



Cargo

Application of GNSS for optimization of freight wagon disposition

02.12.2021 | EGNOS Annual Workshop 2021

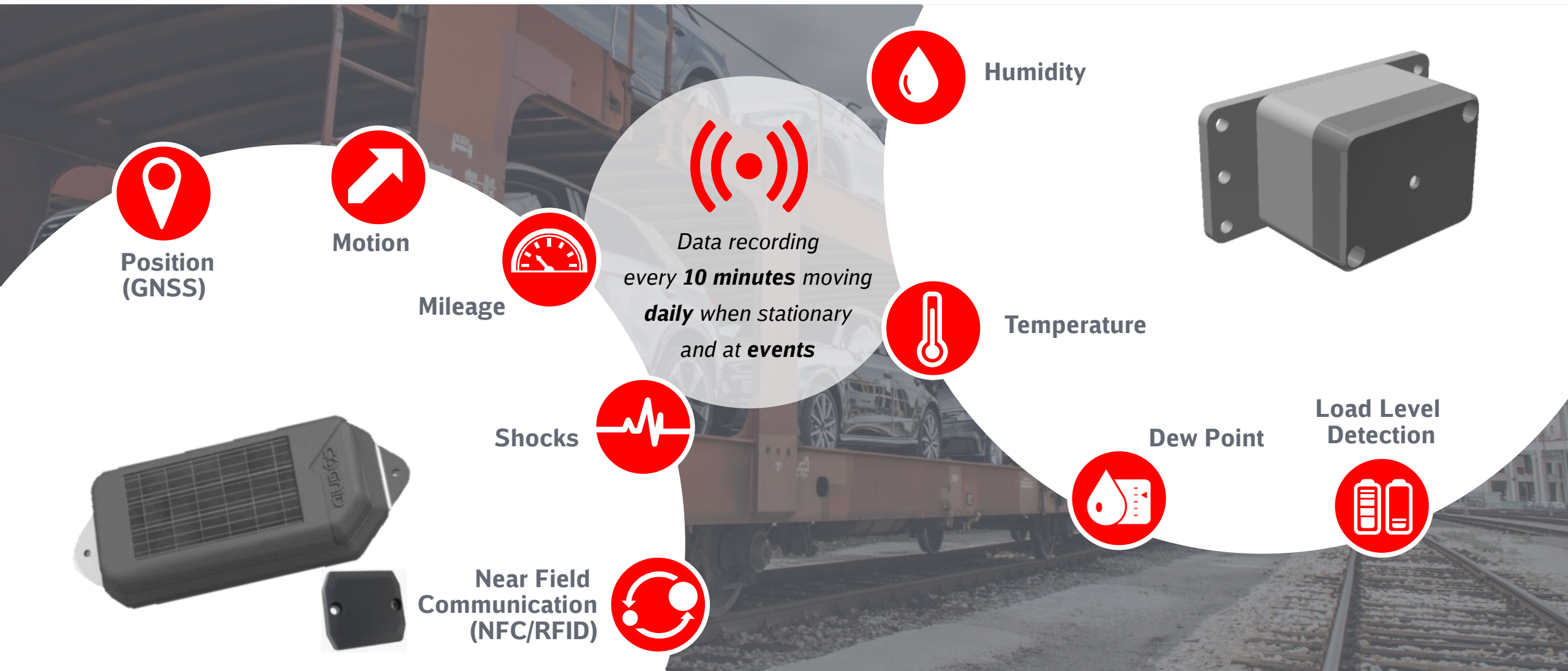
Co-financed by
the Federal Ministry of Transport and Digital Infrastructure
on the basis of a resolution of the German Bundestag

More than 62.040* freight wagons equipped with telematics devices.

Enabling the transformation of analog assets into digital assets to build a digital twin.



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The Wagon Intelligence product portfolio includes a wide variety of dashboards und apps.

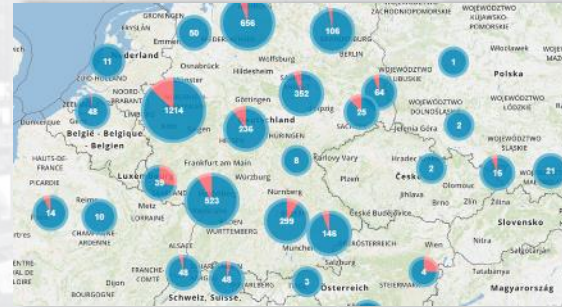
Data visualization improves the disposition in near-time and billing processes in retrospective.



