

Development of SPECA TWG-STTC transport databases

Agenda item 4.6

United Nations Special Programme
for the Economies of Central Asia

SPECA

Thematic Working Group on Sustainable
Transport, Transit and Connectivity (TWG-STTC)
Twenty-fourth session, Ashgabat, 18-19.11.2019



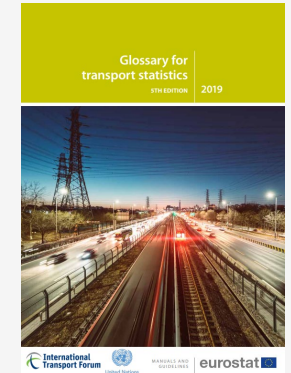
UNECE

UNECE Transport Statistics: Standards, Methodologies and Classifications

Working Party on Transport Statistics (WP.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

Transport Common Questionnaire

Working Party on Transport Statistics (WP.6)



- 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.
- Timeline: 2017 data requested in September 2018, checked and published by January 2019.
- 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)



- unece.org/trans/areas-of-work/transport-statistics/statistics-and-data-online/e-roads/traffic-census-map.html
- 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)



Monitoring the Sustainable Development Goals

Working Party on Transport Statistics (WP.6)



- 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.



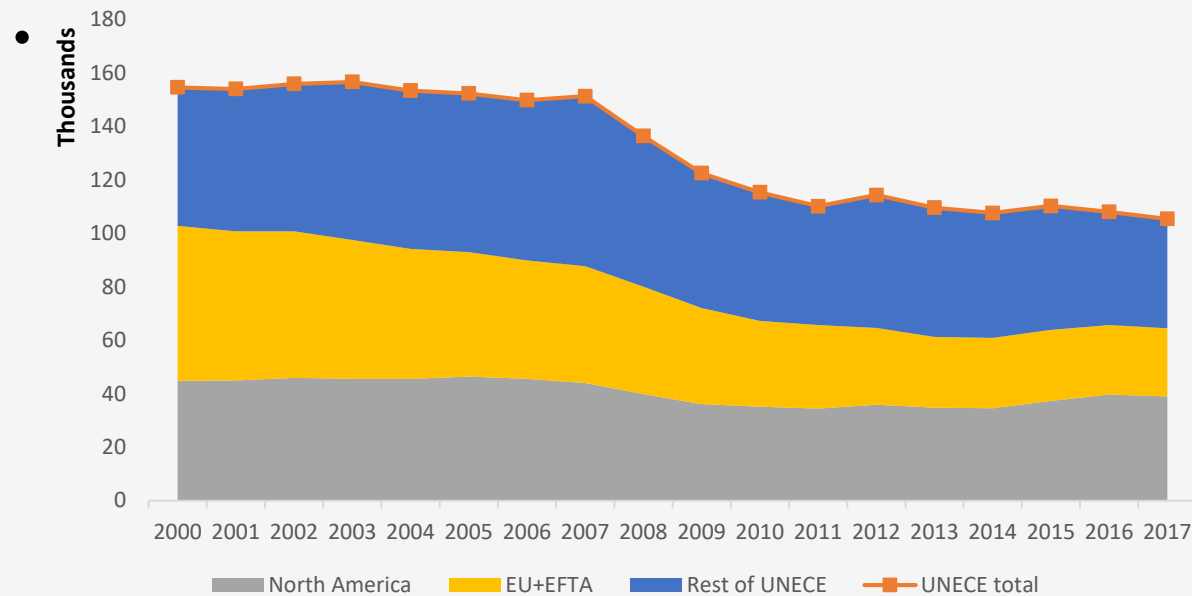
Examples of the collected transport statistics

Working Party on Transport Statistics (WP.6)

