Bus and Coach Statistics

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Overview

- Earlier work
- Publishing the pilot dataset
- Analysis of data
- Definition differences and metadata
- Importance of data for SDG11
- Additional data to consider collection

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Earlier activities of WP.6/AC.6

- Decision from 2006 to set-up ad-hoc task force on statistics of **long-distance** bus transport

- Met eight times between 2006 and 2009, chaired by Netherlands

- Discussions led to consideration of all bus transport, broken down by urban versus interurban

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Pilot questionnaire

- Urban vs interurban
- Regular versus occasional
- National versus international

- Number of passengers
- Vehicle-km
- Journeys offered
- Seats-km offered
- Passenger-km

- Data first collected for 2009
- Collection structure slightly modified in 2013 (described in ECE/TRANS/WP.6/2013/3). Journeys offered and seats-km offered discontinued (but data continue to be collected and reported...)

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New data shines light on bus and coach use as a feature of sustainable transport systems in the UNECE region

Discussions on the future of transportation are often dominated by headline-grabbing ideas: autonomous or electric vehicles, intelligent transport systems focusing on mobility services; ever-faster high-speed trains. Within this debate bus transport is often an unfashionable afterthought, a relic of 20th Century transportation networks. Nevertheless, bus travel is a low-cost, safe, green and effective means of transporting large numbers of people into and around cities, and thus an important transportation tool that countries can apply to achieve many Sustainable Development Goals (SDGs). In particular:

- **SDG 3: Good health and well-being**. Bus travel is one of the safest means of transportation in terms of fatalities per passenger-km (SDG indicator 3.6.1), and a short walk to a bus stop can have positive health impacts compared to private car usage, improving health outcomes.
- **SDG 7: Sustainable energy**. The energy intensity of bus travel (energy per passenger-km) is less than a third that of a passenger car, and its environmental footprint can be expected to decline further with the uptake of trolley buses, electric buses and more efficient vehicles.
- **SDG 9: Industry, innovation and infrastructure**. Well-developed bus transport is a key part of any efficient transportation service, allowing the generation of employment and wealth and driving economic development
- **SDG 11: Sustainable cities and communities**. When bus stops are safely positioned near to where people live and work, buses can aid the transportation needs of everyone, in particular those in vulnerable situations, women, children, persons with disabilities (in particular when "low-floor" vehicles are used) and older persons.

New insights to inform sustainable transport policy

3 GOOD HEALTH AND WELL-BEING

7 AFFORDABLE AND CLEAN ENERGY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

https://www.unece.org/info/media/news/transport/2018/new-data-shines-light-on-bus-and-coach-use-as-a-feature-of-sustainable-transport-systems-in-the-unece-region/doc.html

Definitional issues

- A very wide range of definitions used makes international comparisons difficult

- Do vehicle-km represent all bus movements, or just those with passengers?

- Problems even within the same country, e.g. vehicle-km refers to all vehicles on national territory, but passenger numbers only represent national occasional services

- International:
  - total vehicle-km?
  - just part of journey on your territory?
  - just your companies, or all?

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Interurban definition

- Sweden: bus that crosses at least one county border and final destination is a major dwelling in the destination county

