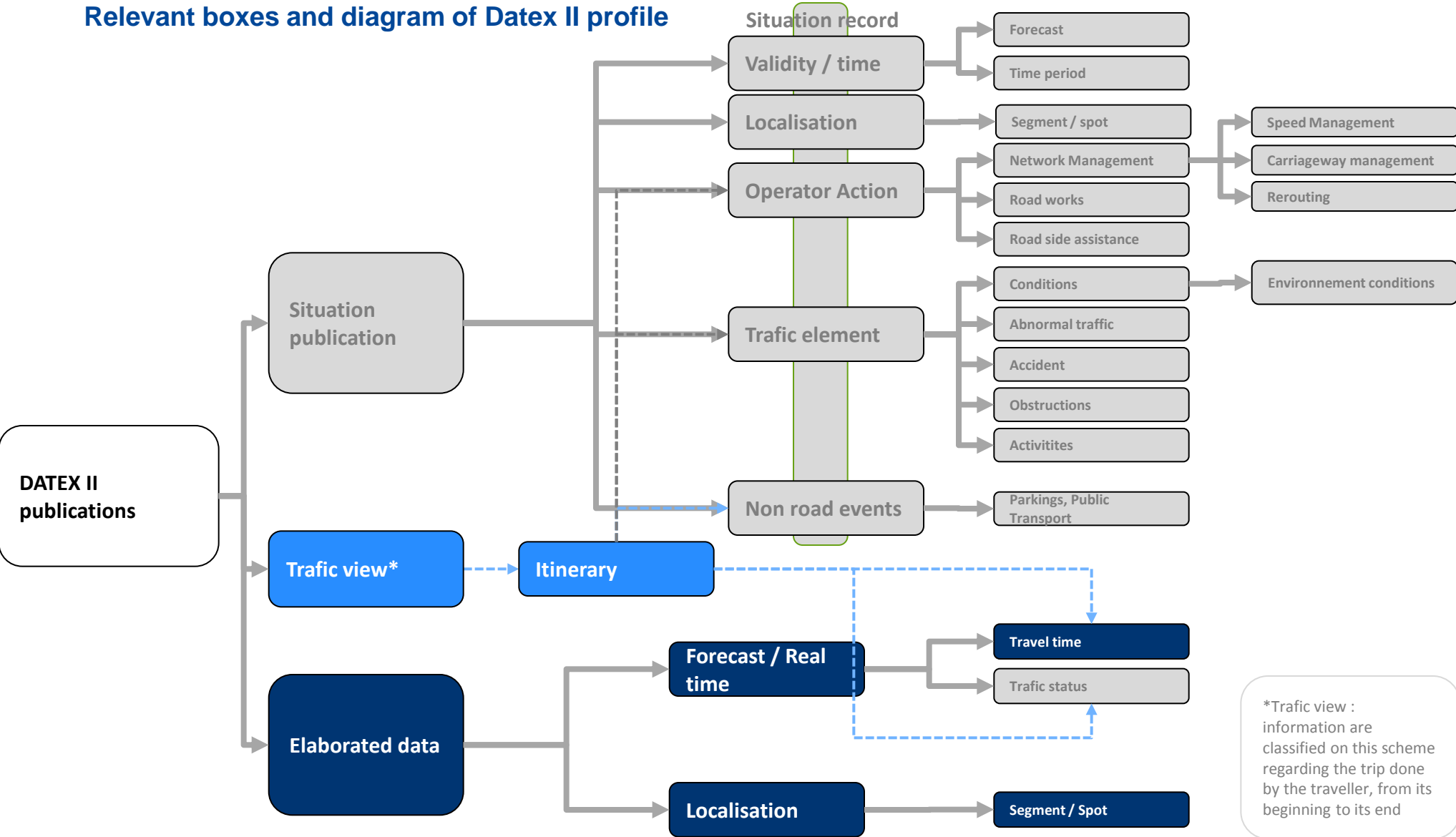
Relevant boxes and diagram of Datex II profile



*Traffic view : information are classified on this scheme regarding the trip done by the traveller, from its beginning to its end

