



INSPIRE and ITS Applications

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INSPIRE Workshop Warsaw

Agenda

An aerial photograph of a complex highway interchange. The image shows multiple levels of overpasses and ramps for a multi-lane highway. A river flows through the center of the interchange. There are several power line towers and some commercial buildings visible in the background. The overall scene is a busy transportation hub.

About HERE/Map Building

TN-ITS – Map Update Exchange

INSPIRE and digital Maps

HERE in numbers

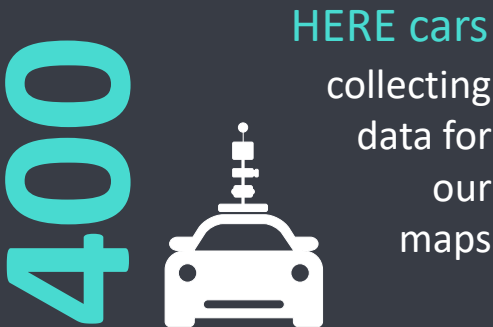
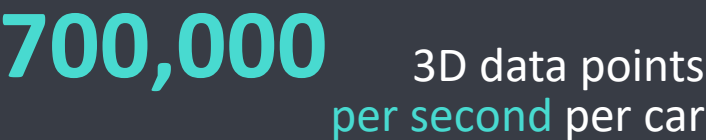
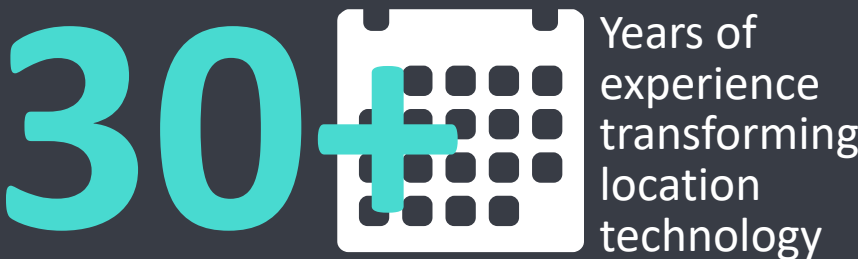