- Latvia: covers only regular transport

- Poland: only covers enterprises with more than nine employees

- Norway: urban defined as bus services in the 13 largest cities

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Data availability

- Coverage: 26 member States have reported at least some data
- Data typically available for passenger-km, vehicle-km and passenger numbers
- Less provide Seat-km offered (nine countries) and journeys offered (four) *(these were supposedly discontinued in 2013…)*
- 17 countries split urban and interurban transport (but definitions…)
- 21 countries report for regular transport, whereas 15 report for occasional transport
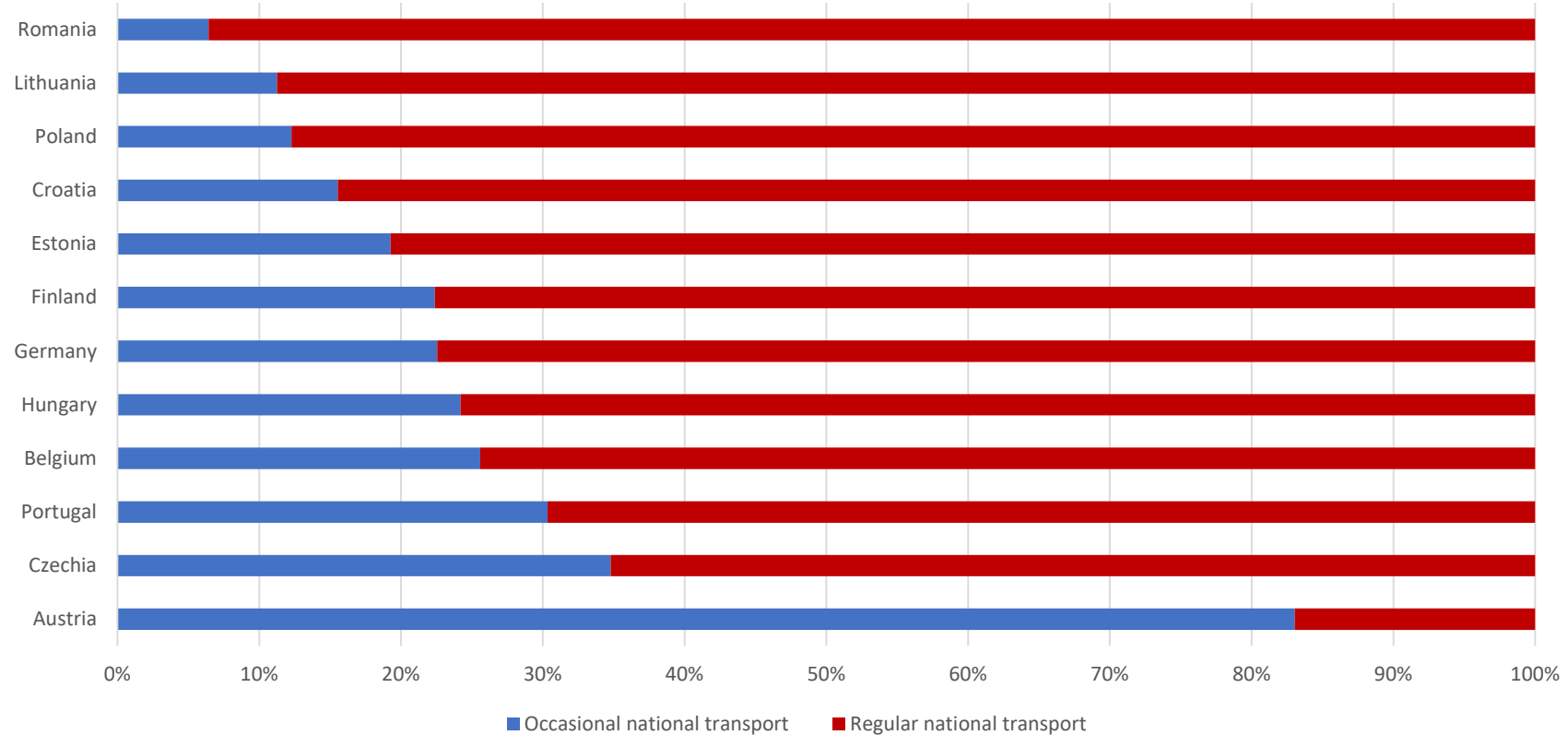
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Differences with bus data from the Common Questionnaire

(Passenger-km comparison)

- 7 countries had identical or near-identical figures across both datasets

- 6 countries showed higher data in main webcoq figure than in the pilot (expected, but check metadata)

- 5 countries had bus pilot figure higher than main webcoq figure (explained by metadata in four cases)

- 10 countries had webcoq data but nothing in bus pilot

- 2 countries had data in bus pilot but not in webcoq (no metadata. Public transport only?)

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Data analysis: occasional versus regular

Note: Belgium: regular transport is public transport and school transport. Croatia: only interurban transport. Poland: only enterprises with more than 9 employees and excludes urban transport. Portugal: mainland only, and only public transport.

