



Directorate-General
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and Transport



EUROPEAN
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● Data and indicators for passenger travel demand – the European perspective

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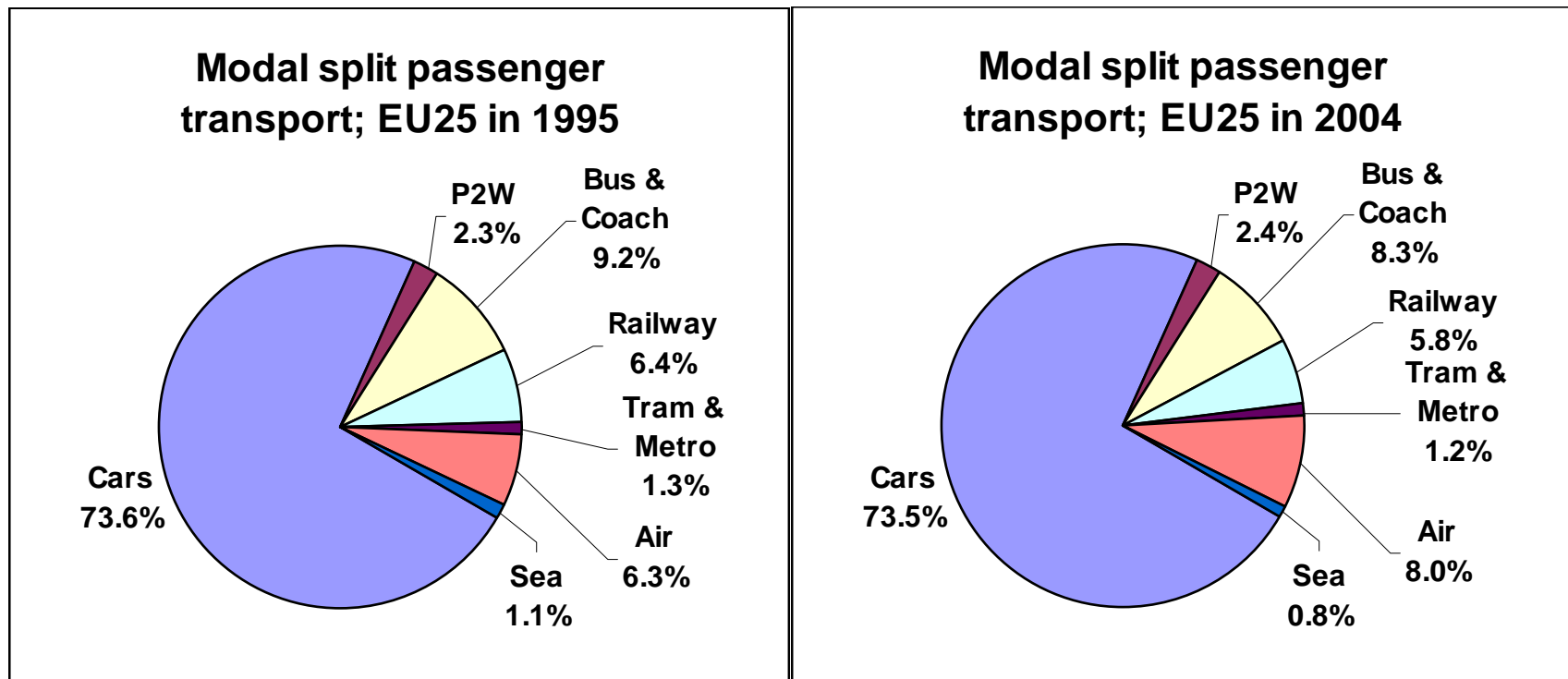
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● Overview

- 1) **Pkm** by mode and modal split in the EU
 - » Data from 2006 statistical pocketbook
 - » Convergence in passenger transport in the EU
 - » Sources of pkm data in DG TREN pocketbook
 - » Concluding remarks (for part 1)
- 2) **Vkm** by mode
 - » Data use and sources
 - » UNECE Handbook
 - » Eurostat Task Force
 - » Vkm of HGV
 - » Concluding remarks (for part 2)

