

DATEX II

SRTI alignment

DATEX II - Alert C - TPEG - DENM

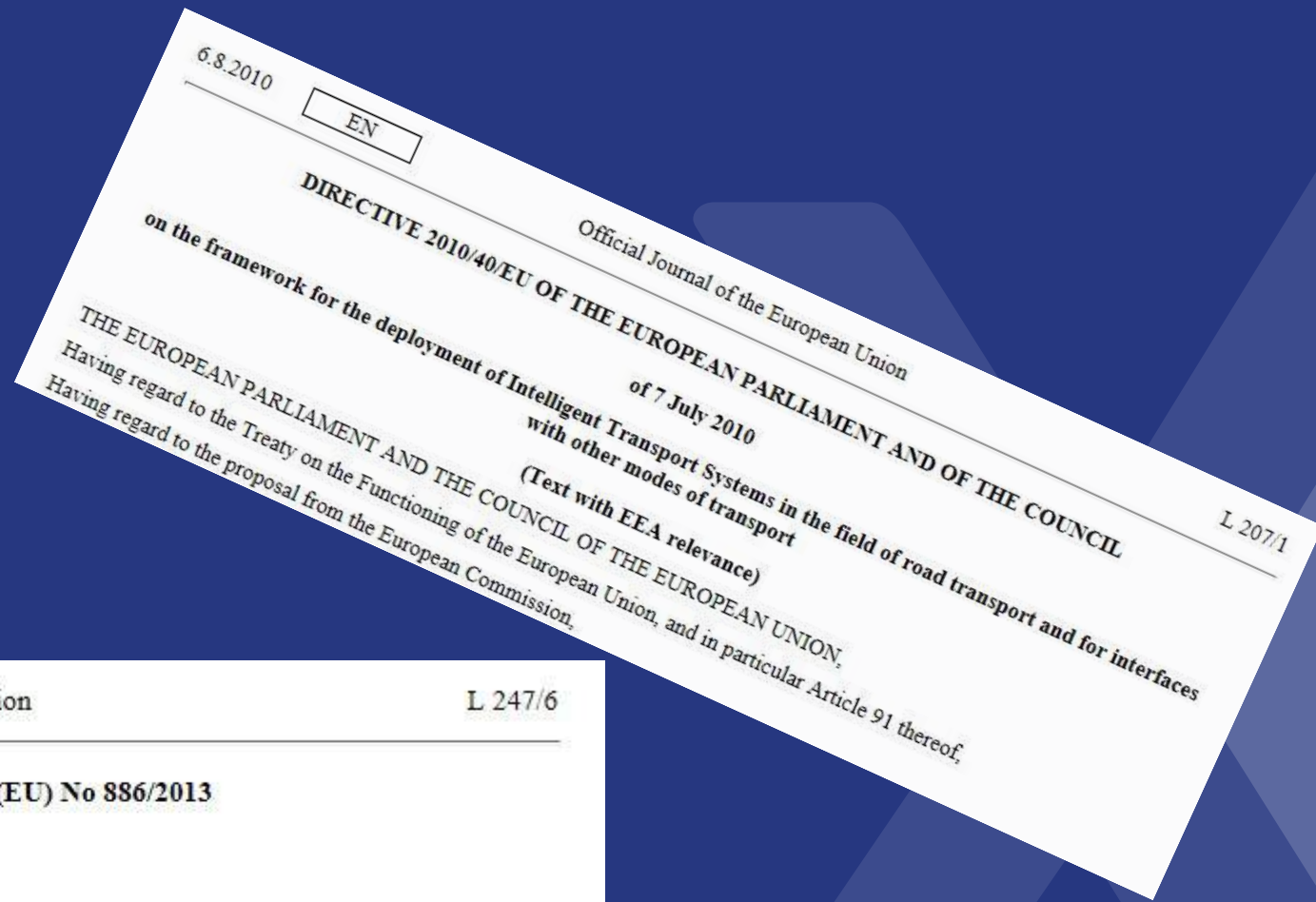
Bard de Vries

Chair DATEX II Technical Group