Countries mapped

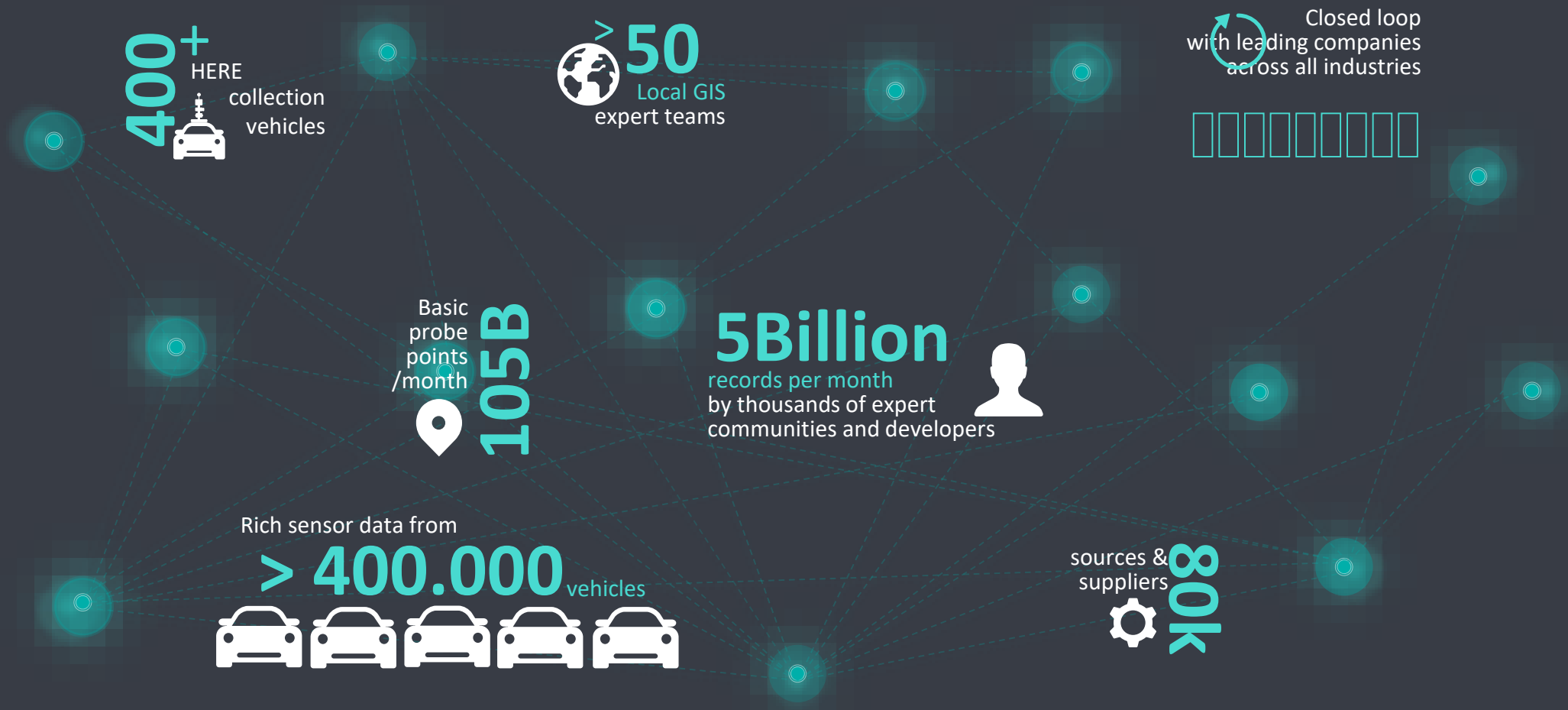


In-car navigation systems in Europe and North America use HERE maps

4 of 5



Building the World's Best Map is a big data problem, but focusing on a single data stream would be missing the point:



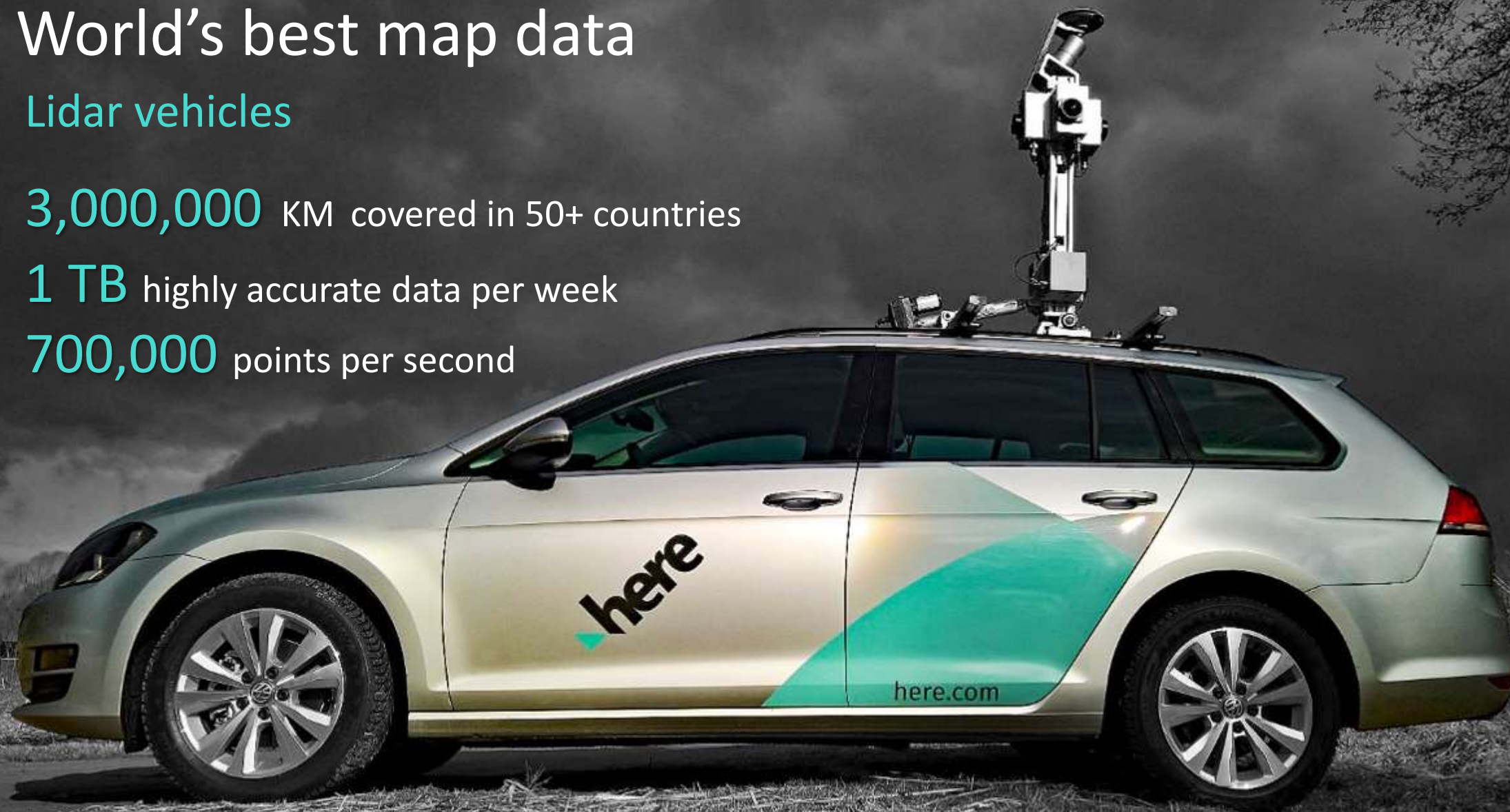
World's best map data

Lidar vehicles

3,000,000 KM covered in 50+ countries

1 TB highly accurate data per week

700,000 points per second



It all starts with the best possible sources

80,000 high
quality sources

- Sources provide the foundation for the map
- Standardized data audit Processes

Imagery

Government
Contacts

Third Party
Data

HERE True

Postal Data