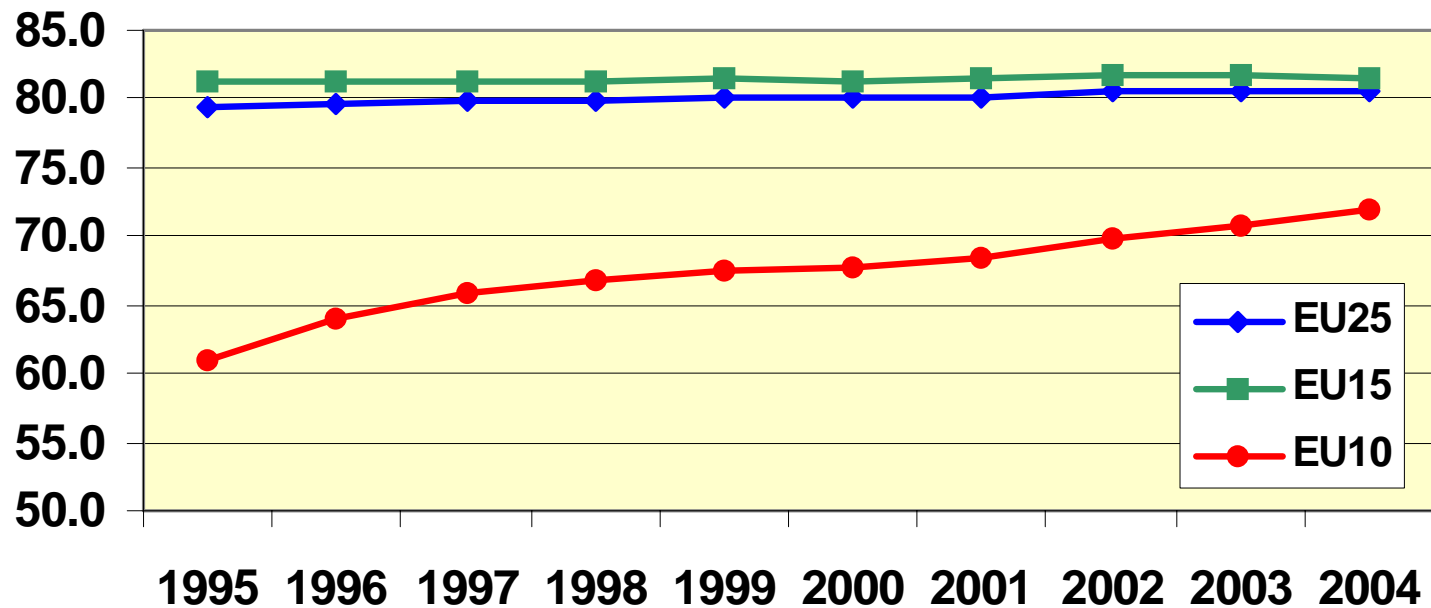
1) Pkm by mode and modal split in the EU

- Data from 2006 statistical pocketbook of DG TREN
http://ec.europa.eu/dgs/energy_transport/figures/index_en.htm