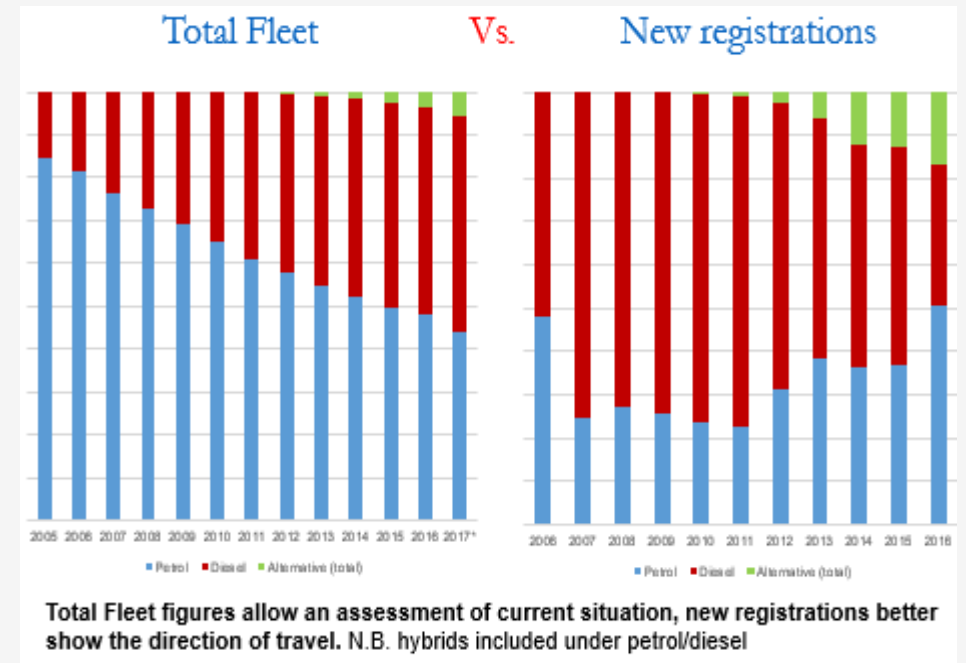


Road deaths in ECE

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



Car registrations (Norway)

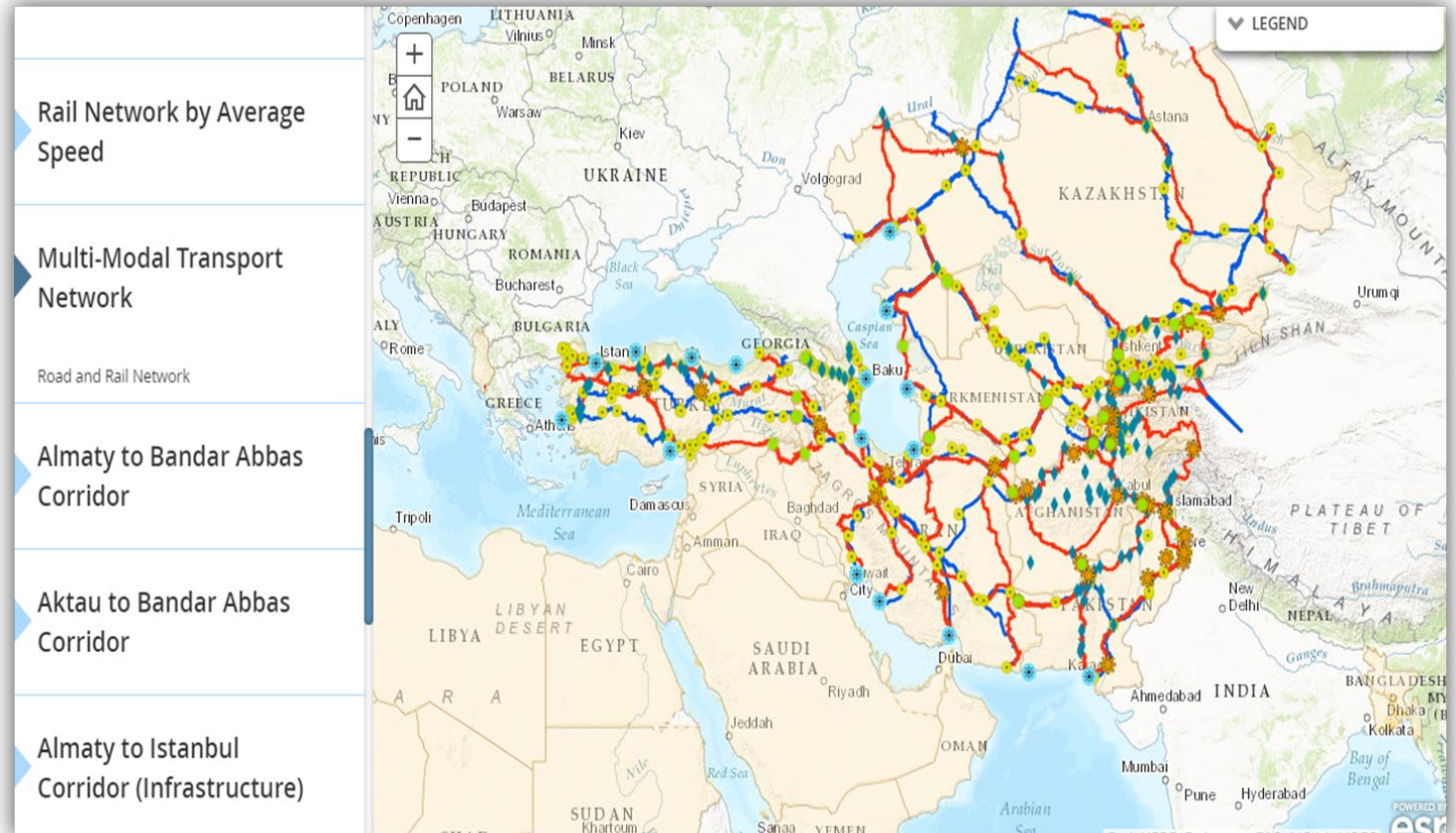


International Transport Infrastructure Observatory

Working Party on Transport Trends and Economics (WP.5)



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)

Source	Geographical data available	Overview
UNECE EATL	EATL corridors data Ports Inland waterways Roads (E roads when applicable) Rails (E rails when applicable) Scale: world to region	
Euro Global Map	Inland waterways Ports Roads (E roads when applicable) Rails Ferry lines and stations Rail stations Airports Point of entrance or exit (outside Schengen area only) Scale: world to cities	

