

# DATEX II

## C-ITS pilot

Short Pitch – concluding webinar

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6<sup>TH</sup> FORUM  
WEBINAR SERIES

# Goal

- Demonstrate Day 1 service using ITS G5 carrier for selected categories of SRTI messages that conforms to the C-ROADS specification.
- Demonstrate mapping from CAM/DENM to DatexII 3.x using the TISA specification for SRTI messages.
- Use existing DATEXII node at NPRA as an input source for SRTI related messages from moving vehicles.

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# CEN - Standard

DATEXII v3.x parts involved:

- 16157 – 1 : Context and framework (EN)
- 16157 – 2 : Location Referencing (EN)
- 16157 – 3 : Situation Publication (EN)
- 16157 – 7 : Common data elements (EN)

Including simple version of exchange for delivery, and a custom profile based on RRP for SRTI.

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# SRTI messages

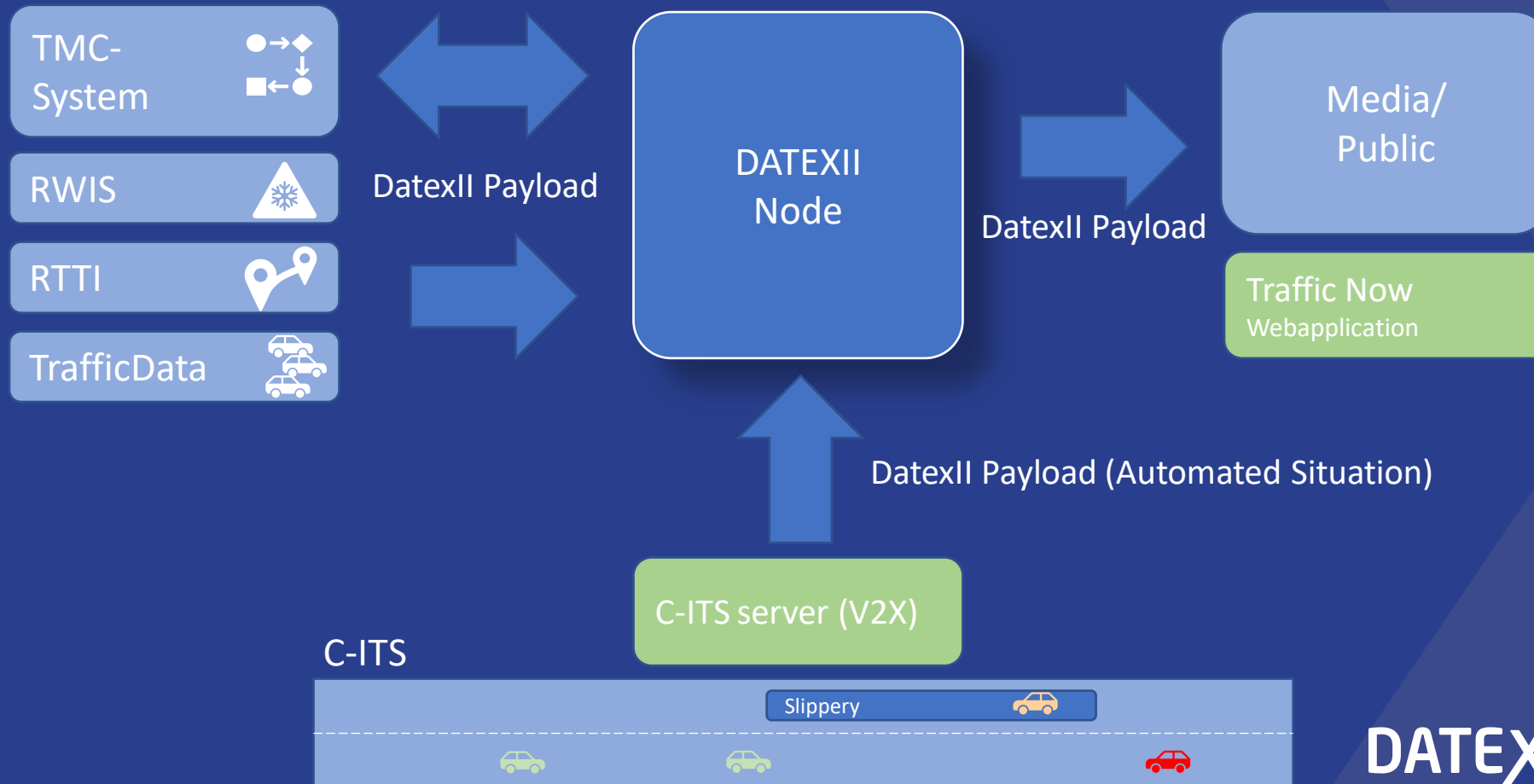
- **Category a) Temporary slippery road \*)**
- *Category b) Animal/people/obstacles/debris on the road*
- **Category c) Unprotected accident area \*)**
- **Category d) Short term road works \*)**
- *Category e) Reduced visibility*
- **Category f) Wrong-way driver \*)**
- **Category g) Unmanaged blockage of a road \*)**
- *Category h) Exceptional weather conditions*

