UNECE E-Road and E-Rail Censuses

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• 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.
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”
• Data seem to be typically produced by infrastructure managers rather than NSOs.
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)


Some segments with zero traffic (wrong and/or not useful, therefore deleted)
E-Rail Census Mapped
Mapping E-Road versus E-Rail

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E-Road

• 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

E-Rail

• NO Shapefiles available (for now?)
• Traffic can be definitively split between goods and people
• Volumes can be very roughly inferred
Example: two extra 60-container trains on the route each day both ways could reduce HGV traffic by ≈8%.
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!

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**UNECE**
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