Call Center

Telecom
& Utilities

Probes

Remote
Collection

TN-ITS- Map Update Exchange

TN-ITS Vision and Mission



Vision

Bringing fresher map data to intelligent transport services

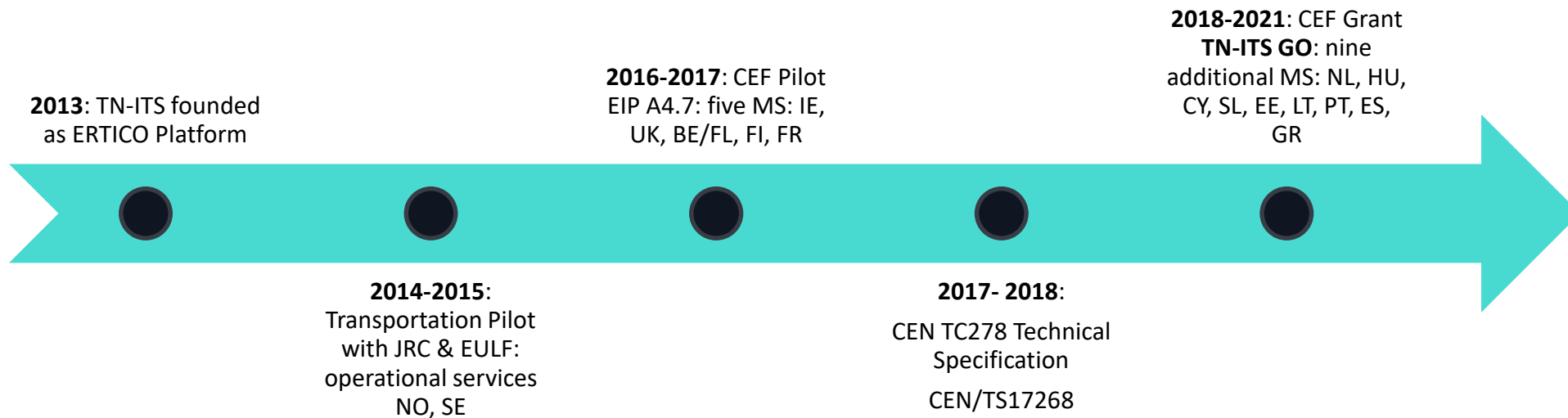
Mission

Facilitate and foster the exchange of ITS-related spatial road data between road authorities as trusted and quality data providers, and, data users as map makers and other parties.