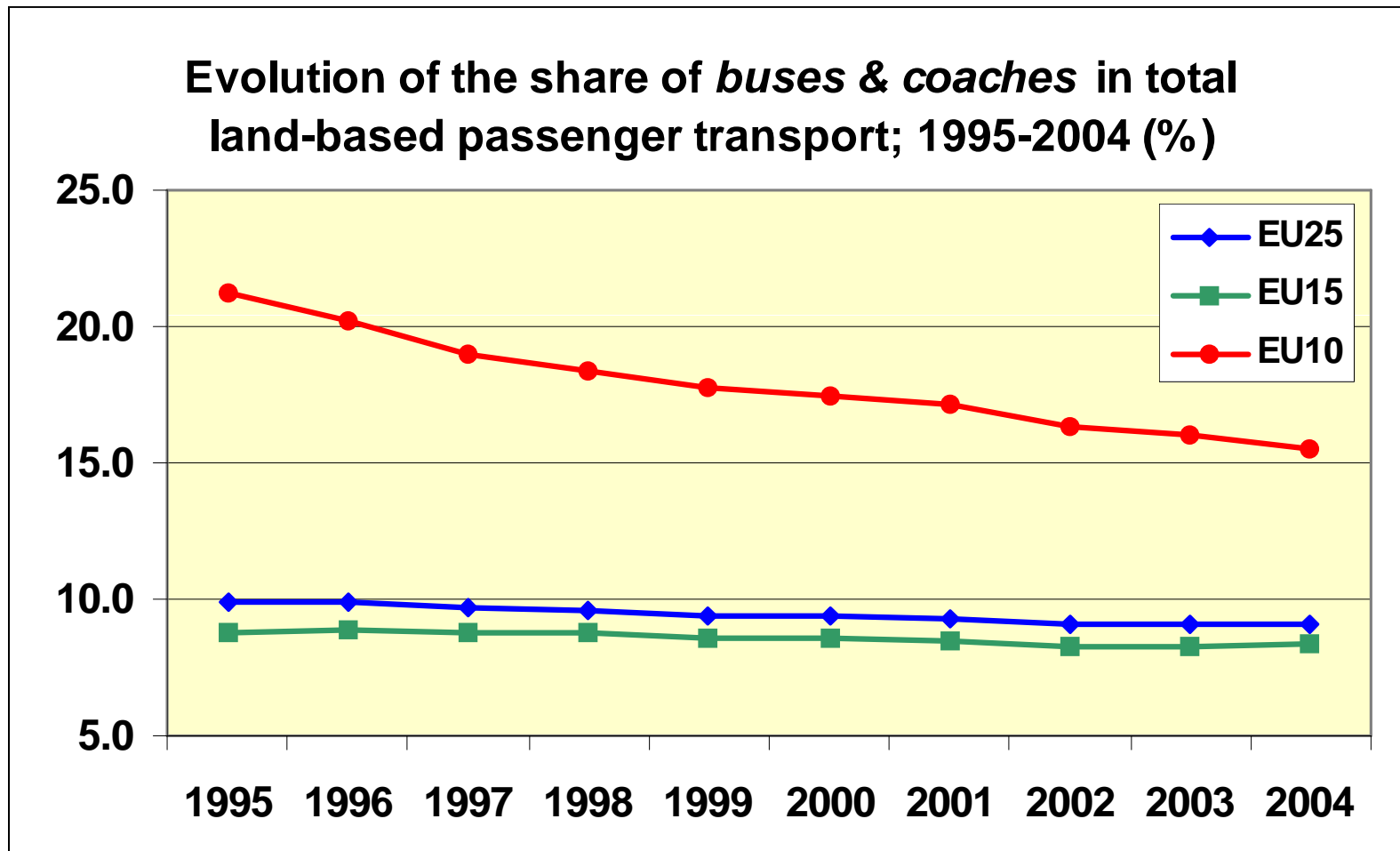


Convergence in the structure of passenger transport in the EU (1)