Chair SRTI Working Group

EU Delegated Act

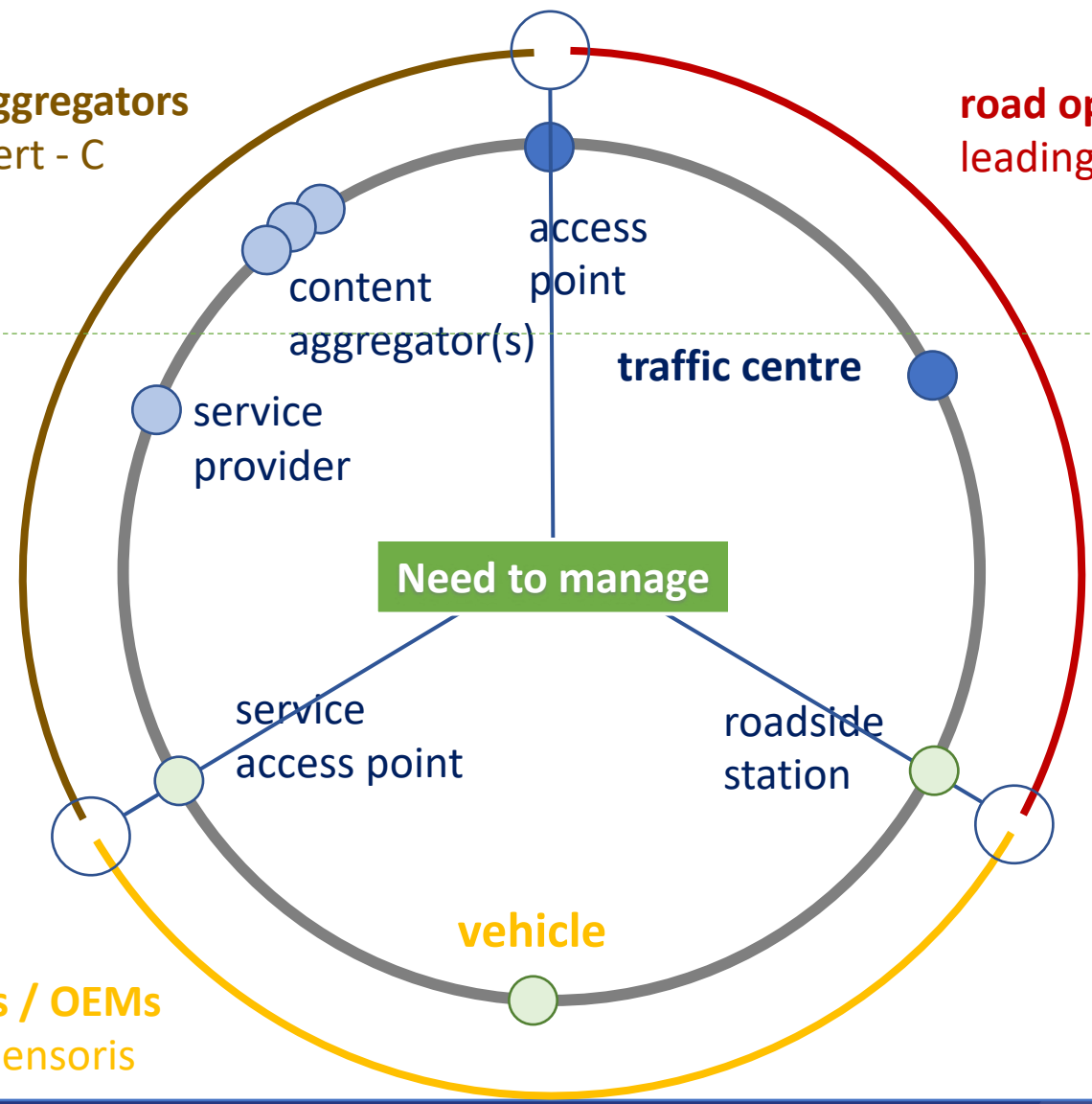
- ITS Directive 2010
- EU Delegated Regulation 886/2013