TN-ITS Storyboard

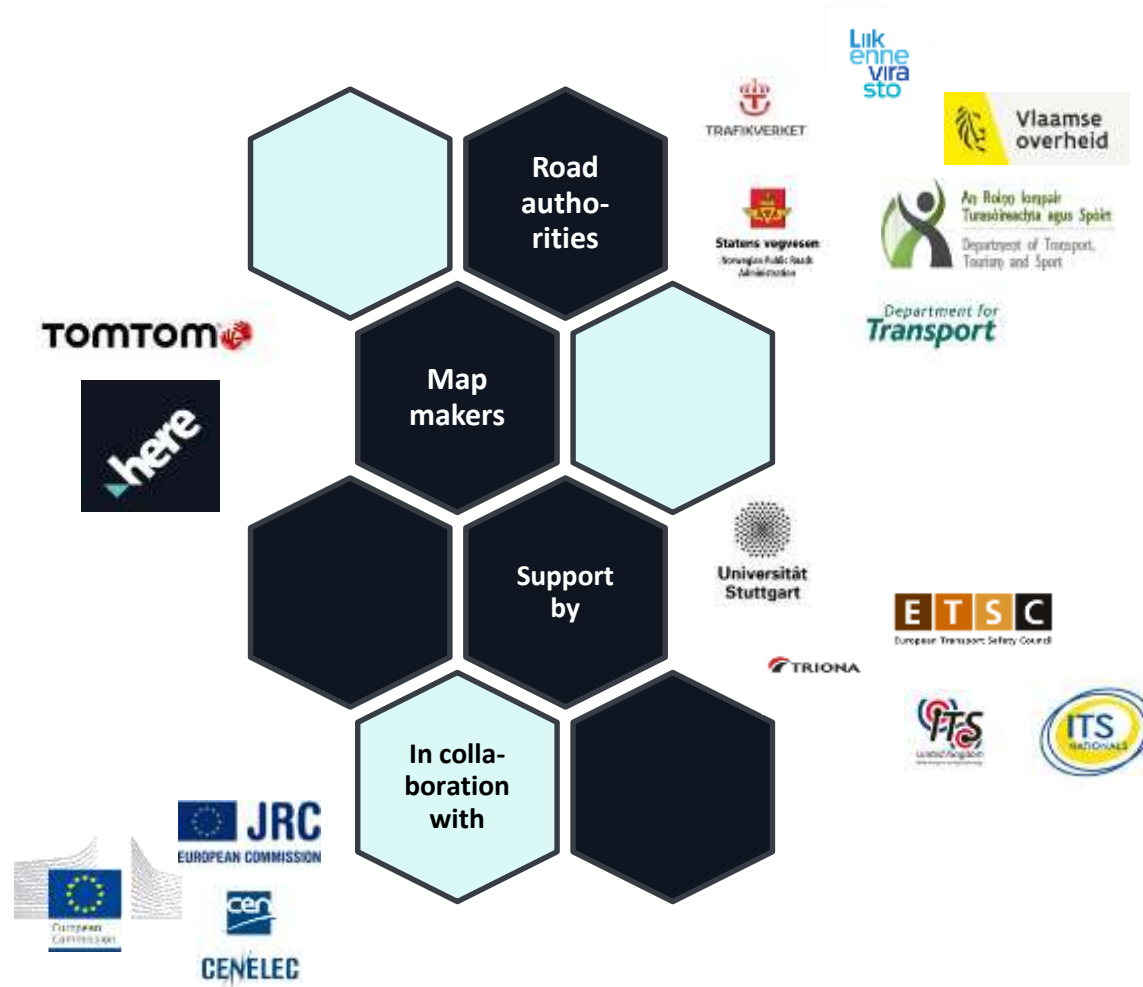


TN-ITS
Map Update Exchange

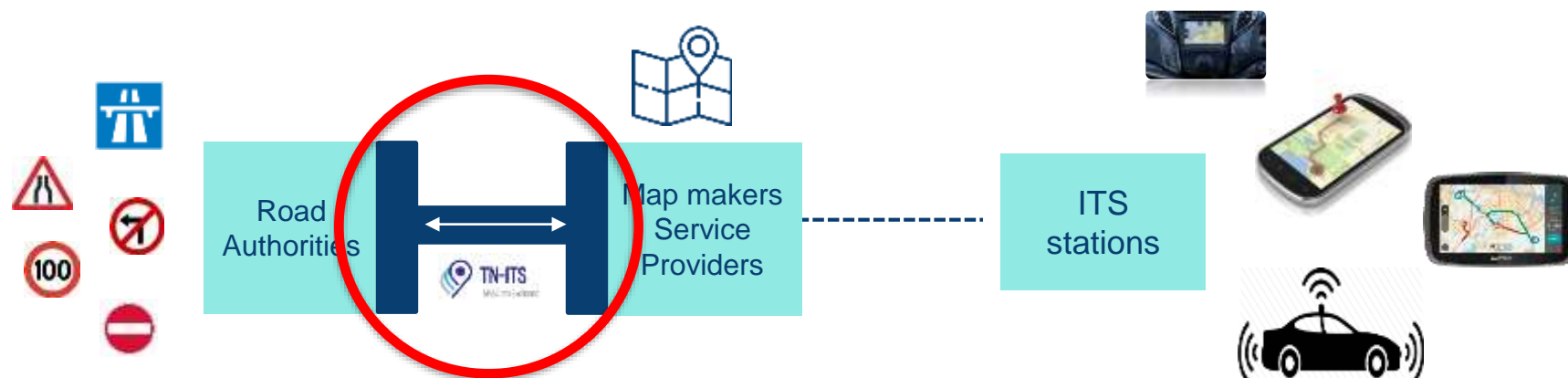


Towards TN-ITS services in 15 EU countries

TN-ITS Members



The TN-ITS data chain



Road Authorities publish changes of road data

