UNECE E-Road and E-Rail Censuses

Alex Blackburn, UNECE

INLAND TRANSPORT COMMITTEE

UNECE

Overview

- Reminder on 2015 E-Road census map
- Small Updates on E-Road census 2020 recommendations
- E-Rail 2015 census map released
- Differences between mapping road and rail.
- Uses of the road and rail maps together, and need for better data.

Reminder: E-Road Census Map

- Census allows mapping of E-Road traffic volumes across the E-Road network.

2020 E-Road Recommendations

- Bigger emphasis on Shapefiles (with easy-to-understand labels)
- Additional category of "2+1" Road as a memo item.
- Preferably Shapefiles that specify type of traffic. This is typically available from automatic measurement, though not necessarily in geospatial format.
- 2019 update to the recommendations: minor updates to remove inconsistencies around number of lanes of duel carriageways.
- February 2019: ITC Endorsed the Resolution on the Recommendations for the 2020 road census, and "**expressed its concern** about the decline of the response rate"

Getting the E-Road Data

- Data seem to be typically produced by infrastructure managers rather than NSOs.

Statistics Office

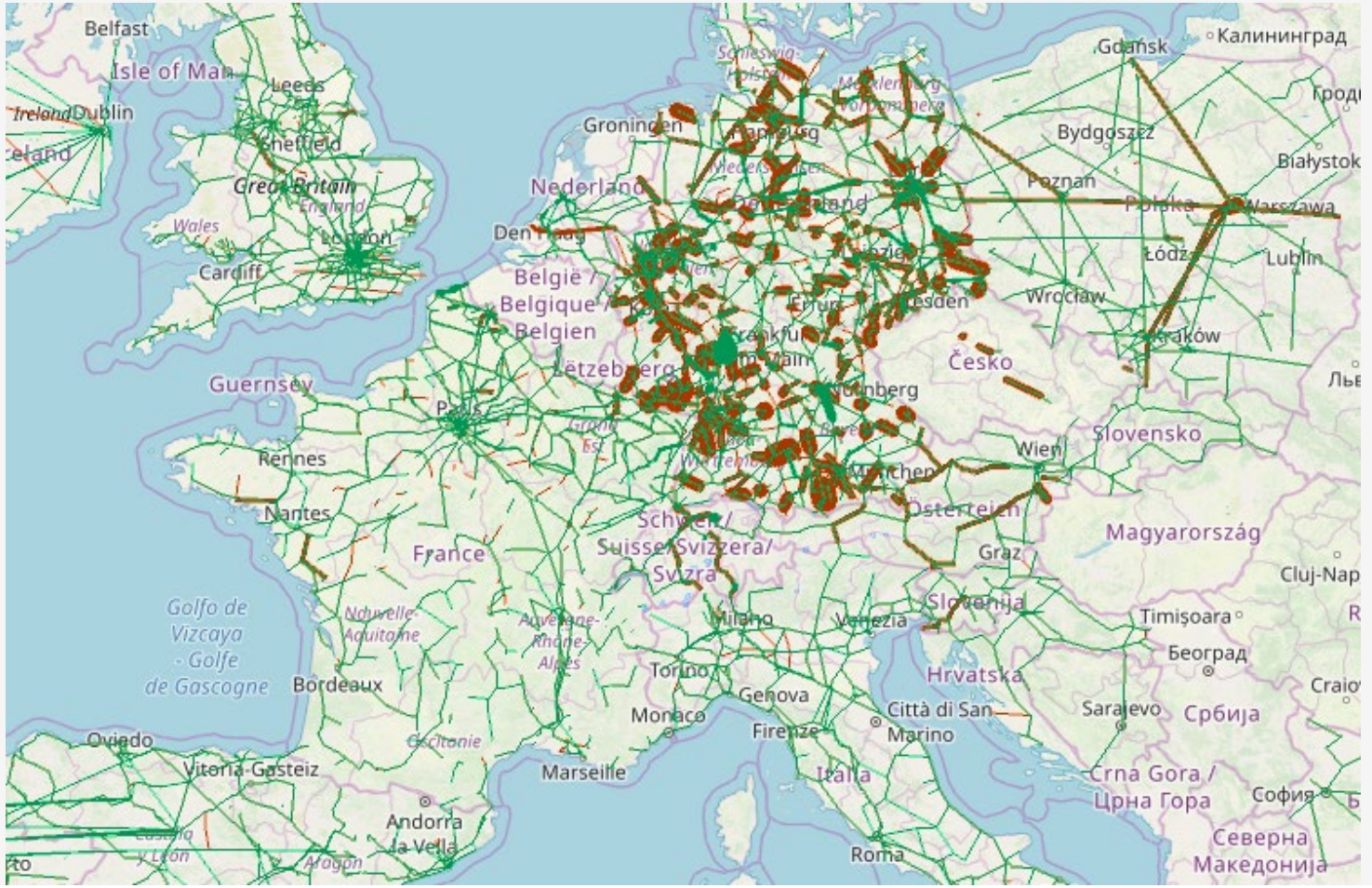
Infrastructure agency

E-Rail Census Mapped

- Since last session, Eurostat data for 2015 now available.
- No Shapefiles available, but data mapped using start and end-points.
- (Not all countries provided GPS coordinates of their 2015 results . Some of those did for 2010 (assumption made that segments are identical over time).