\*) *Selected categories* see [https://www.datex2.eu/support/ITS\\_directive](https://www.datex2.eu/support/ITS_directive) for definition on SRTI

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# System overview

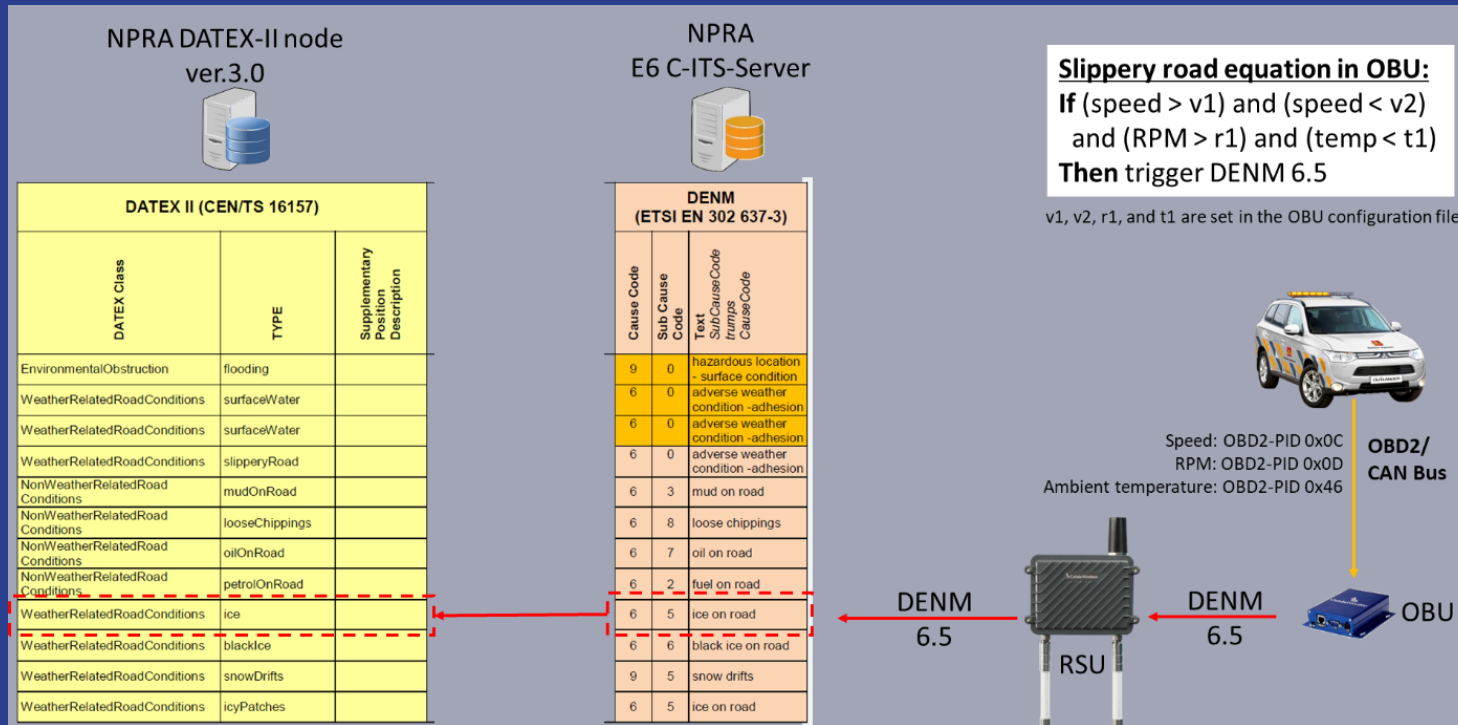


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# a) Temporary slippery road