Map makers retrieve, verify and integrate these changes in their platform and bring this to map users

Drivers can benefit from up-to-date fresh map data in their in-vehicle system, stand-alone navigation device or smartphones

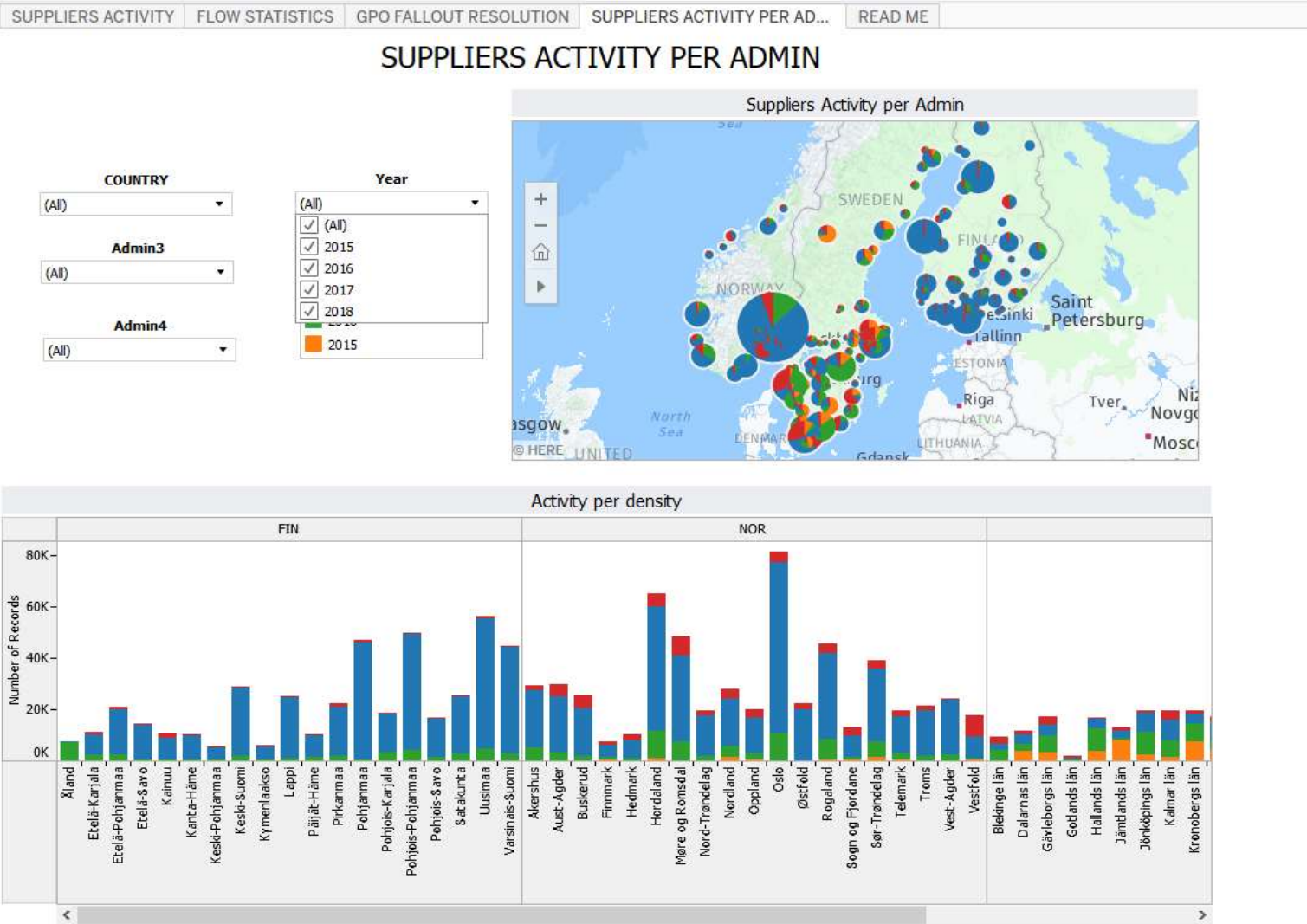
→ to share effectively any changes to road data and ensure a seamless data chain