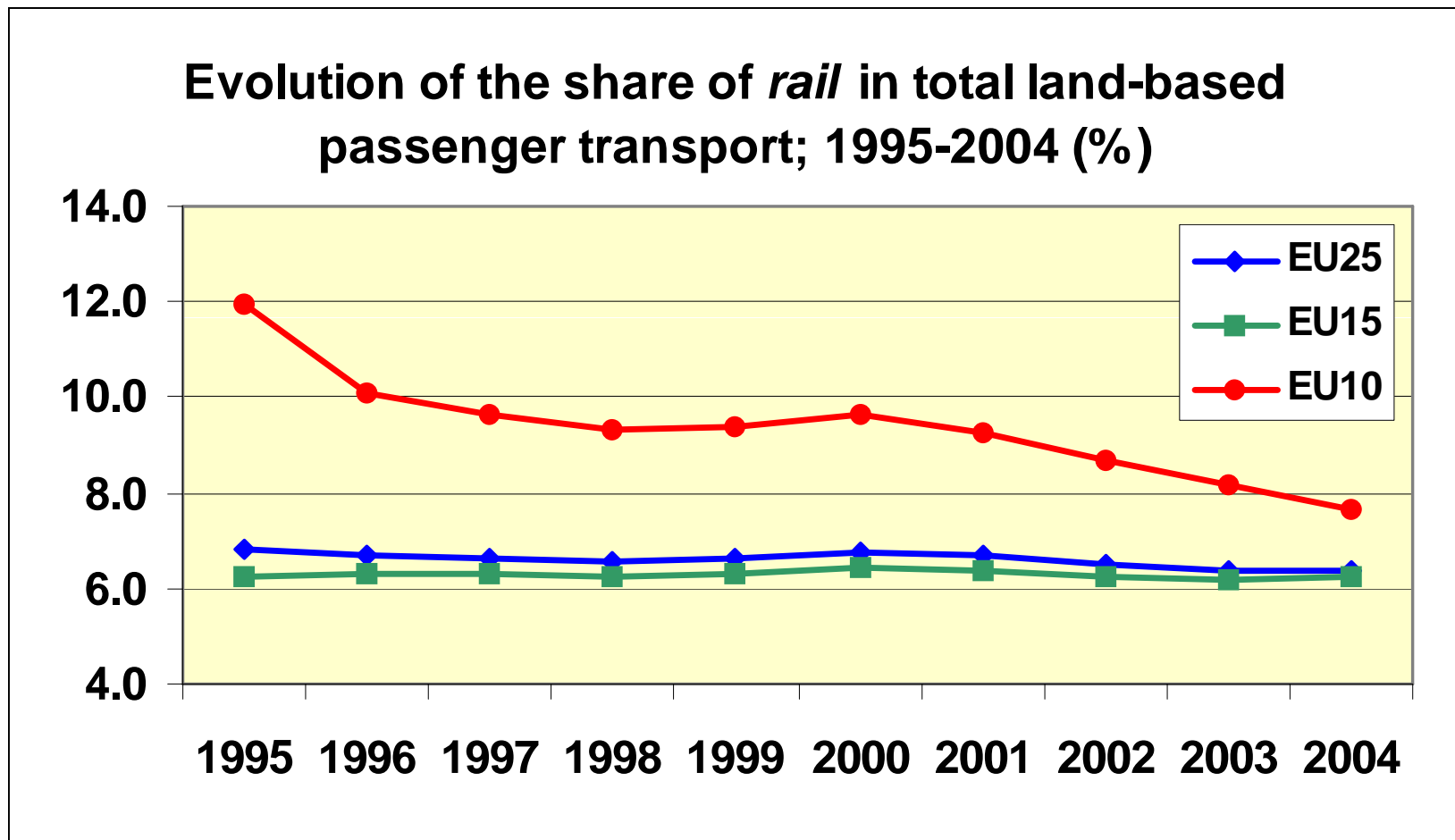
Evolution of the share of *passenger cars* in total land-based passenger transport; 1995-2004 (%)



Convergence in the structure of passenger transport in the EU (2)



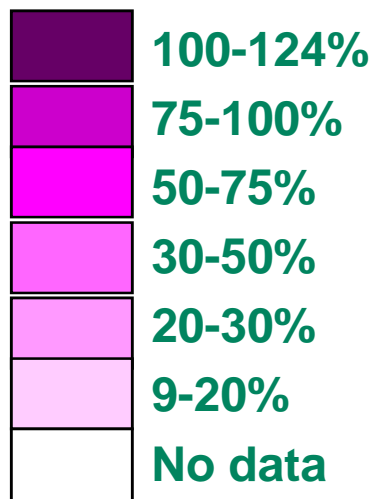
Convergence in the structure of passenger transport in the EU (3)