DATEX II

content/service aggregators
leading: TPEG / Alert - C

road operators
leading: DATEX II



service providers / OEMs
TPEG / DENM / Sensoris

hybrid profile

The need to manage because

- Road safety is a confirmed joint responsibility of all actors
- Domains tend to overlap more and more
- The circle is not perfect
- Legal and formalised public responsibility of roadoperators has to be visible
- Collaboration and service feedback are key for effective provision of safety related information
- Key example of the will to collaborate as the basis for Standardisation, because all recognise the benefits

DATEX II

Mapping of SRTI events

- Joint Working group of
 - TISA
 - DATEX II
 - AMSTERDAM Group
 - CAR2CAR communication consortium
 - Data for road safety group
 - C-ROADS to join.....
- Hosted by TISA
- Chaired by DATEX II
- Continuous proces for maintaining based on operations and extending both in content scope as in technologies

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Safety related message sets – Selection of DATEX II Codes, DENM Event Types, TPEG2-TEC Causes and TMC Events for EC high level Categories		

DATEX II

Road safety-related events in 886

- (a) temporary slippery road;
- (b) animal, people, obstacles, debris on the road;
- (c) unprotected accident area;
- (d) short-term road works;
- (e) reduced visibility;
- (f) wrong-way driver;
- (g) unmanaged blockage of a road;
- (h) exceptional weather conditions.

DATEX II

Version 1 and 2: an expert assesment of events for each category

DATEX II (CEN/TS 16157)			TMC Events (EN ISO 14819-2)			TPEG-TEC (ISO/TS 21219-15)				DENM (ETSI EN 302 637-3)		
DATEX Class	TYPE	Supplementary Position Description	Line	Text (CEN-English)	Code	Cause Code	Sub Cause Code	Warning Level	Text SubCauseCode trumps Cause Code	Cause Code	Sub Cause Code	Text SubCauseCode trumps CauseCode
EnvironmentalObstruction	flooding		880	flooding. Danger	908	5	1	3	flooding	9	0	hazardous location - surface condition
WeatherRelatedRoadConditions	surfaceWater		980	danger of aquaplaning	1002	7		3	aquaplaning	6	0	adverse weather condition -adhesion
WeatherRelatedRoadConditions	surfaceWater		977	surface water hazard	1041	7		3	aquaplaning	6	0	adverse weather condition -adhesion
WeatherRelatedRoadConditions	slipperyRoad		979	slippery road (above Q hundred metres)	1003	6		3	slippery road	6	0	adverse weather condition -adhesion
NonWeatherRelatedRoad Conditions	mudOnRoad		981	mud on road. Danger	1055	6	3	3	mud on road	6	3	mud on road
NonWeatherRelatedRoad Conditions	looseChippings		985	loose chippings. Danger	1056	6	8	3	loose chippings	6	8	loose chippings
NonWeatherRelatedRoad Conditions	oilOnRoad		987	oil on road. Danger	1057	6	7	3	oil on road	6	7	oil on road
NonWeatherRelatedRoad Conditions	petrolOnRoad		989	petrol on road. Danger	1058	6	2	3	fuel on road	6	2	fuel on road
WeatherRelatedRoadConditions	ice		992	ice (above Q hundred metres)	1006	6	5	3	ice on road	6	5	ice on road
WeatherRelatedRoadConditions	blackIce		996	black ice (above Q hundred metres)	1008	6	6	3	black ice on road	6	6	black ice on road
WeatherRelatedRoadConditions	snowDrifts		1006	snow drifts (above Q hundred metres)	1016	9	5	3	snow drifts	9	5	snow drifts
WeatherRelatedRoadConditions	icyPatches		996	icy patches (above Q hundred metres)	1047	6	5	3	ice on road	6	5	ice on road

