TN-ITS implementation in Flanders

ITS Congress - 29/09/2017
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TN★ITS

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TN-ITS

TN-ITS - Vision & mission

TN-ITS project 2016-2017 (www.tn-its.eu)

- Partners: ERTICO, France, UK, Finland, Ireland, Sweden, Norway, Flanders, TomTom, Here.

- Vision: "Bringing fresher map data to intelligent transport services"

- Mission: "Facilitate and foster the exchange of ITS-related spatial road data between road authorities as trusted data providers and data users as map makers and other parties."
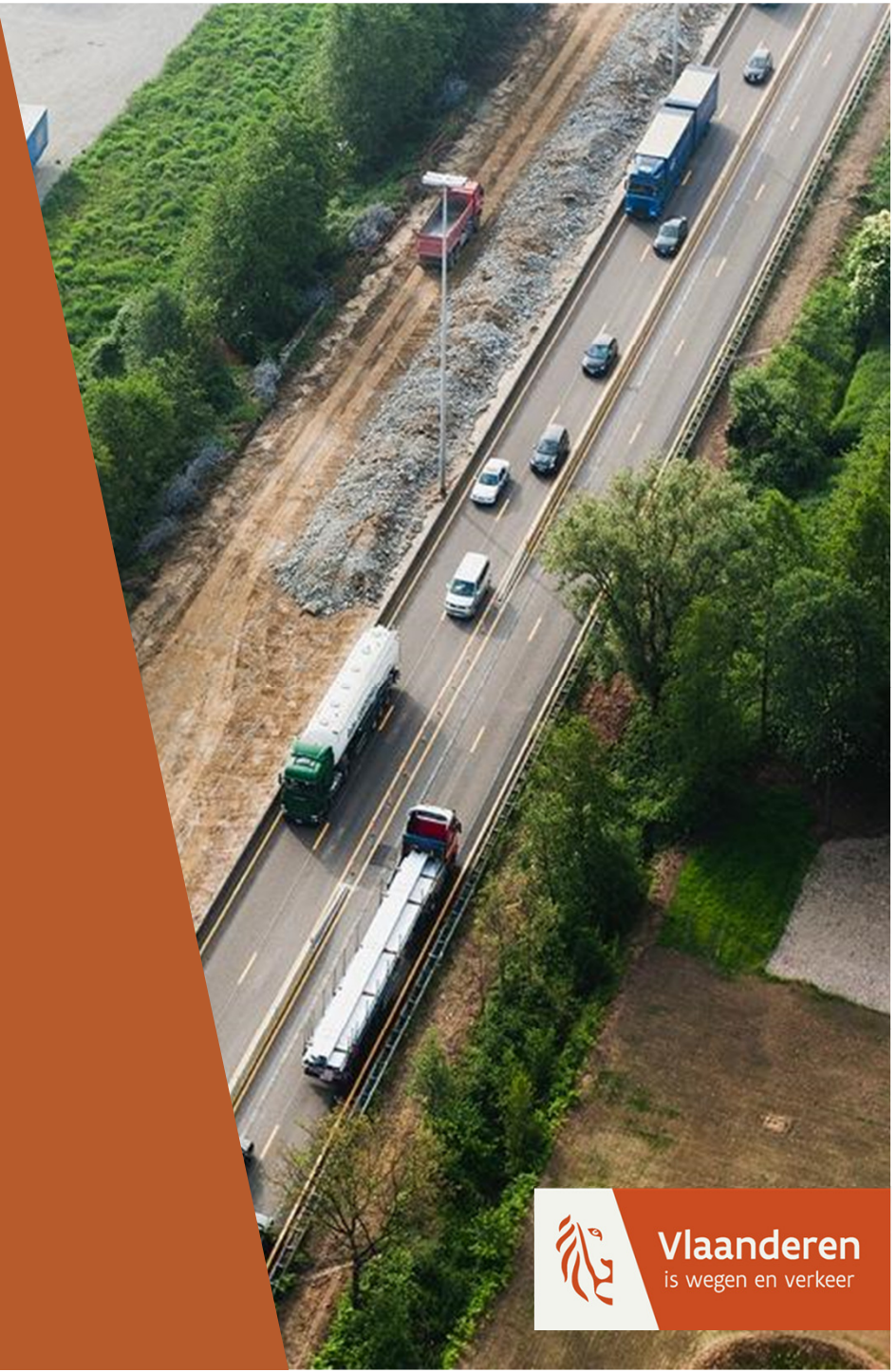
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TN-ITS - Vision & mission

Focus:

- Static road attributes = the attributes are of a more or less permanent nature such as speed limits.The focus is in general on road attributes based on regulations, but may extend to other road and transport related features.
- Up-to-date = important role for the Road Authorities, who create the changes
- Common exchange format
- Data chain from road autorities to map makers