Evolution of passenger car stock, 1995-2005

Growth 1995-2005, %



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EU27: +23.8%

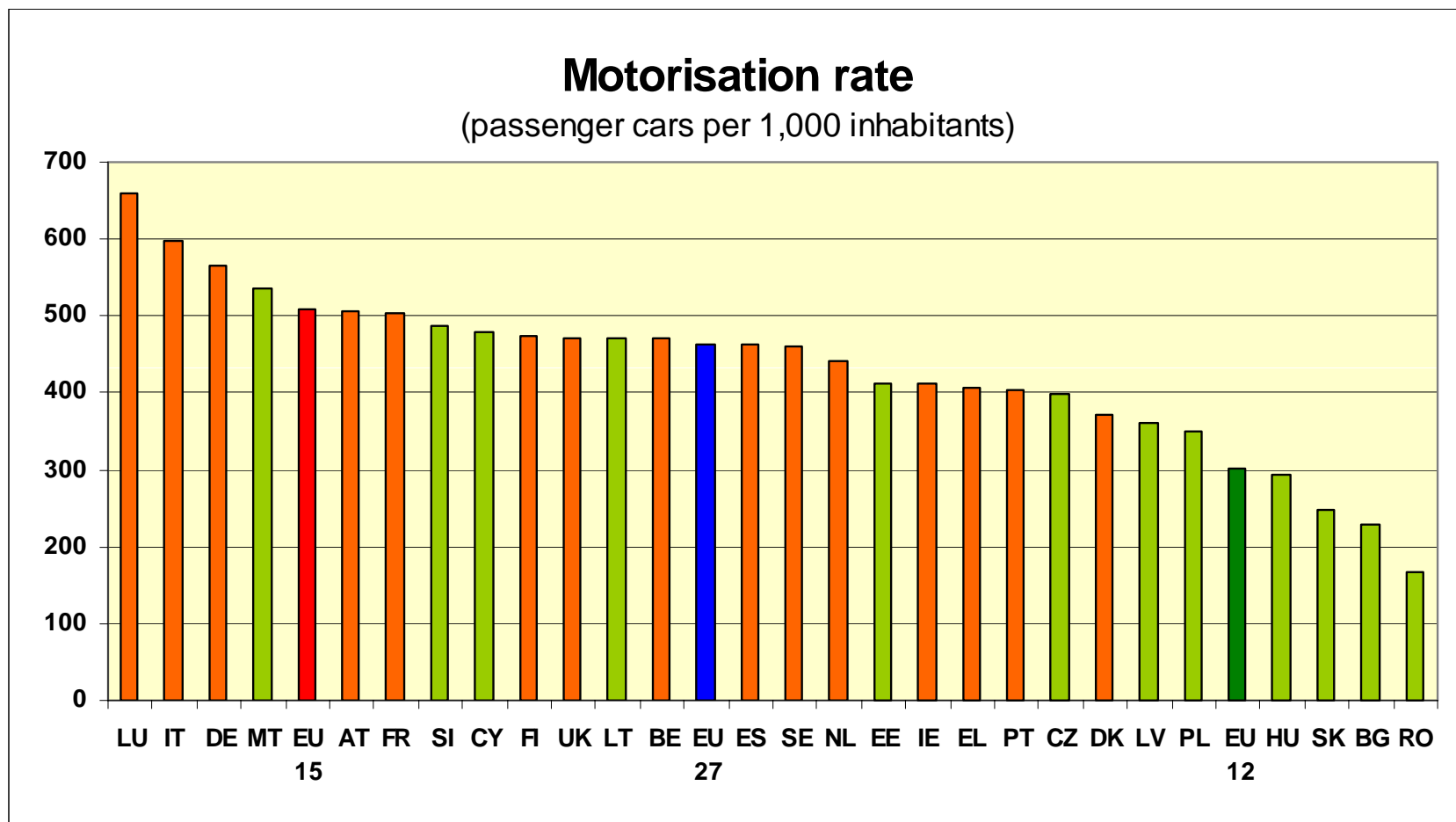
EU15: +20.4%

EU12: +51.5%





Passenger cars per 1,000 inhabitants (2006)





Sources of pkm data in DG TREN pocketbook

http://ec.europa.eu/dgs/energy_transport/figures/index_en.htm

- Problem: there is no EU legal act which would ensure the collection of harmonised road passenger transport data
- Whenever we found them, we took data from national statistical publications - as close to the source as possible; (e.g. for passenger car pkm, data have been extracted from BE, CZ, DK, DE, FR, IT, AT, FI, UK, NO, CH statistics)
- If not, then we checked data from the Common Questionnaire (CQ) of ITF, UNECE and Eurostat (e.g. for passenger car pkm, CQ data have been used for ES, LT, HU, NL, PL, SK, SE, IS)
- If not, then we produced own estimates, which we largely based on the evolution of the vehicle stock (e.g. passenger car pkm estimates for EE, EL, IE, CY, LV, LU, MT, PT, SI)
-> main purpose of estimations: calculation of EU-total!