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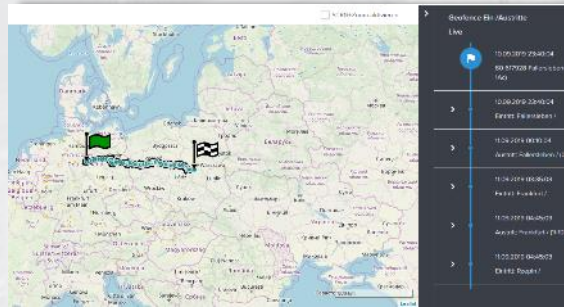
**Wagon
Timer**



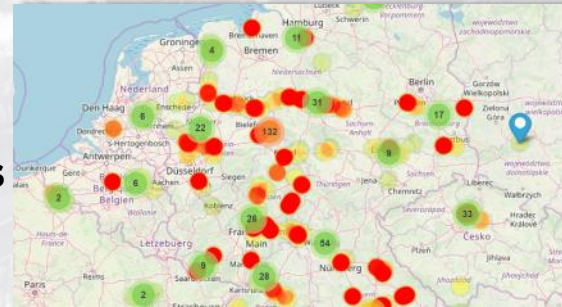
**Empty
Wagon
Detector**



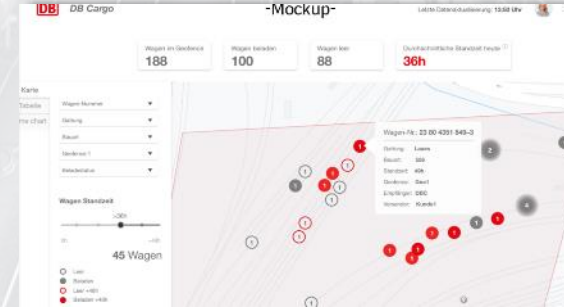
**Wagon
Biller**



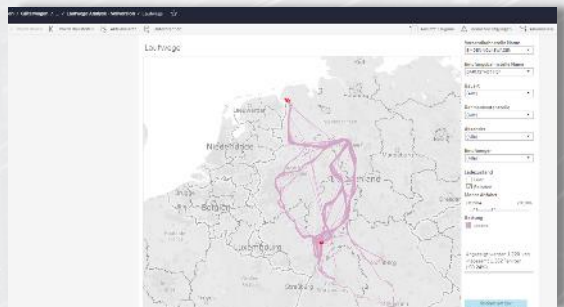
**Wagon
Compass**



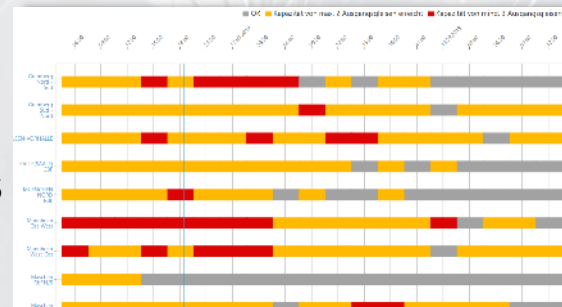
**Wagon
Shock
Detector**



**Geofence
Control**



**Wagon
Analytics**



**Wagon
Operator**



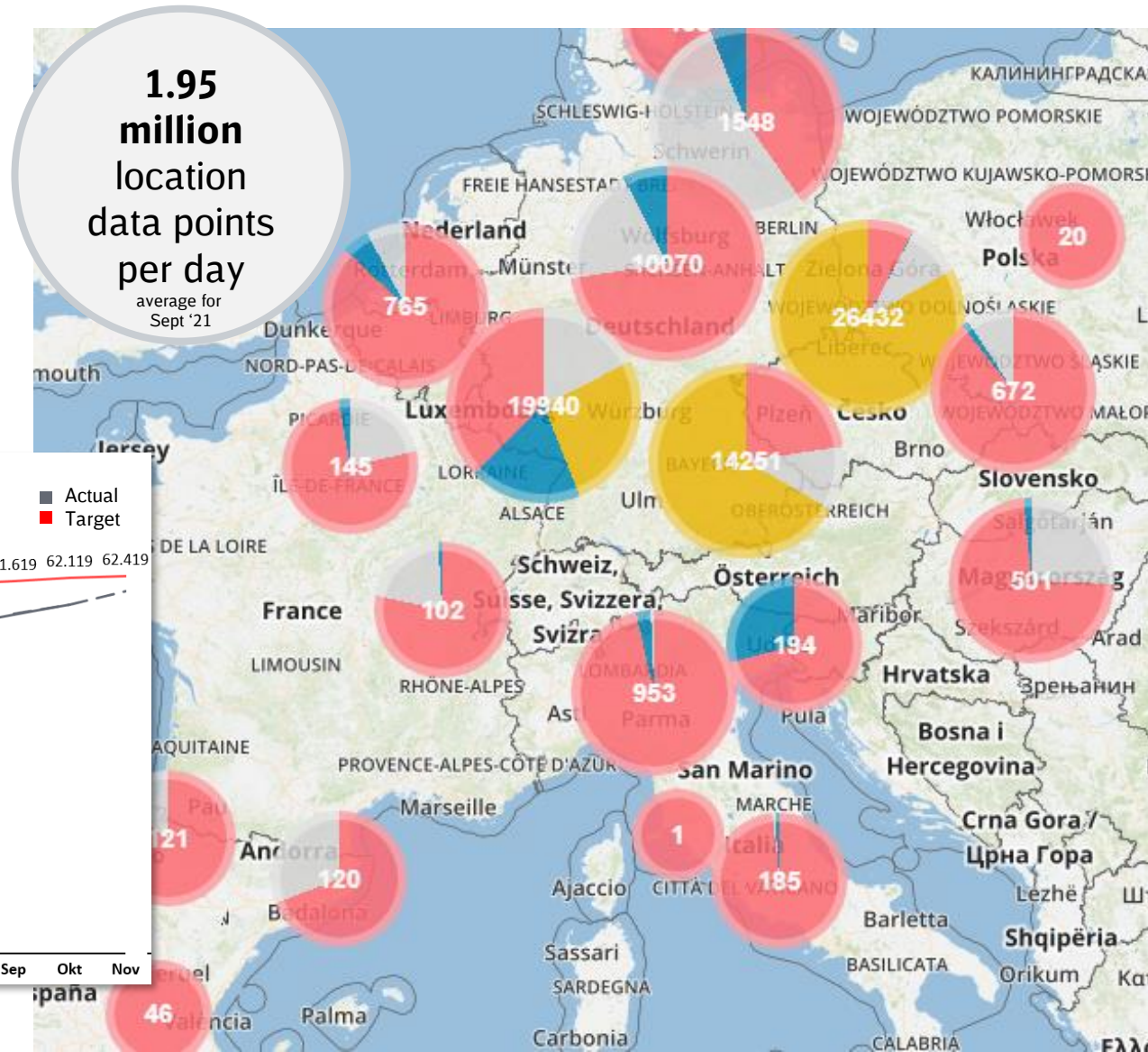
**Mobile
Wagon
Tracker**

Millions of location data points generate real added value.

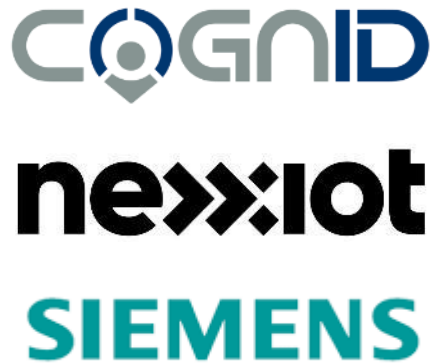
The challenge is to improve accuracy and availability without increasing energy consumption.