DATEX II > TIS DG 05 Travel time

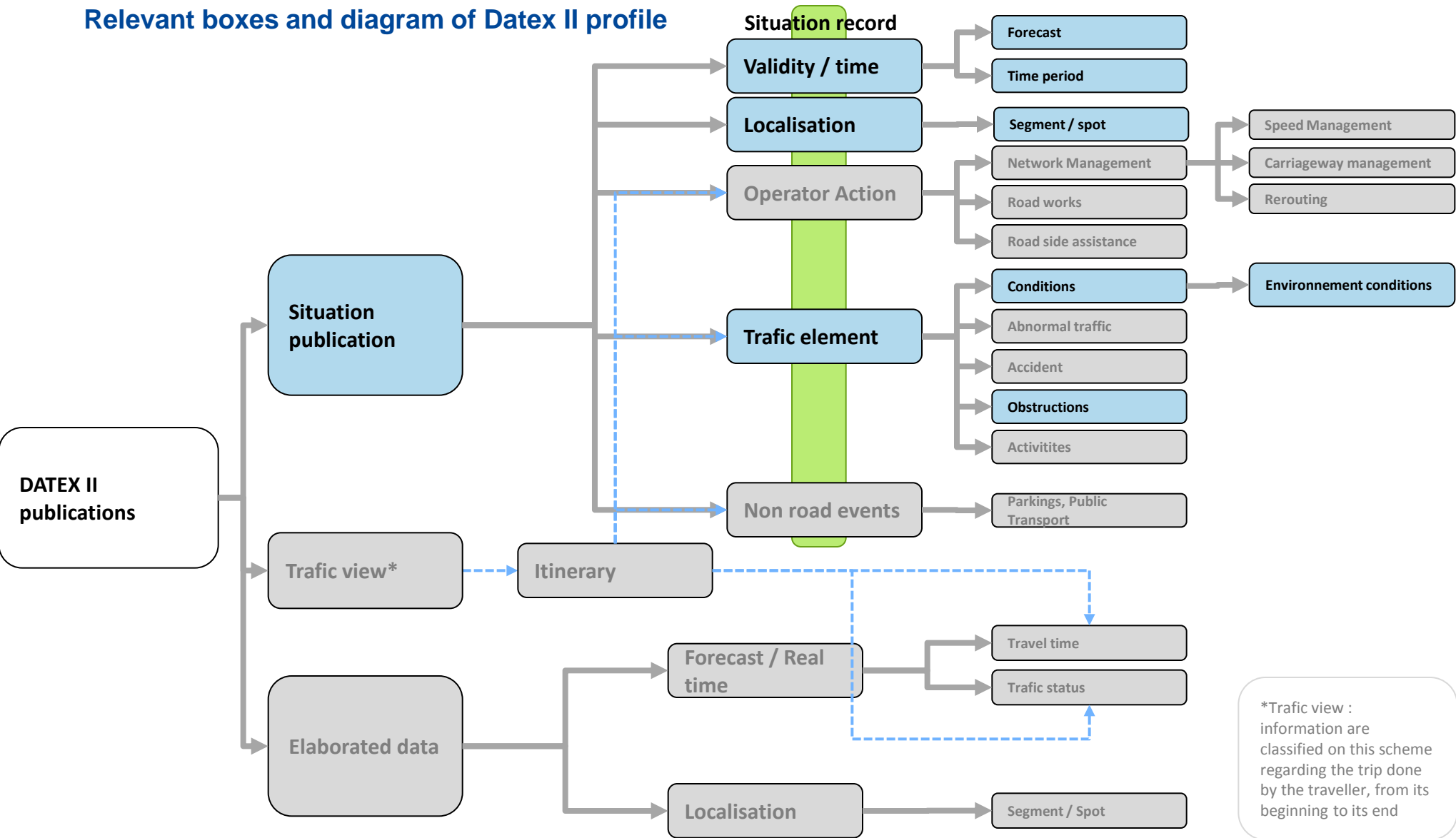
Relevant boxes and diagram of Datex II profile



*Traffic view : information are classified on this scheme regarding the trip done by the traveller, from its beginning to its end