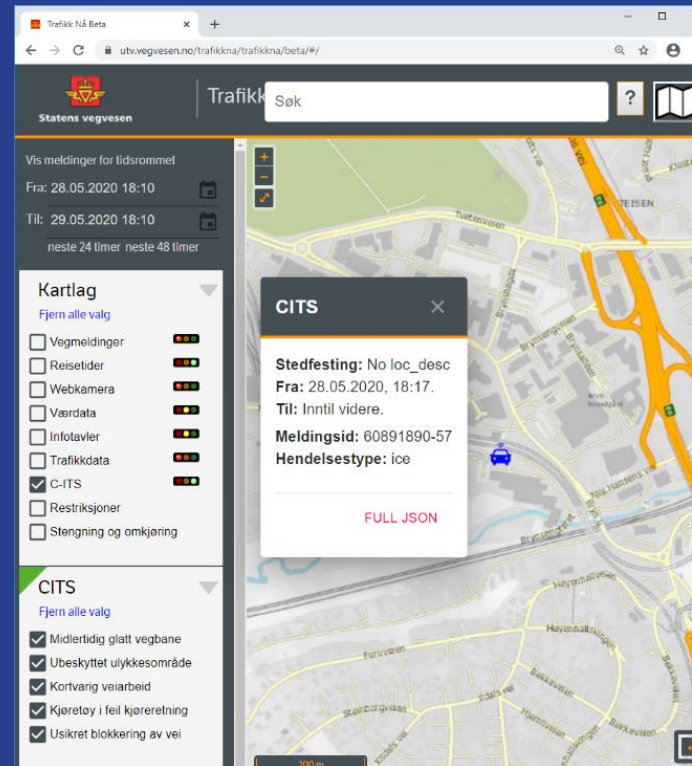
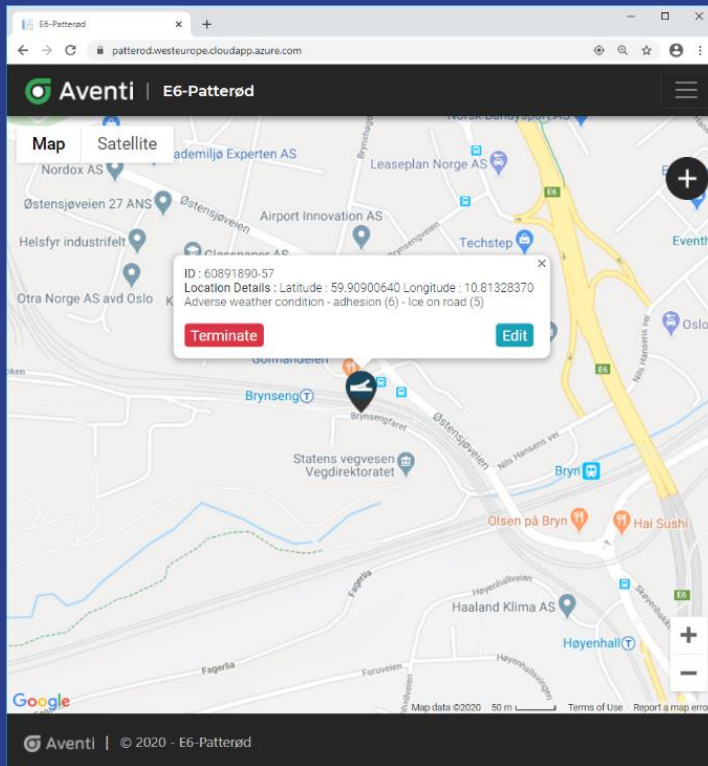
- OBU connected to ECU via the OBD2 port for CAN-bus communication. Read the OBD2 parameter id for speed, RPM and ambient temperature and send via G5 to RSU
- DENM “ice on road” mapped and transferred as DATEX “WeatherRelatedRoadConditions->ice” to Datex-node



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# a) Temporary slippery road

- Left, DENM messages received in the Central ITS Server.
- Right, the corresponding message viewed in the DATEXII node