Urban versus interurban
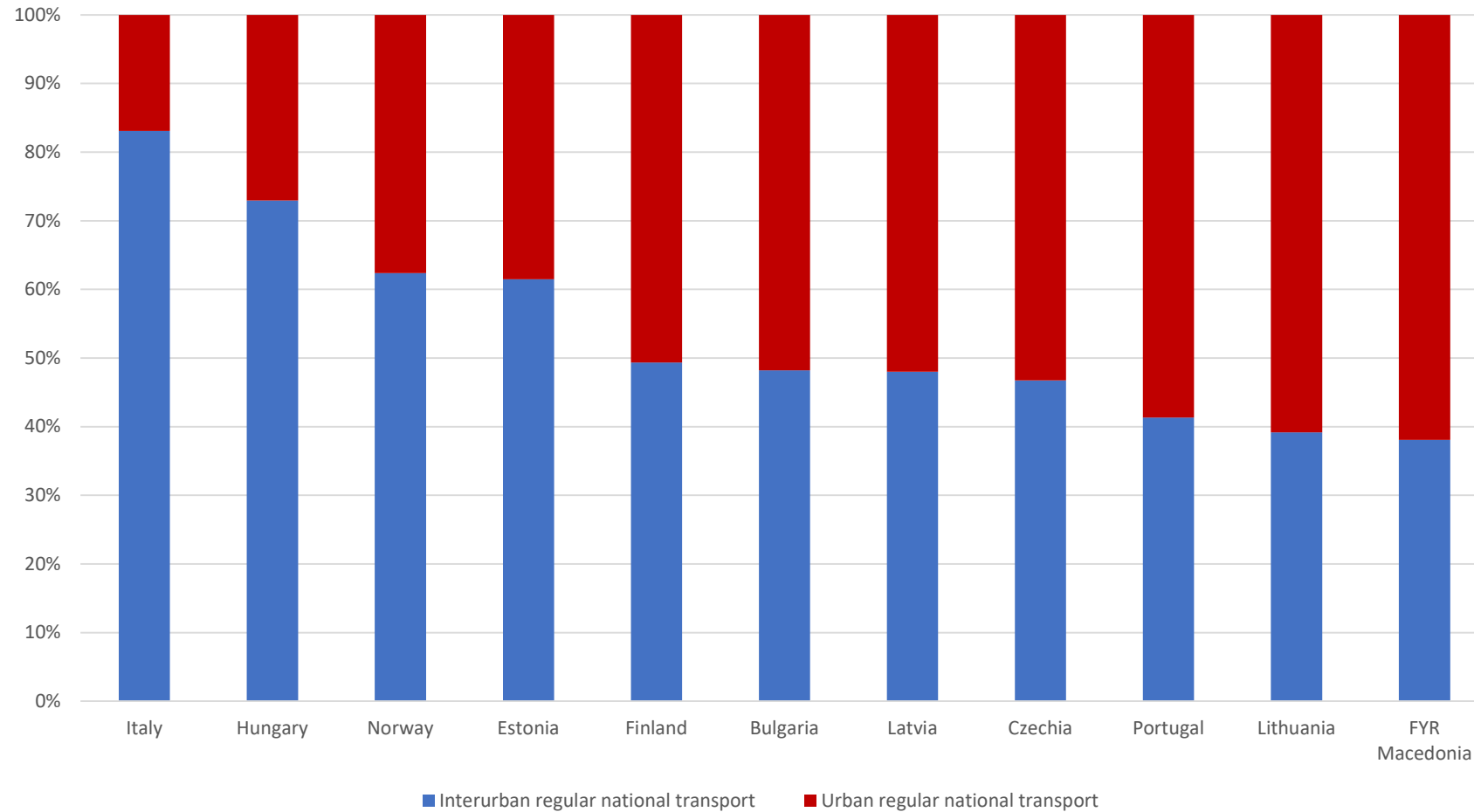
Note: Hungary: data from enterprises with more than 49 employees. Norway: urban data refer to the 13 largest cities only.

Indicators calculation

- Average passenger distance (passenger-km/passengers)
- Vehicle occupancy rate (%) and passengers per vehicle rate

But definitions...

SDG 11

- 11.2: By 2030, provide access to **safe**, **affordable**, **accessible** and **sustainable** transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

- 11.2.1: Proportion of population that has convenient access to public transport, by **sex**, **age** and **persons with disabilities.**

- **Measured as % of urban population within 500m of a transport stop**

- **Indicator custodian: UN Habitat**

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Uses of the Data

- Modal split and passenger mobility analyses, national and urban (SDG11)

Other data to consider

- Number of buses by fuel type (already collected in common questionnaire)

- Tram/metro/light rail data to complete the picture in an urban context

- Geospatial information (bus stop locations? Point-to-point journey info?)

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Challenges and Future Work

- Seat-km offered, occasional and regular will be in Glossary 5th edition. Consideration of urban definition will be changed too (but this may not change definition of an urban journey)

- Main challenge to usefulness of the data remains comparability. How to improve?

- **Decide to make the pilot collection regular (encourage participation?)**

- Implement streamlining agreed to in 2013?

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