Taking inventory of SRTI flagged events

Event	Comments	NEW Event	NL	NO	IT	ES	SE	DK	GR	PT	LU	FR	BE	DE
Category A: Temporary slippery road														
flooding		10		X	X	X	X		X	X	X	X	X	X
danger of aquaplaning		4	X					X				X		X
surface water hazard		6	X	X			X	X	X					X
slippery road		8	X	X			X	X	X	X			X	X
mud on road		6	X	X				X		X		X		X
loose chippings		4					X	X				X		X
oil on road		10	X	X		X	X	X	X	X		X	X	X
petrol on road		6	X			X			X	X		X		X
ice		9	X	X		X	X	X	X	X	X			X
black ice		5	X	X					X			X		X
snow drifts		6	X				X	X		X		X		X
icy patches														X

Category C Unprotected accident area

unprotected accident area														3
accident						1								8
accident involving bus						1								4
accident involving lorry						1								4

Revised Mapping of events to standards

Category according to Delegated Regulation 886/2013	DENM (ETSI EN 302 637-3)				TMC	
Event	Cause Code	Cause Code	SubCauseCode trumps CauseCode	Remark on DENM	Code	Urgency
Category A: Temporary slippery road						
flooding	environmentalObstruction	0	flooding - surface condition	flooding. Danger	908	U
danger of aquaplaning	weatherRelatedRoadCondition	7	aquaplaning surfaceWater	risk of aquaplaning	1002	U
surface water hazard	weatherRelatedRoadCondition	6	surfaceWater	surface water hazard	1041	
slippery road	weatherRelatedRoadCondition	6	slipperyRoad	slippery road (above Q hundred metres)	1003	U
mud on road	weatherRelatedRoadCondition	6	mudOnRoad	mud on road. Danger	1055	U
loose chippings	weatherRelatedRoadCondition	6	looseChippings	loose chippings. Danger	1056	U
oil on road	weatherRelatedRoadCondition	6	oilOnRoad	oil on road. Danger	1057	U
petrol on road	weatherRelatedRoadCondition	6	petrolOnRoad	petrol on road. Danger	1058	U
ice	weatherRelatedRoadCondition	6	ice	ice (above Q hundred metres)	1006	
black ice	weatherRelatedRoadCondition	6	blackIce	black ice (above Q hundred metres)	1008	U
snow drifts	weatherRelatedRoadCondition	6	snowDrifts	snow drifts (above Q hundred metres)	1016	
icy patches	weatherRelatedRoadCondition	6	icyPatches	icy patches (above Q hundred metres)	1047	U

Joint working group SRTI 2020

- Joint Working group of
 - TISA
 - DATEX II
 - AMSTERDAM Group
 - CAR2CAR communication consortium
 - Data for road safety (known as Data Task Force)
- C-ROADS to join.....
- Hosted by TISA
- Chaired by DATEX II
- Version 3

DATEX II

What we aim for:

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**Safety related message sets –
Selection of DATEX II Codes, DENM Event Types, TPEG2-TEC
Causes and TMC Events for EC high level Categories**

DATEX II

Version 3 and what's next

- Version 3 published in february 2021
- 10 new events added based on operations of road operators in 16 MS
- Future work:
 - Impact of car as datasource
 - Full bi-directional mapping

DATEX II

10 events added to the list

- vehicle on fire 6
- accident 8
- accident involving bus 4
- accident involving lorry 4
- rescue and recovery work 5
- snowploughs in action 6
- serious fire 6
- fog 8
- hail 4
- thunderstorm 5

DATEX II

How to implement a DATEX II SRTI service

- Select the categories you have data from
- Choose the location referencing technology
- Select whether you will publish data in xml or json format
- Select the way data is published (will be presented in next webinar)
- <https://Webtool.datex2.eu/wizard/>

DATEX II

Data for road safety

- The level 3 data that is provided by OEM's in DATEX II
- Implemented profile and documentation:
- Profile for Safety Related Traffic Information (SRTI) created from in-vehicle data | DATEX II (datex2.eu)

DATEX II