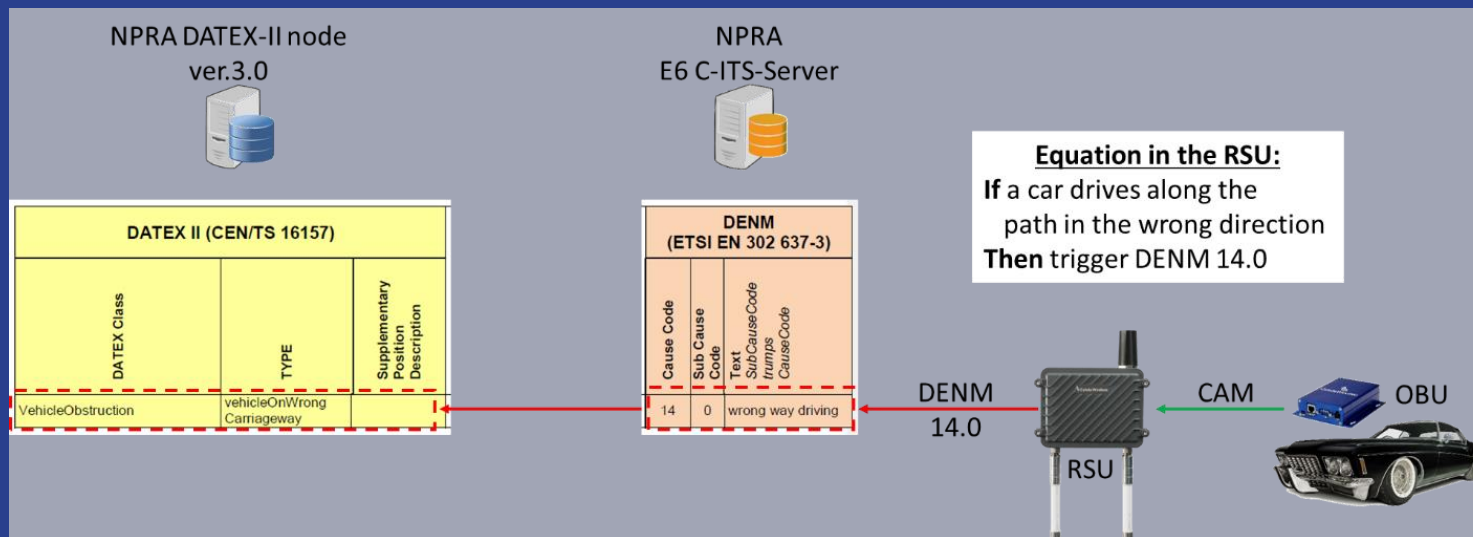


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# f) Wrong-way driver

- OBU use CAM and send via G5 to RSU
- RSU analyse CAM and if driven in wrong direction transferred as DATEX “VehicleObstruction->vehicleOnWrongCarriageway” to Datex-node



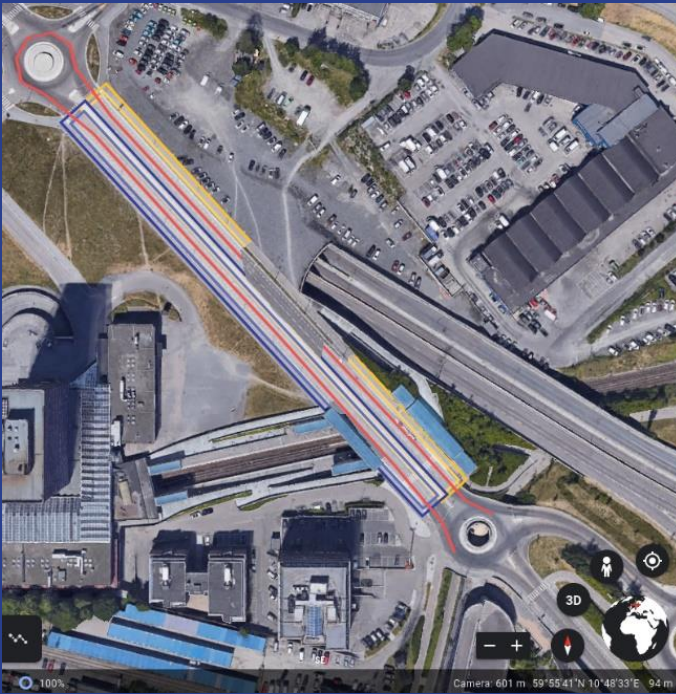
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# f) Wrong-way driver

- Left, the blue geo-fence is used to detect wrong-way-driver if someone is driving in a south-eastern direction.
- Right, all three geo-fences combined will detect wrong-way-driver if someone is driving in a north-eastern direction.