DATEX II > TIS DG 06 Weather information

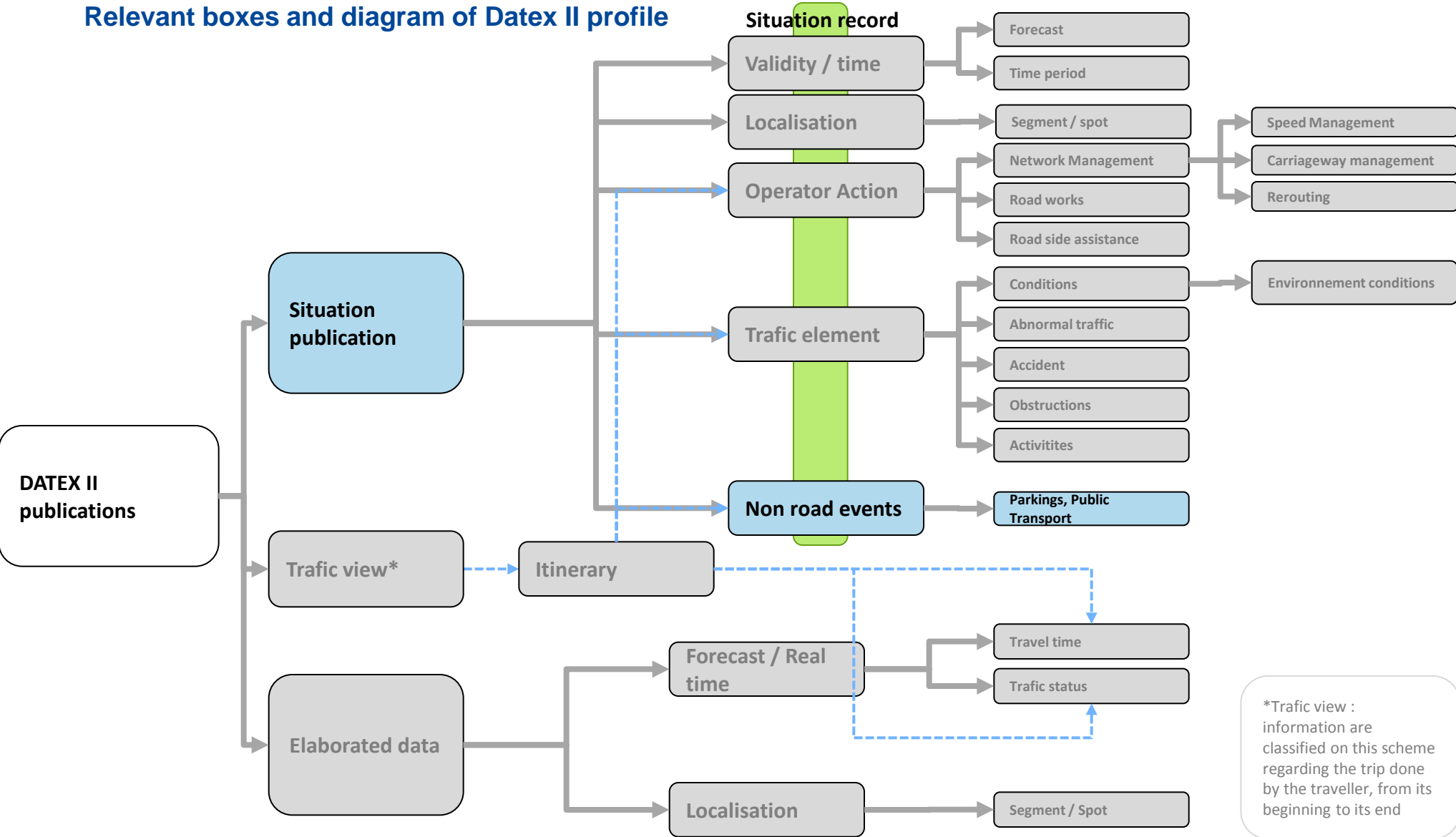
Relevant boxes and diagram of Datex II profile