● Data sources (cont.); some remarks to other modes (1):

● **Powered two-wheelers (P2W):**

- » Pkm “production” problematic because only 7 out of 27 EU countries seem to produce and publish estimates for P2W pkm.
- » Estimation difficult because structure and use of vehicle stock (mopeds vs. motor cycles) varies significantly from one country to another and is not always known.
- » Due to low quality of data, only estimate for EU total given in pocketbook.
- » Yet, P2W pkm not negligible (they appear to be more important than urban rail)!



- Data sources (cont.);
some remarks to other modes (2):

- **Buses and coaches:**

- » Pkm “production” easier because more than 50% of countries publish estimates of bus&coach pkm
- » Problem: coverage may differ (urban, interurban, regular, occasional services: not always all services included in the data)
- » Own estimates (which have to be made for a handful of smaller countries only) based on the evolution of the vehicle stock and an assumed average occupancy rate and mileage



● Data sources (cont.); some remarks to other modes (3):

- **Interurban Rail:** data from Eurostat, collected under Regulation (EC) No. 91/2003
- **Urban rail:** nightmare; 11 countries provide their own estimates which are definitely not comparable; the rest is being estimated
- **Air:** airport-to-airport declarations collected under Regulation (EC) No. 437/2003 and use of distance matrix between airports for intra-EU flights only
- **Maritime:** port-to-port declarations collected under Council Directive 95/64/EC and use of distance matrix between ports for intra-EU journeys only (mostly ferry traffic)



Concluding remarks (for part 1)


- Quality of road (and urban rail) pkm data leaves room for improvement
- Frequent methodological changes and breaks in time series are extremely annoying from a user perspective
- Unclear whether data are based on what is going on on the territory of the countries or on the performance of nationally registered vehicles
- TREMOVE update (expected for April 2008) should bring some light into darkness



● 2) Vkm by mode – data use and sources

- Up to recently: Not very much interest in vkm data
- Now: Huge interest in vkm data (above all for emission calculations and the assessment of climate change impacts)
- Currently available vkm data for non-HGV are mainly based on studies or modelling results (TREMOVE); source of data in these studies: partly national statistics, partly estimates
- So far, the CQ has not much to offer in this respect
- New initiatives to get better vkm data: UNECE and ESTAT task forces





UNECE Handbook on statistics on road traffic – Methodology and experience

- UNECE workshop in Copenhagen in December 2005 created Task Force
- Task Force produced Handbook which covers the following topics:
 - User needs
 - 4 main data collection methods:
 - » odometer readings
 - » household surveys
 - » roadside traffic counts
 - » fuel consumption
 - Foreign traffic on national territory
- Handbook may be downloaded from http://www.unece.org/trans/doc/2007/wp6/handbook_final.pdf

● Eurostat Task force on Road Vkm

- Due to rising interest in the subject, which had become obvious during the production of the UNECE Handbook, Eurostat set up its own task force with the aim of getting more data on road traffic volumes and of making the data more comparable
- TF produced and sent out a questionnaire asking for main methodologies used to get vkm data and for available data
- Meeting of CCST (covering EU+EFTA+EU candidate countries) in December 2007 decided to add four road vkm tables to CQ

● Vkm tables to be included in CQ (1)

● **Table 1: Road traffic by (detailed) type of vehicle**

- » Passenger cars broken down by fuel used,
- » Distinction between buses, coaches and minibuses,
- » Distinction between mopeds and motorcycles,
- » Goods vehicles by type of fuel, by size class and, for >6t, by type of vehicle (lorry / road tractor)
- » Bicycles(!)

- Data on road traffic on national territory preferred, but data following the nationality principle also ok.