Incremental updates

Since start in 2015:

About 1 mil. changes received from Norway, Sweden and Finland

Resulted in more than 500k Database changes/validations



Suppliers Activity per Admin

Activity per density

FIN

NOR

TN-ITS GO : further deployment in EU



- CEF MOVE/B4-2017-63 2M€ Grant
- 20 partners across EU
- First TN-ITS services in nine MS
- Improvement in five existing implementations
 - Pilot services to become fully operational
 - Feedback loop from Map Makers
 - New features supporting new use cases
- Minimum coverage TEN-T network – ambitions is more!
- Start Jan 2018 – 4 Years

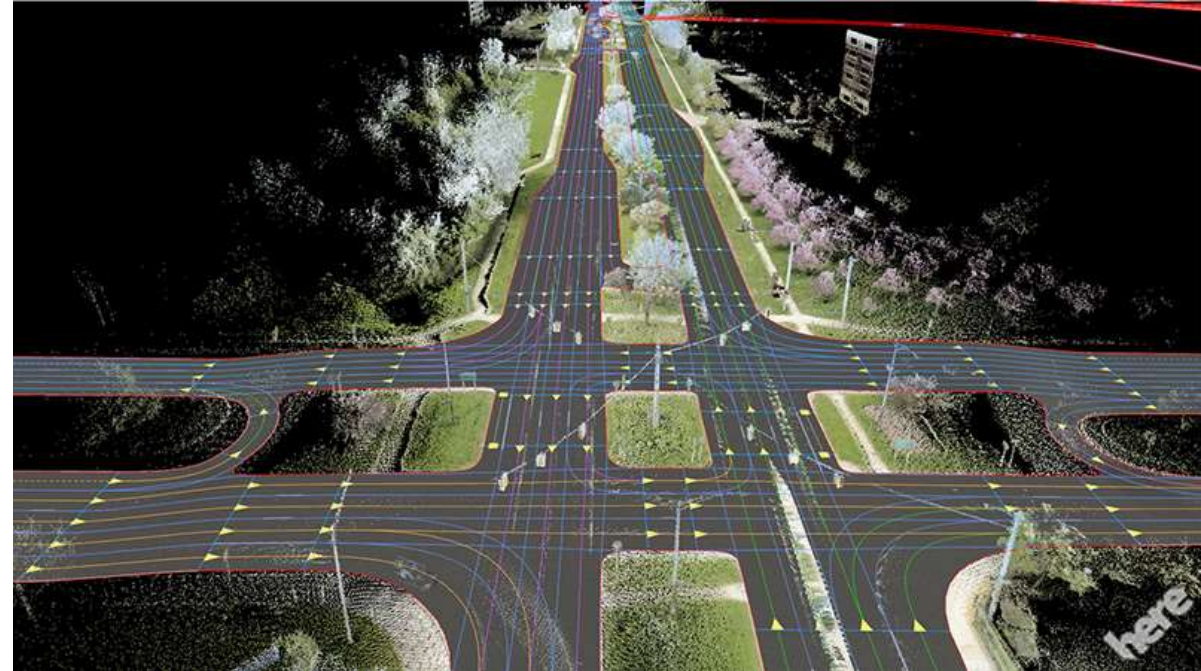


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Main benefits of TN-ITS

- Trusted Source
- Incremental updates – pointing to the changes
- Daily updates
- Standardization
- Automatization
- One Interface and data license per country



INSPIRE and digital Maps

Examples of Public Data Sources


Point Addresses


Transport Networks


Points of Interests


3D City Models



Road Signs

HERE Reality Index™

Adress Data

Integration of APIs

Automated Process

Regular updated Point Addressing

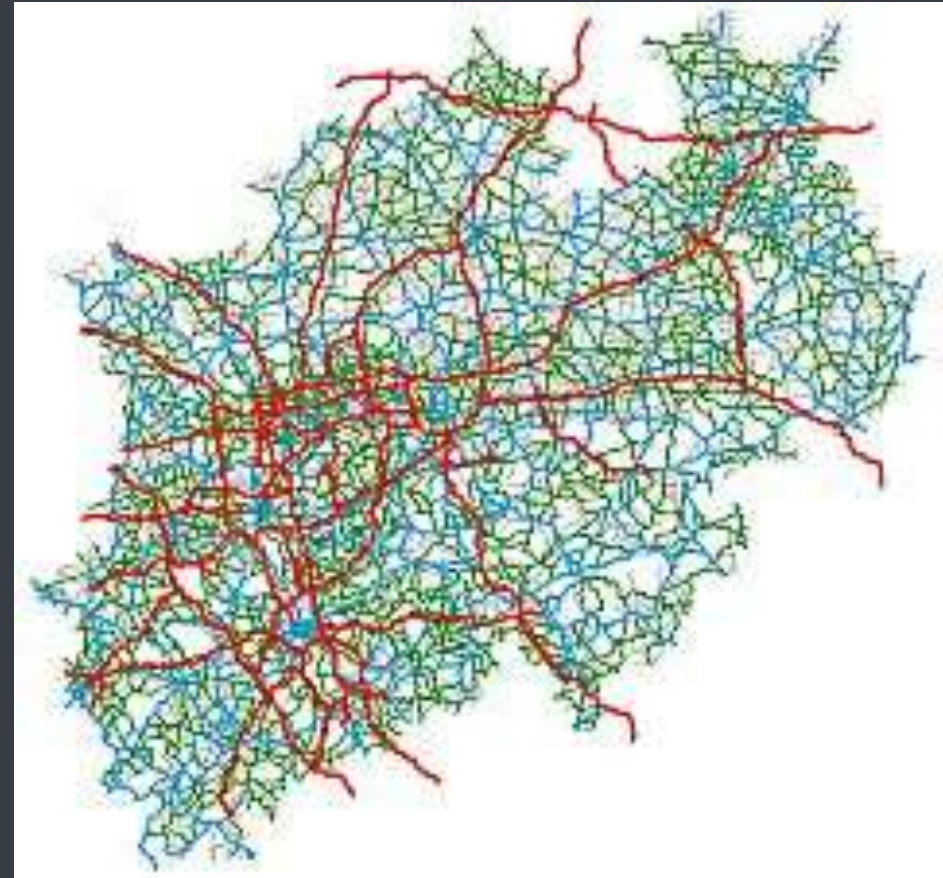


Road Network

Germany

Data is used to detect:

- New constructions
- Road Classification
- Roundabouts



INSPIRE and ITS

INSPIRE Data is
an important
source

Data Quality

Harmonization of
Access Points

Standardization is
Key

Data at big scale

Regular updates

Licensing



Thank you

Contact

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