



Transport of Dangerous Goods Technical Committee of the Transport Community

26 October 2022

**EU Regulation n° 70/2012 on Road Freight Transport Statistics
(of which road transport of dangerous goods)**

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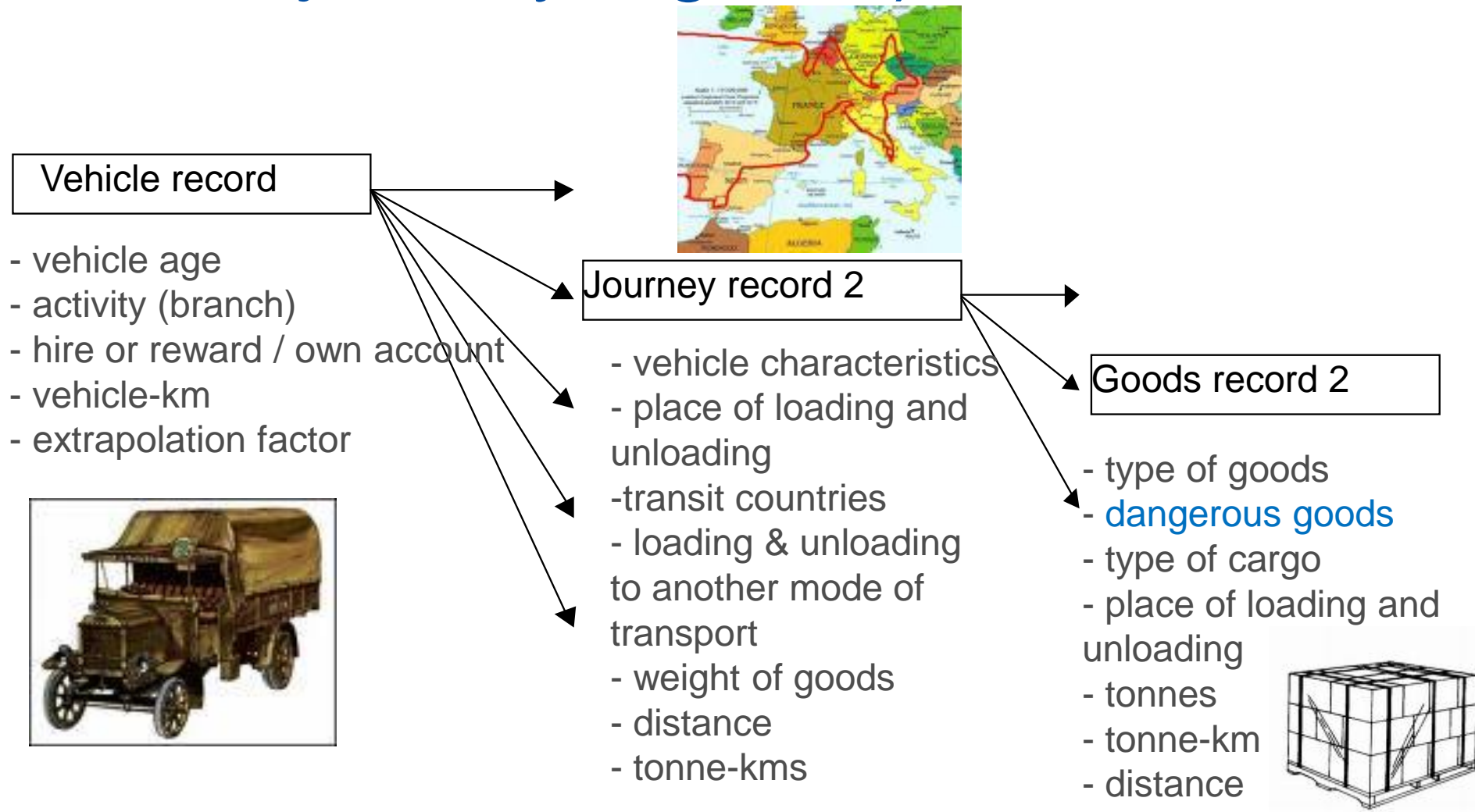
Content

- **The main features of Road Freight Transport Statistics supervised by Eurostat since 1998 (EU regulation 1172/98 -> 70/2012):**
 - Observation of motor vehicles registered in the country
 - Microdata with 3 interrelated tables (vehicle – journey – goods)
 - For structural and short-term statistics
 - Return of information to countries on the transport performed on their territory
- **Pre-requisites: good quality of national vehicles register, national business register and geographical databases**
- **Some flexibility in methodology, follow the goods or the journey**
- **What Eurostat disseminates**

The initial possibilities for road freight transport statistics – choice of motor vehicles

- **Observation of the customers**: allows a global approach of all modes, by origin/destination and kinds of products, including foreign vehicles. But difficult sampling, need to extrapolate the kilometres travelled.
- **Observation of the road network**: customs for international transport, cordon line surveys for domestic transport. Includes foreign vehicles. Pertinent for fine geographical purposes, hard to aggregate.
- **Observation of the loading vehicles**: good knowledge of the kind of products, less good of the distance, restricted to vehicles registered in the country, lower quality of the national vehicle register.
- => **Observation of the motor vehicles**: good knowledge of the journey and the distances, the driver can answer, restricted to vehicles registered in the country, higher quality of the national vehicle register (technical inspections).

Microdata with 3 interrelated tables (vehicle – journey – goods) since 1998



For structural and short-term statistics

- The microdata are collected by Eurostat quarterly. The aggregates in tonne-km reflect the short-term volume of the economic activity. Aggregated tables are disseminated at quarterly pace.
- The requirement for precision makes that the most detailed tables are disseminated on Eurobase at annual pace only (of which transport of dangerous goods).
- The National Authorities usually collect weekly and disseminate monthly, with of course more details at annual level.