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>

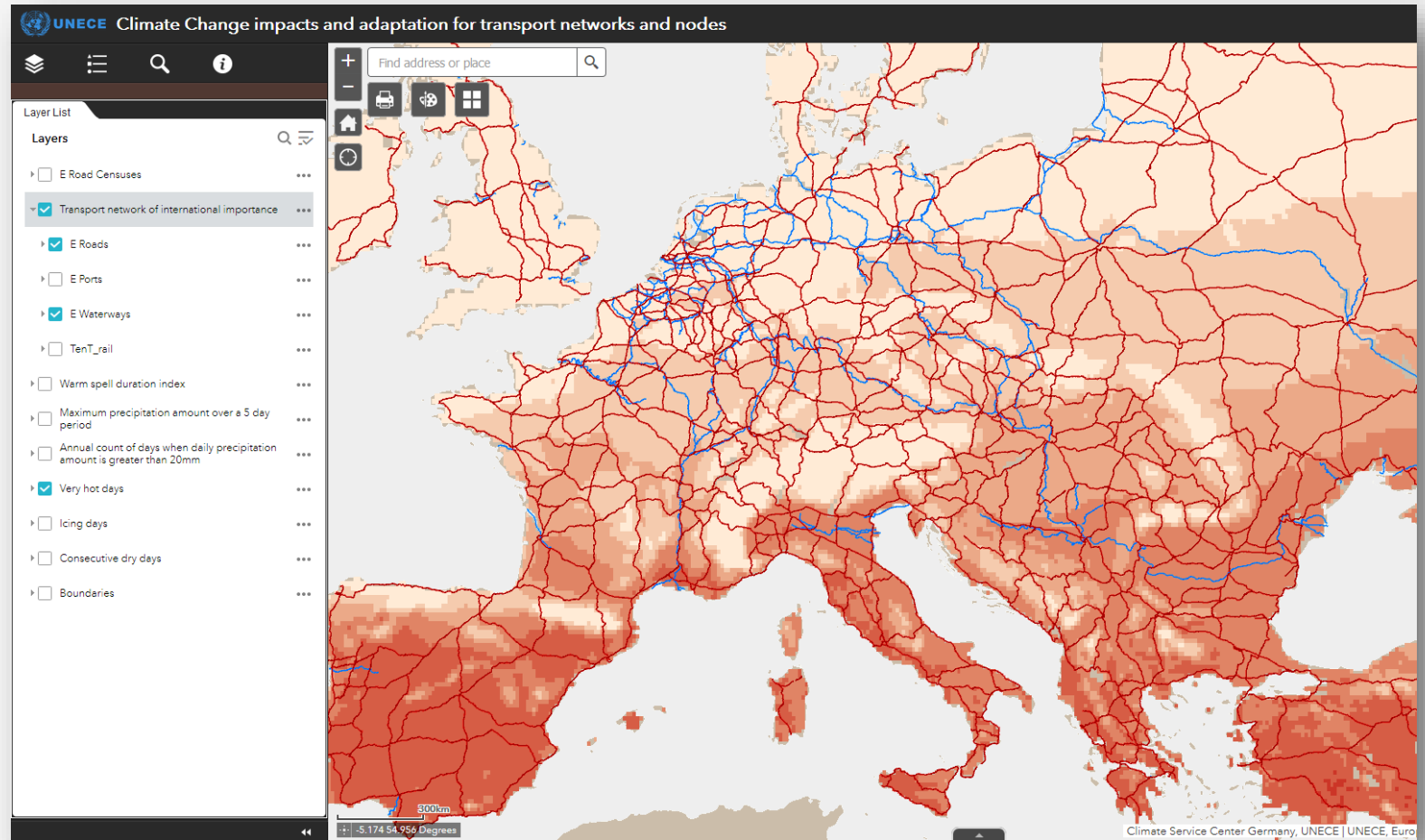


GIS projects related to rail and intermodal transport



Climate change impact on transport infrastructure

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



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

Transportation Network Web Application Islamic Development Bank Group

Esri World Geocoder

Layer List

Operational Layers

- Road Network
- Rail Network
- Road Projects
- Rail Projects
- IWT Network
- Maritime Ports
- Dry Ports
- Border Crossings

Search Network Elements

Layer Of Interest

- Road Network
- Rail Network
- IWT Network
- Dry Ports
- Road Projects
- Rail Projects
- Maritime Ports
- Border Crossings
- Road Nodes
- Rail Nodes
- IWT Nodes

Location Criteria

Sub-Region
Keep blank to search all sub-regions

Country
--- Countries ---

Route Number
keep blank to search all road networks

Attribute Criteria

First Condition

Field	Operator	Value
Weight	=	

AND OR

Second Condition

Field	Operator	Value
Weight	=	

Ordering

Field
Route Number

ASC DESC

Search Reset Export To CSV

Thank you!

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UNECE Sustainable Transport Division

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