TN-ITS Implementation in Flanders

Context

There are 2 traffic sign databases in Flanders:
- The traffic sign database containing all traffic signs along the <u>highways, main roads and regional roads</u> in Flanders (about 6500km)
  - Managed by the <u>Agency Roads and Traffic (AWV)</u> of the Flemish government.
- The traffic sign database containing all traffic signs along the other roads in Flanders, mainly <u>local and secondary roads</u> maintained by the <u>cities and municipalities</u> (about 54000km)

Context

TN-ITS implementation is based upon the Traffic Sign Database
of the Agency for Roads and Traffic in Flanders
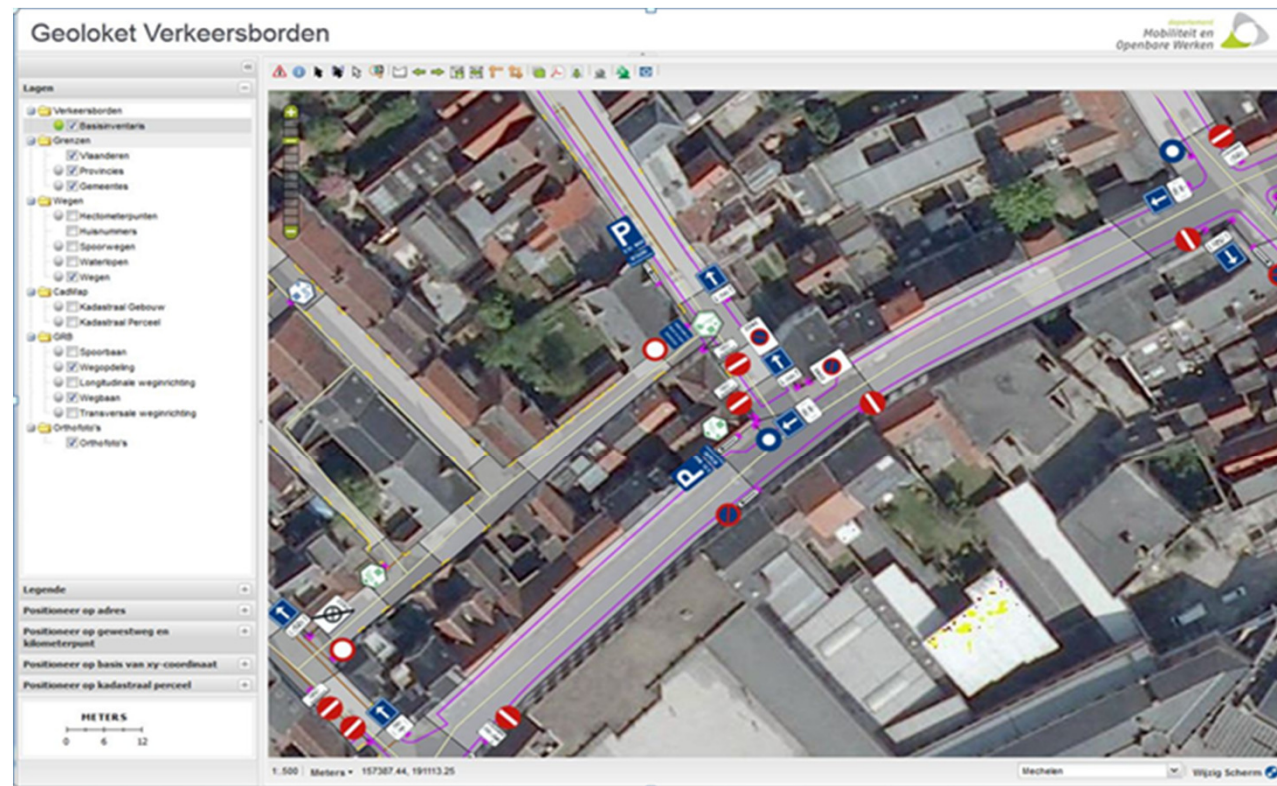
Context

The TN-ITS pilot of the Flanders region focused on:

- Exchanging speed limit signs and speed limit line segments that are located along the highways and the regional roads of the wegenregister
- "wegenregister" = road database of Flanders, published as free open data (june 2016)
- Using OpenLR and GML
- No INSPIRE locations yet available in "Wegenregister"

Implementation in Flanders

Speed limit traffic signs
- First public TN-ITS webservice available: 29/09/2016
  - StartOfSpeedLimit, the EndOfSpeedLimit, the StartOfBuiltUpArea and the EndOfBuiltUpArea (point features, traffic signs)
  - Daily updates

Feedback TomTom & Here
- Many speed limit traffic signs are located along municipal roads, though managed by the Flemish region
- Causes confusion with map providers, because location information did not have the road segment it belongs to associated with it

Implementation in Flanders

Speed limit line segments
- Speed limits as line features published on 30/12/2016
  - Automatically generated using the traffic sign database and 'Wegenregister'

Feedback TomTom & Here
- line features are more valuable data than the speed limit traffic signs
- more frequent updates on this data would be meaningful (daily instead of once every two weeks)
- problems due to the directionality in the road network data.