- Length of segments varied significantly, sometimes more than 700km (Spain).
- Smaller segments are more accurate and make it easier to see the real path of traffic (without Shapefiles)
- Coordinates in different GIS systems (digital, compass,, different projections etc)
- Reminder data for EU countries comes through Annex V of Regulation 2018/643 (previously Annex G of 91/2003.
- Some segments with zero traffic (wrong and/or not useful, therefore deleted)

E-Rail Census Mapped

INLAND TRANSPORT COMMITTEE



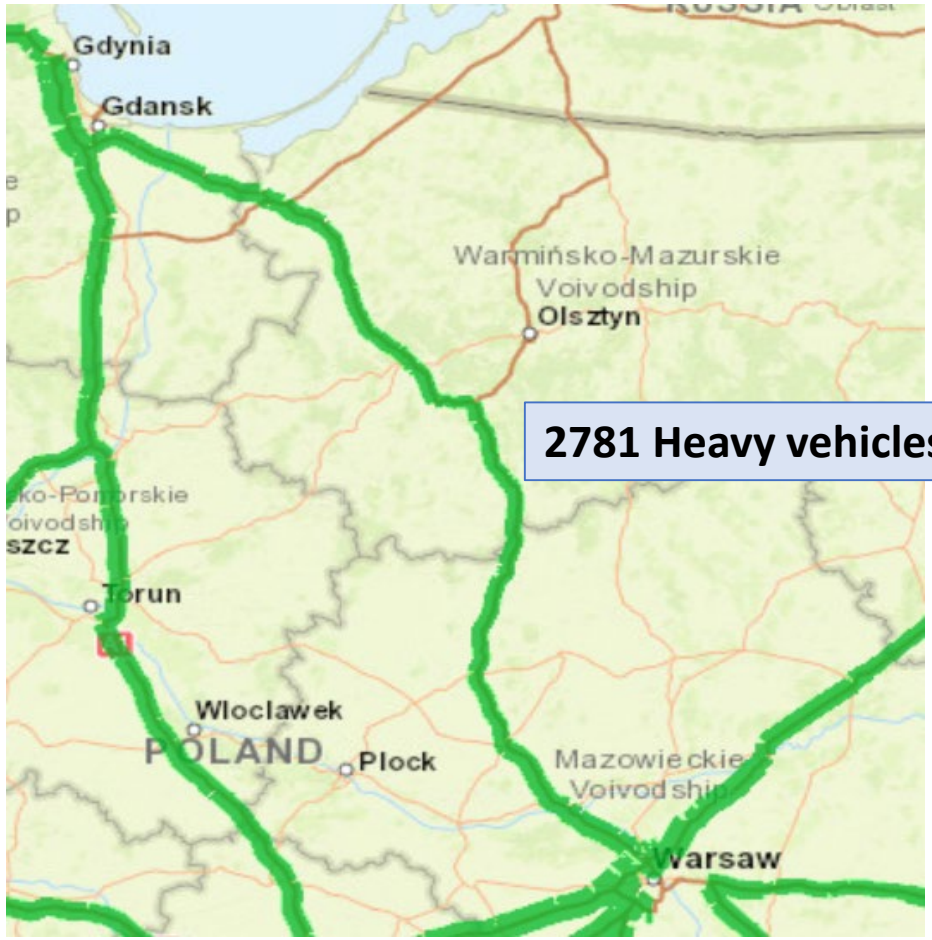
Mapping E-Road versus E-Rail

E-Road	E-Rail
• Shapefiles available • Traffic can be somewhat split between goods and traffic (using Heavy vehicles as proxy for goods) • Freight volumes can be very roughly inferred	• NO Shapefiles available (for now?) • Traffic can be definitively split between goods and people • Volumes can be very roughly inferred

Rail

75 goods trains a day

Road



2781 Heavy vehicles a day

Example: two extra 60-container trains on the route each day both ways could reduce HGV traffic by ≈8%.

UNECE

Summary

Future: Could combine with regional specific goods journey movements (NUTS 2 region) for greater insights.

Censuses can be a useful tool, but better data for 2020 that is complete, clear and accurate would unlock much greater potential.

Thank you!

Alex Blackburn
WP.6 Secretary
UNECE
Date 12-14 June 2019, Geneva

INLAND TRANSPORT COMMITTEE

UNECE