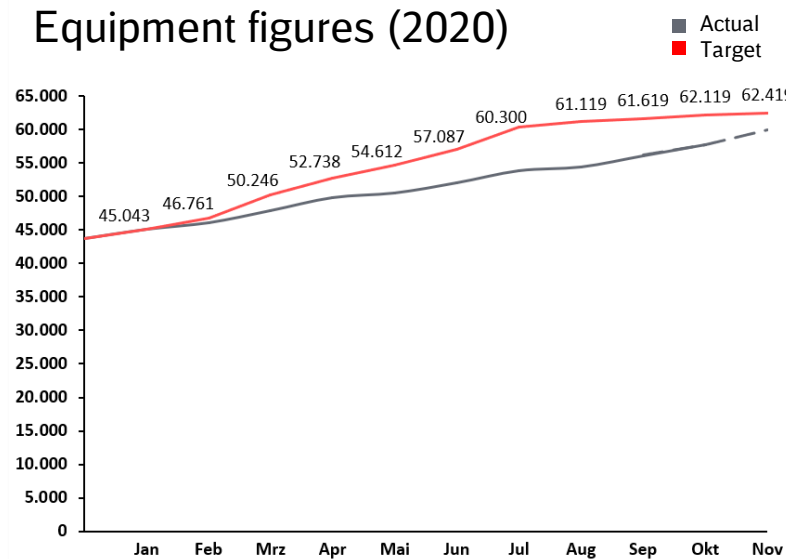
- Telematics devices use off-the-shelf GNSS receivers and antennas with data transfer over mobile network to central IoT cloud.
- The position data is optimized using EGNOS data where available
- Development projects initiated to enable automation from linking various data sources and to increase accuracy for better data quality
- Key factors are power consumption and with it the lifetime of the battery-powered telematics devices



Telematics devices supplied by:



Equipment figures (2020)



WI 2.0

Wagon Intelligence

QR CODE
DB Cargo



QR CODE
DB Planet



Gefördert durch:



Bundesministerium
für Verkehr und
digitale Infrastruktur

aufgrund eines Beschlusses
des Deutschen Bundestages