Implementation in Flanders

From traffic sign (point) to speed limit (line)
1. Project traffic signs indicating speed limits (incl. Built up areas, zone) on Wegenregister
2. Speed limit is generated using:
   a. Implicite speed limits
   b. Form of way
   c. Traffic signs

● Result = automatically generated map with the speed limits
● Quality = depends on quality of the traffic sign database, Wegenregister and the algoritm.

End of zone 30

Speed limit 30

Start of zone 30

Speed limit 50 (built up area)

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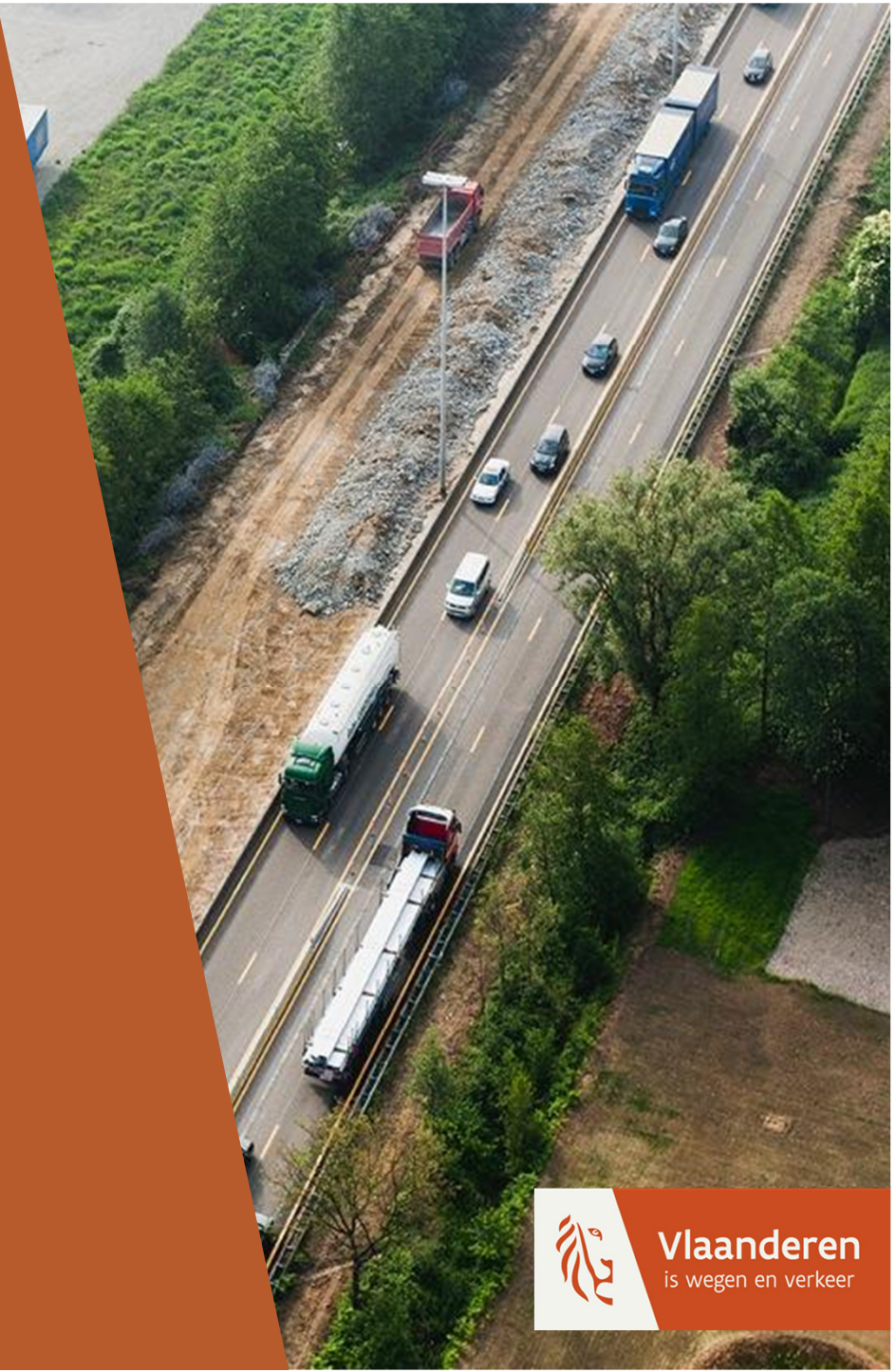
TN-ITS GO

TN-ITS GO

TN-ITS GO 2018 - 2021

- Implement <u>pilot TN-ITS services</u> in each of the nine new Member States (Greece, The Netherlands, Lithuania, Hungary, Cyprus, Portugal, Slovenia,...)
- Implement <u>extension of the existing TN-ITS services</u> in six Member States (depending on the operational readiness of the TN-ITS service of the MS)
- <u>Evaluation</u> of the TN-ITS services including the integration of the data in commercial database as well as the <u>feedback loop</u>
- Maintain an active <u>TN-ITS expert community</u>

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Thank you!

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