Development of SPECA TWG-STTC transport databases

Agenda item 4.6
Transport Statistics Collection Programme
E-Road Censuses
Methodology: The Glossary
Transport-related SDG monitoring

UNECE Transport Statistics allow analysis of transport issues in the SPECA region and beyond.
Producing them following international standards allows meaningful comparisons and analysis across countries. The Transport Statistics Glossary provides harmonized definitions. More cooperation with ESCAP would be welcome on this.
UNECE Censuses allow corridor specific analyses and other localized focus.
Transport SDG reporting can be improved, and UNECE is engaging on guidance for 9.1.2
• Data are submitted by countries through an online questionnaire. Data can be entered manually (time consuming) or uploaded as a bulk file.

• Very detailed, +900 indicators for some countries.

• Purely a voluntary collection.


• Some countries have one focal point in NSO or MoT. Some have multiple contacts for each transport mode, in highway agencies, rail companies, NSO, MoT, Infrastructure agencies etc.
Road Traffic: E-Road Census
Working Party on Transport Statistics (WP.6)

- Conducted every 5 years on E-Road network, defined in the European Agreement on Main Traffic Arteries (AGR)
- Collects basic E-Road infrastructure data, and detailed mapped traffic numbers (Annual Average Daily Traffic)
• 3.6: Halving the number of road accident fatalities by 2020. TIER 1
• 9.1.2: Passenger and freight volumes (passenger-km and tonne-km) by mode. TIER I
• 11.2.1: Proportion of urban population with convenient access to public transport. TIER II
• Current indicator: proportion of population within 500 m of a transport stop.
Road deaths in ECE

- 3.6: ~8% reduction per year 2007-2010, but more flat since
- Positive trend masks huge differences between countries.

Car registrations (Norway)

Total Fleet vs. New registrations

Total Fleet figures allow an assessment of current situation, new registrations better show the direction of travel. N.B. hybrids included under petrol/diesel.
Information for roads, railways, inland waterways, intermodal terminals, ports, border crossings
International Transport Infrastructure Observatory

Data available

ROAD NETWORKS
Motorways
Express roads
Ordinary roads
Design speed (km/h)
Number of traffic lanes
Width of traffic lanes
Width of shoulders
Minimum width of the central reserve
Number of interchange points
Railway intersections
Vertical signs and road markings
Safety fences and barriers
Traffic control and user information
Traffic light signals
Emergency communication systems
Road lighting
Safety of pedestrians and cyclists
Protection of disabled persons
Protection from and of animals
Rest areas
Service areas
Toll areas
Traffic management systems
Emergency exits and access for emergency services
Tunnel equipment
Cost of maintenance
Flows (e-census)

RAIL TRANSPORT:
Number of tracks
Vehicle loading gauge
Minimum distance between
track centres for passenger traffic only
Minimum distance between
track centres for passenger and
goods traffic
Nominal minimum speed for passenger traffic only
Nominal minimum speed for passenger and goods traffic
Authorized mass per axle: Locomotives (≤200 km/h) for passenger traffic only
Authorized mass per axle: Locomotives (≤200 km/h) for passenger and goods traffic
Authorized mass per axle: Rail cars and rail motor sets (≤300 km/h) for passenger traffic only
Authorized mass per axle: Rail cars and rail motor sets (≤300 km/h) for passenger and goods traffic
Authorized mass per linear metre for passenger traffic only
Authorized mass per linear metre for passenger and goods traffic
Test train (bridge design) for passenger traffic only
Test train (bridge design) for passenger and goods traffic
Maximum gradient for passenger traffic only
Maximum gradient for passenger and goods traffic
Minimum platform length
in principal stations
Minimum useful siding length
Comments
Cost of Maintenance
Flows (e-census)
Electrified

INTERMODAL TERMINALS
with Railways
with Highways
with Airport
with IWT
Customs Warehouses
Simple Warehouse
Logistics Warehouses
Open Warehouses
Trucks parking spaces
Rail stopping spaces
IWT PORT
Number of Rail Container
Cranes
Number of Rail Bulk cargo
Cranes
Number of Boat Container
Cranes
Number of Boat Bulk cargo
Cranes
Opening Hours
Logistics Services
Total Capacity in
Containers storage
Total Capacity in Bulk
Cargo Storage
General Description
Comments
## Geographical Information Systems (GIS)

<table>
<thead>
<tr>
<th>Source</th>
<th>Geographical data available</th>
<th>Overview</th>
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<tbody>
<tr>
<td>UNECE EATL</td>
<td>EATL corridors data&lt;br&gt;Ports&lt;br&gt;Inland waterways&lt;br&gt;Roads (E roads when applicable)&lt;br&gt;Rails (E rails when applicable)</td>
<td><img src="image1" alt="Map of Europe" /></td>
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<tr>
<td></td>
<td><strong>Scale:</strong> world to region</td>
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<tr>
<td>Euro Global Map</td>
<td>Inland waterways&lt;br&gt;Ports&lt;br&gt;Roads (E roads when applicable)&lt;br&gt;Rails&lt;br&gt;Ferry lines and stations&lt;br&gt;Rail stations&lt;br&gt;Airports&lt;br&gt;Point of entrance or exit (outside Schengen area only)</td>
<td><img src="image2" alt="Map of Europe" /></td>
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<tr>
<td></td>
<td><strong>Scale:</strong> world to cities</td>
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</tbody>
</table>
GIS projects related to rail and intermodal transport

Road and Rail censuses
- Based on data gathered from Member States in 2005, 2010 and 2015
- Annual average daily traffic

https://arcg.is/1yHCmH
Climate change impact on transport infrastructure

- Climatic data (current, projections)
- Transport networks (railways, roads, waterways, ports...)

GIS projects related to rail and intermodal transport
GIS projects related to rail and intermodal transport

- Islamic Development Bank project
- Data collected through national focal points of common member States
- A strong GIS component
- Establishment of inter-agency partnership mechanisms
Thank you!

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