*Traffic view : information are classified on this scheme regarding the trip done by the traveller, from its beginning to its end

DATEX II > TIS DG 07 Co-modal information

Relevant boxes and diagram of Datex II profile



*Traffic view : information are classified on this scheme regarding the trip done by the traveller, from its beginning to its end

Exemple of DII Profiles identified within ESG2

Only for one DG (overtaking ban)



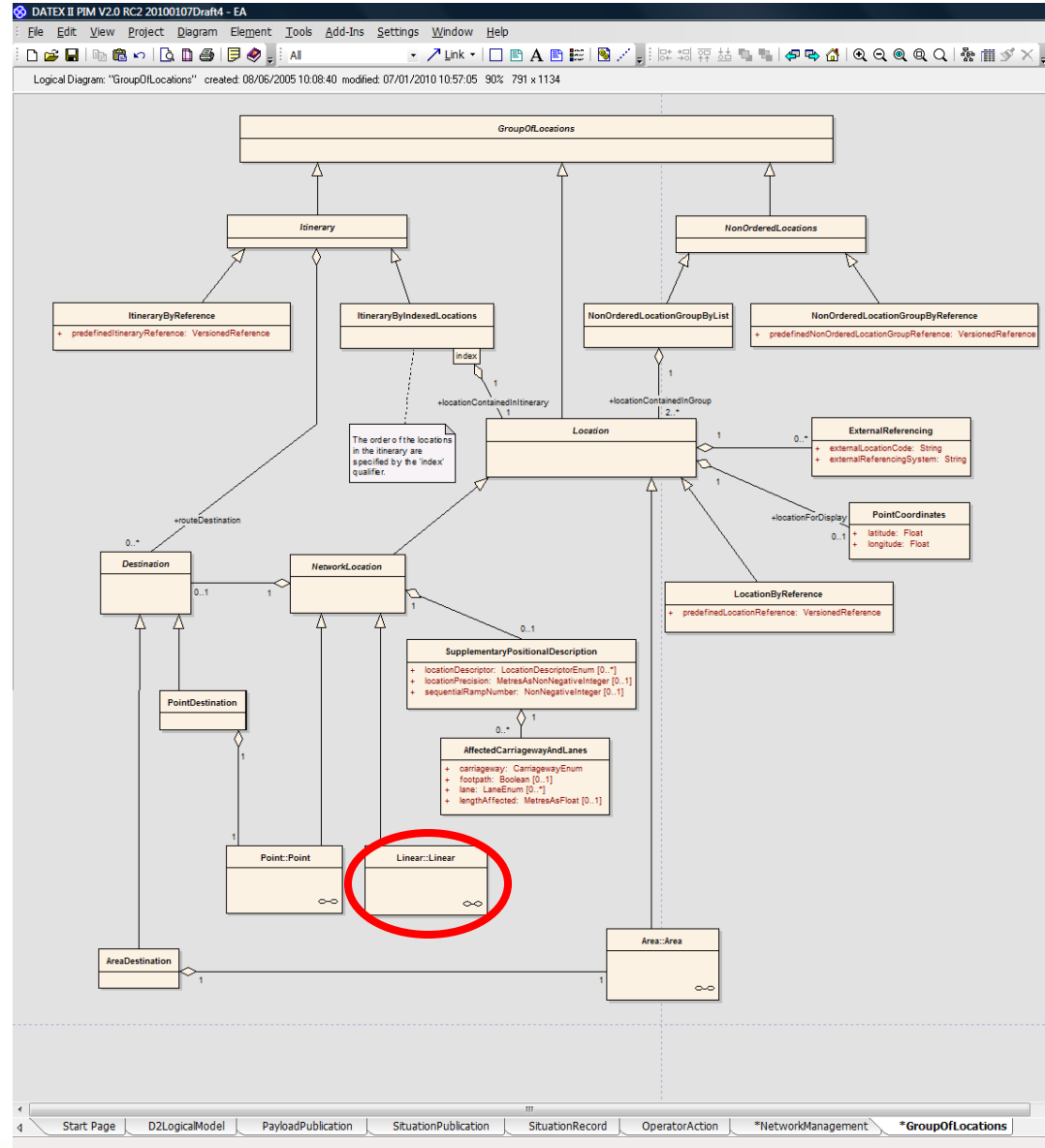


HGVS overtaking ban is characterized by the following elements:

- *Location of the ban*
- *Length affected by the measure*
- *Type of vehicle concerned by the ban*

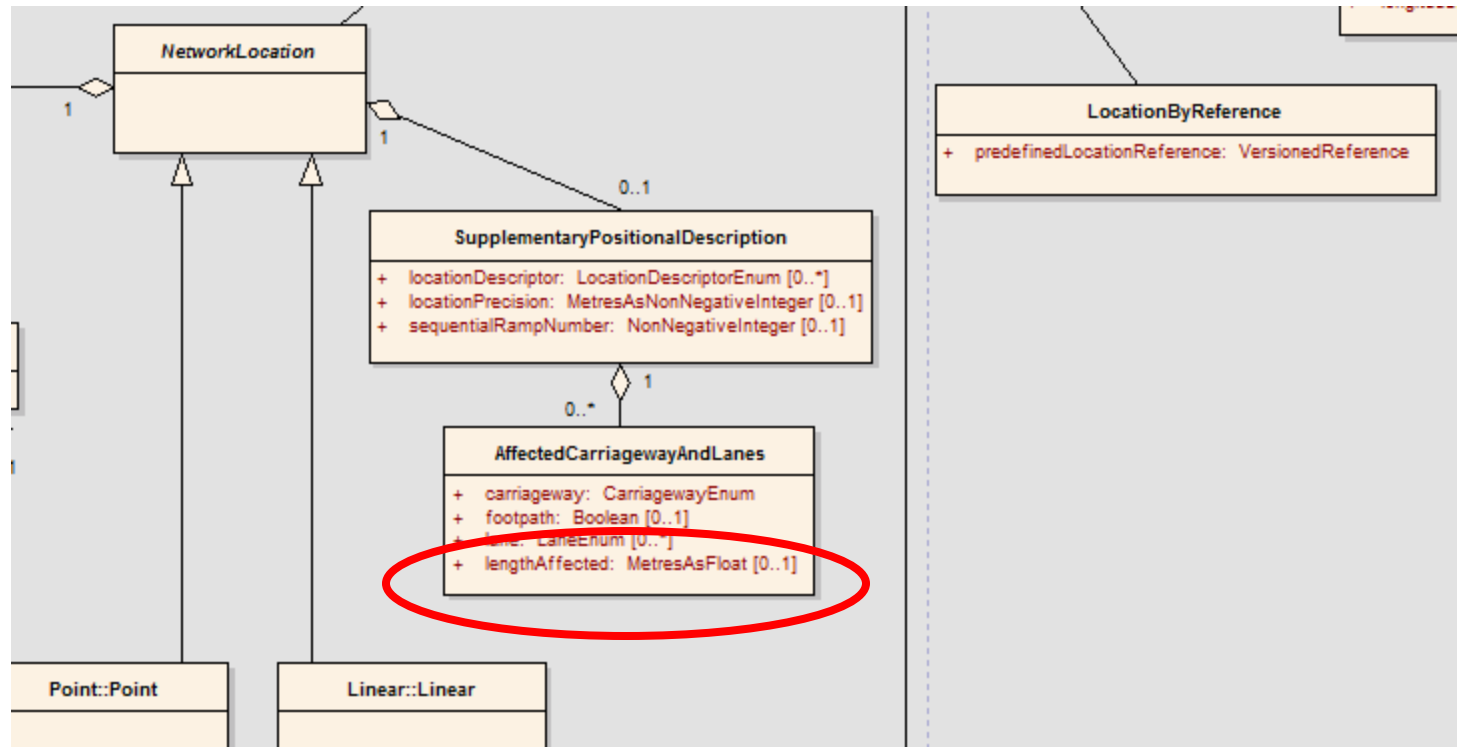
DATEX II > TMS DG 06 Overtaking ban

- **Location of the ban**



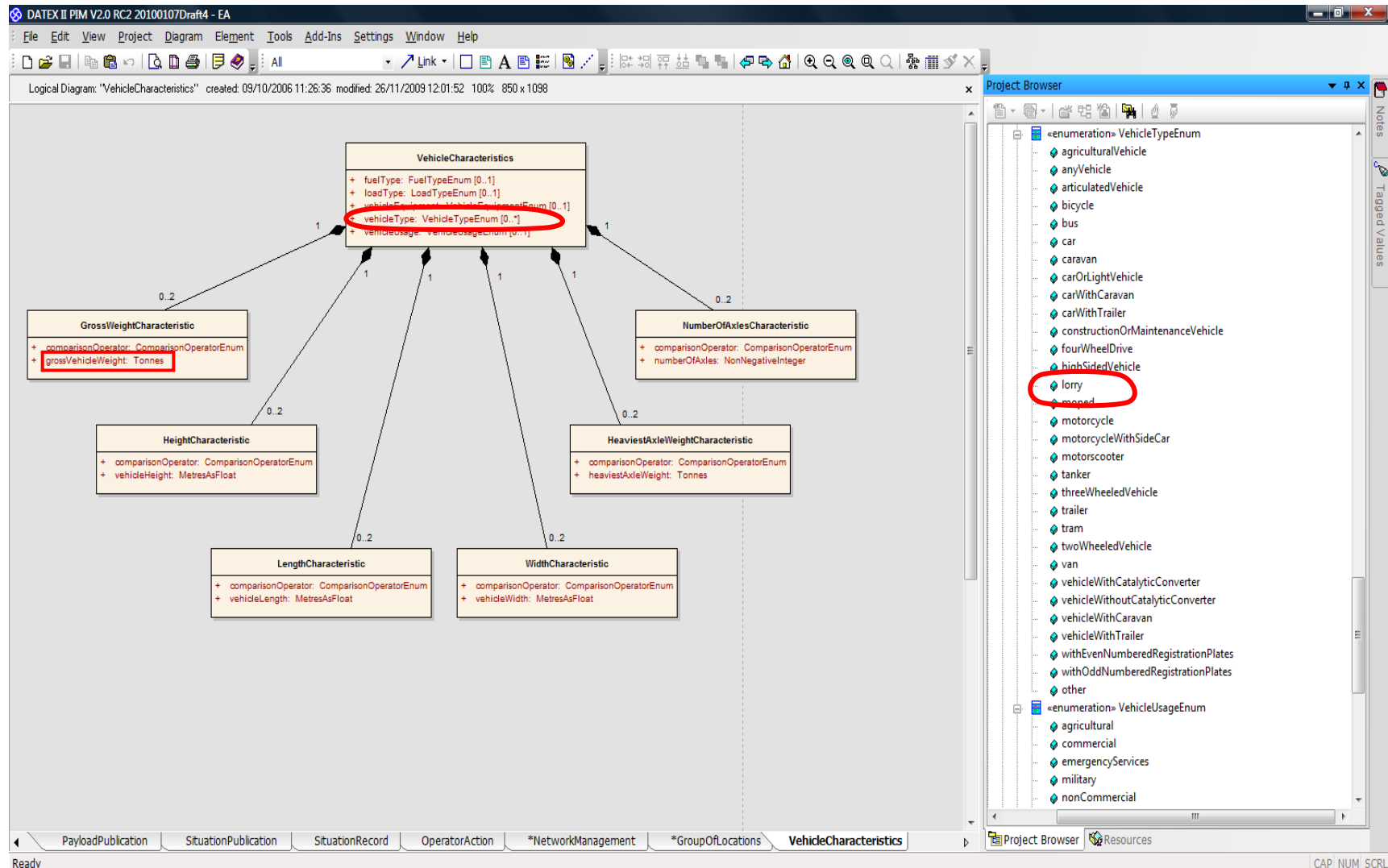
DATEX II > TMS DG 06 Overtaking ban

- *Lenght affected by the measure*



DATEX II > TMS DG 06 Overtaking ban

- *Type of vehicle affected by the measure*



DATEX II > TMS DG 06 Overtaking ban

- *Type of measure*

The screenshot displays the DATEX II PIM V2.0 software interface. The main window shows a logical diagram titled "NetworkManagement" with the following classes and relationships:

- VehicleCharacteristics:VehicleCharacteristics** (0..*)
 - + fuelType: FuelTypeEnum [0..1]
 - + loadType: LoadTypeEnum [0..1]
 - + vehicleEquipment: VehicleEquipmentEnum [0..1]
 - + vehicleType: VehicleTypeEnum [0..1]
 - + vehicleUsage: VehicleUsageEnum [0..1]
- NetworkManagement** (OperatorAction)
 - + applicableForTrafficDirection: DirectionEnum [0..1]
 - + applicableForTrafficType: TrafficTypeEnum [0..1]
 - + automaticallyInitiated: Boolean [0..1]
 - + complianceOption: ComplianceOptionEnum
 - + placesAtWhichApplicable: PlacesEnum [0..1]
- GeneralNetworkManagement**
 - + generalNetworkManagementType: GeneralNetworkManagementTypeEnum
 - + trafficManuallyDirectedBy: PersonCategoryEnum [0..1]
- GeneralInstructionOrMessageToRoadUsers** (highlighted in red)
 - + generalInstructionToRoadUsersType: GeneralInstructionToRoadUsersTypeEnum [0..1]
 - + generalMessageToRoadUsers: MultilingualString [0..1]
- WinterDrivingManagement**
 - + winterEquipmentManagementType: WinterEquipmentManagementTypeEnum
- RoadOrCarriagewayOrLaneManagement**
 - + minimumCarOccupancy: NonNegativeInteger [0..1]
 - + roadOrCarriagewayOrLaneManagementType: RoadOrCarriagewayOrLaneManagementTypeEnum
- SpeedManagement**
 - + speedManagementType: SpeedManagementTypeEnum [0..1]
 - + temporarySpeedLimit: KilometresPerHour [0..1]
- ReroutingManagement**
 - + entry: String [0..1]
 - + exit: String [0..1]
 - + reroutingBinaryDescription: MultilingualString [0..1]
 - + reroutingManagementType: ReroutingManagementTypeEnum [1..*]
 - + roadOrJunctionNumber: String [0..1]
 - + signedRerouting: Boolean [0..1]
- GroupOfLocations:itinerary** (GroupOfLocations)
 - + alternativeRoute: 0..*
 - + routeDestination: 0..*

The Project Browser on the right lists the following instruction types under "GeneralInstructionToRoadUsersTypeEnum":

- allowEmergencyVehiclesToPass
- approachWithCare
- avoidTheArea
- closeAllWindowsTurnOffHeaterAndVents
- crossJunctionWithCare
- doNotAllowUnnecessaryGaps
- doNotLeaveYourVehicle
- doNotThrowOutAnyBurningObjects
- doNotUseNavigationSystems
- driveCarefully
- driveWithExtremeCaution
- flashYourLights
- followTheVehicleInFrontSmoothly
- increaseNormalFollowingDistance
- inEmergencyWaitForPatrolService
- keepYourDistance
- leaveYourVehicleProceedToNextSafePlace
- noNakedFlames
- noOvertaking** (highlighted in red)
- noSmoking
- noStopping
- noUturns
- observeAmberAlert
- observeSignals
- observeSigns
- onlyTravelIfAbsolutelyNecessary
- overtakeWithCare
- pullOverToTheEdgeOfTheRoadway
- stopAtNextSafePlace
- stopAtNextServiceArea
- switchOffEngine
- switchOffMobilePhonesAndTwoWayRadios
- testYourBrakes
- useBusService
- useFogLights
- useHazardWarningLights
- useHeadlights

- **ESGI and ESG2 work on DII profiles and requirements will ensure:**
 - *a solid dimension in terms of service standardisation and harmonisation,*
 - *the information exchange among traffic managers*
 - *wide dissemination thanks to the facilities for providing standardised Datex II publications to service providers*
- **Additional work still remains for precisising how to use of TIS and TMS DII profiles**



Many thanks for your attention
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