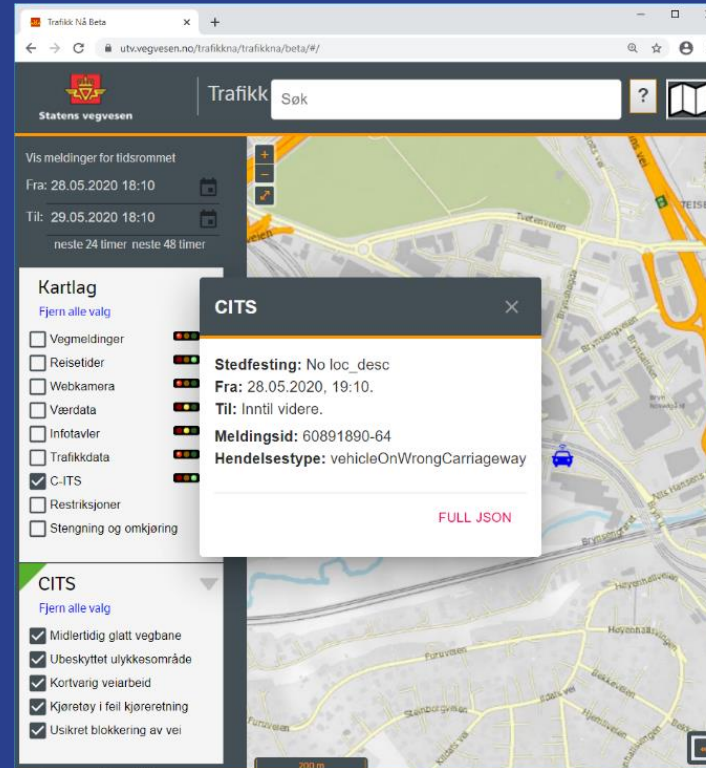
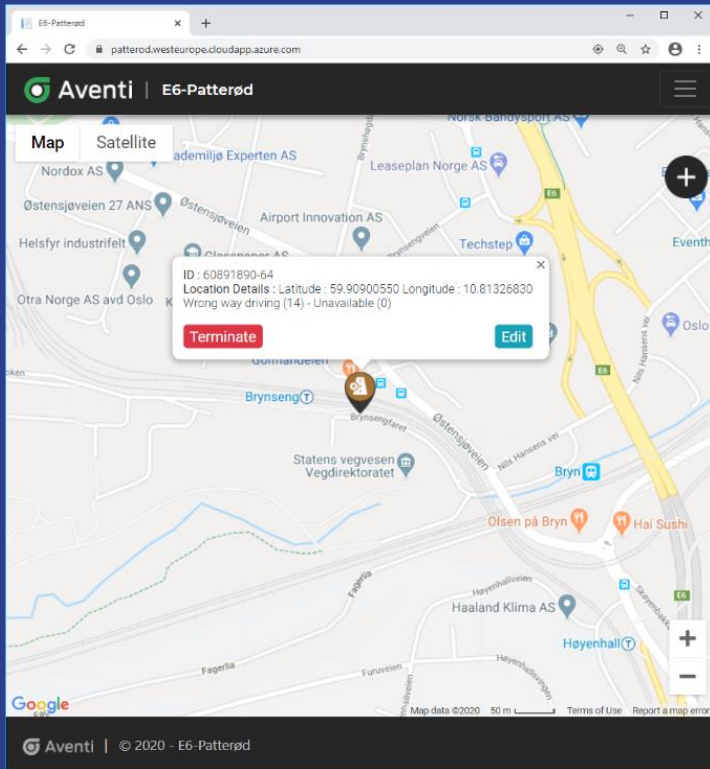


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# f) Wrong-way driver

- Left, DENM messages received in the Central ITS Server.
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Thank you for your attention



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