- Ideally, incl. estimations of the traffic volume of foreign vehicles on national territory and of national vehicles abroad



Vkm tables to be included in CQ (2)

- **Table 2: Road traffic on national territory by type of vehicle and by type of road**
 - » Road types: Motorways and other roads (further distinction between other roads within and outside built-up areas)
 - » Only main categories of vehicle types
- **Table 3: Road traffic on national territory by type and age of vehicle**
 - » Only main categories of vehicle types; passenger cars broken down by fuel used
- **Table 4: Road traffic on national territory by type of vehicle and by age and sex of driver**
 - » Only main categories of vehicle types

● Eurostat Task Force on Road Vkm: Next – actual and potential – steps

- Start of regular, voluntary data collection by CQ in 2008
- Eurostat will assist Member States in assessing, developing and/or improving current data collection processes
- Directive 96/96/EC (on the approximation of national laws related to roadworthiness tests in the EU) should be revised for it to foresee the reading of the odometer during the technical inspections and the passing on of the info to the national authorities. This would provide us with a full coverage of data by vehicle type and age of the national fleet.



- Harmonised vkm data for Heavy Goods Vehicles (HGV) are already available

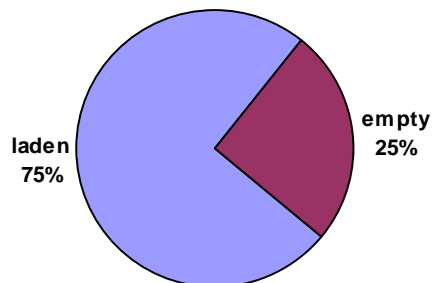
- Collected under Regulation (EC) No. 1172/98

Millions of Vehicle-km of HGV in the EU & Norway

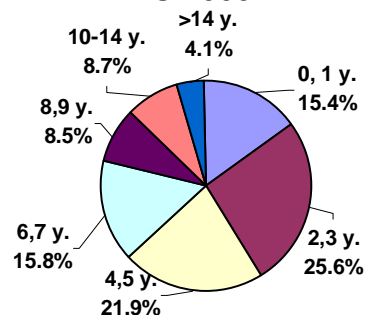
	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT
2006	3419	1581	5463	2210	30243	497	2481	3048	20903	21588	:	155	1464	1575
2005	3355	:	5222	2267	28853	493	2522	2491	20160	21367	13864	196	840	1413
2004	3755	:	5495	2316	28792	595	2314	3373	19090	21709	13422	143	741	1183

	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO
2006	682	2898	:	9095	3391	14276	4097	3482	1123	3010	2541	2704	24087	1837
2005	670	2491	:	9700	3137	13010	3986	:	1104	3158	2650	2683	23802	1784
2004	726	2201	:	10346	3268	12872	3833	:	955	2822	2620	2530	23951	1776

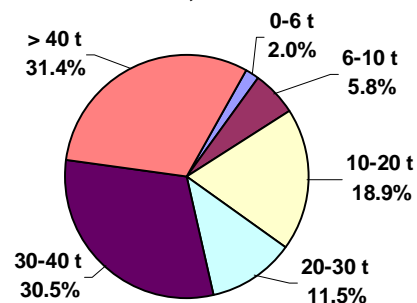
Vkm by empty/laden journeys EU (2005)



Vkm by age of HGV, EU 2005



Vkm by mplw of HGV EU, 2005





Loading factor of HGV in the EU – by type of transport operation

- Factors based on tkm and vkm data collected under Regulation (EC) No. 1172/98

Average loading weight of HGV in tonnes EU25 in 2005

	nat. trsp	intl. trsp.	total trsp.
own account	7.8	12.2	8.1
for hire or reward	14.2	16.1	14.8
total	12.2	15.8	13.1



● Concluding remarks (for part 2)

- The quality of vkm data in Europe is bound to improve
- With rising interest in the data, there are signs that more countries are willing to invest in data collection / estimation
- TREMOVE update (expected for April 2008) should provide a set of fairly consistent vkm (and pkm!) data at a pretty detailed level for 2005 (on which the model will be based)
- It is still a long way until we will have fully harmonised and detailed data on pkm and vkm in the EU. With rising data needs, however, it may one day come true (currently, the predominant mood is rather for reducing the administrative burden and cutting back on statistical requirements).

● Thank you for your attention!