Return of information restricted to National Authorities

	Description	Period	Aggregated on dimensions Note	Units
D1.1	Transport operations at country level (laden journeys)	Year	<ul style="list-style-type: none"> — reporting country — country of loading — country of unloading — type of goods — type of transport — age class — distance class — axle configuration 	<ul style="list-style-type: none"> Tonnes Tonne-km Vehicle-km Movements Number of vehicle records
D1.2	Transport of dangerous goods at country level (laden journeys)	Year	<ul style="list-style-type: none"> — reporting country — country of loading — country of unloading — dangerous goods — type of transport 	<ul style="list-style-type: none"> Tonnes Tonne-km Vehicle-km Movements Number of vehicle records

- Microdata collected by reporting countries can be aggregated by country of loading and country of unloading, and provide vehicle-km performed on the national territories by vehicles registered in other countries.

Pre-requisite: access to fresh and good national (vehicles and businesses) registers

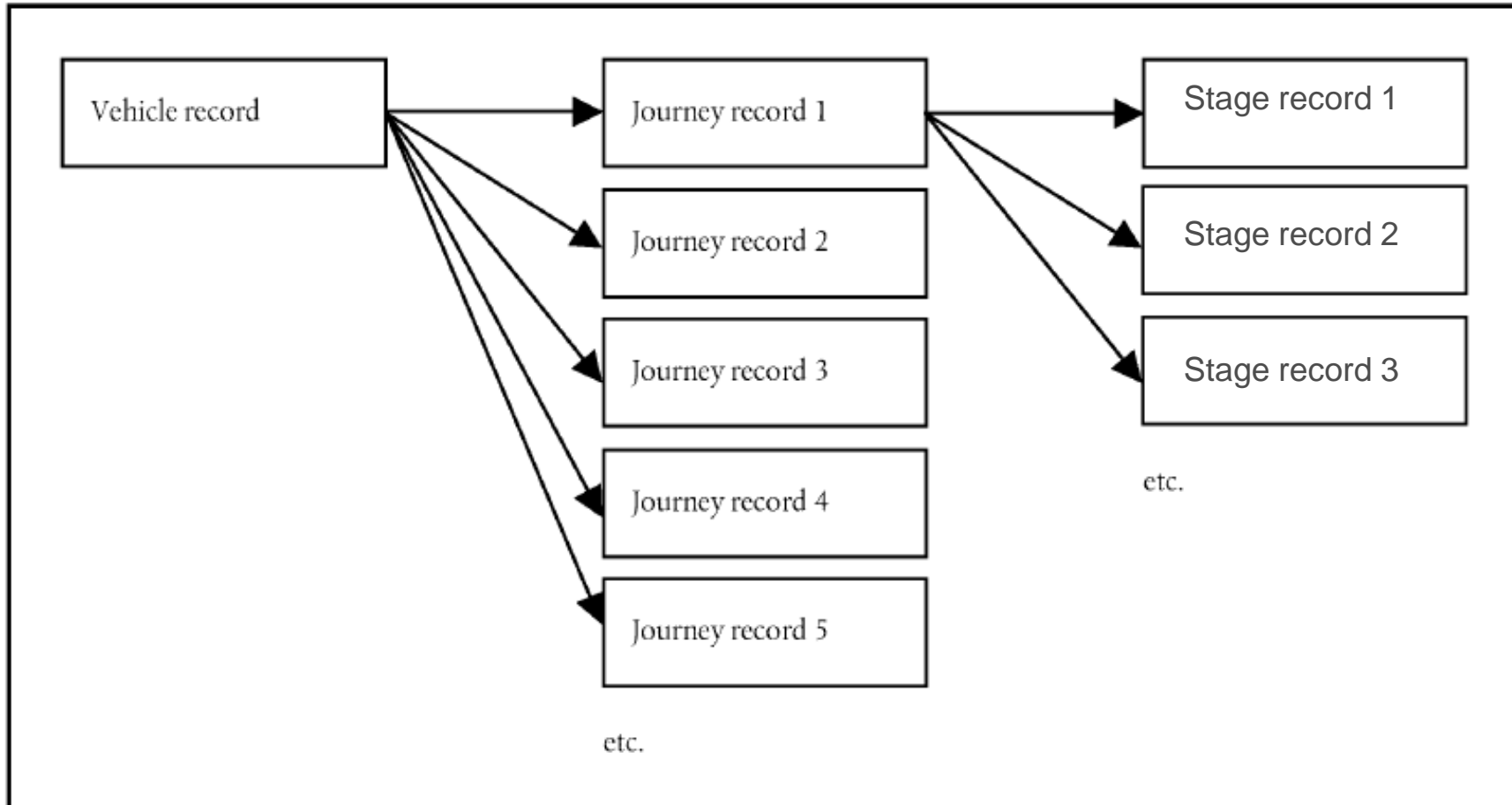
- A good quality of the national vehicles register (Ministry of Interior or Ministry of Transport): removal of “dead” vehicles, freshness of the information, identification of the owner with its full name and full address, its business register ID number, type of vehicle, body type, MPLW, load capacity, etc.
- A good quality of the national business register: in order to match with the national car register, to update addresses, add information on activity at NACE level, etc.
- Possible enrichment of the sampling with specific lists of firms provided by Ministry of Transport (for instance: licensed for international transport).

Some flexibility in the methodology

- Legislation on which the road freight survey is based does not impose:
 - Sampling frame
 - Sample size
 - Stratification
 - Survey period
- Instead, reporting countries should achieve an acceptable percentage precision for main indicators in their sample surveys (Article 4: precision of statistical results in EU Regulation n° 70/2012).
- Some countries have introduced Electronic Data Interchange with big firms instead of initial postal survey.

Follow the goods or the journey

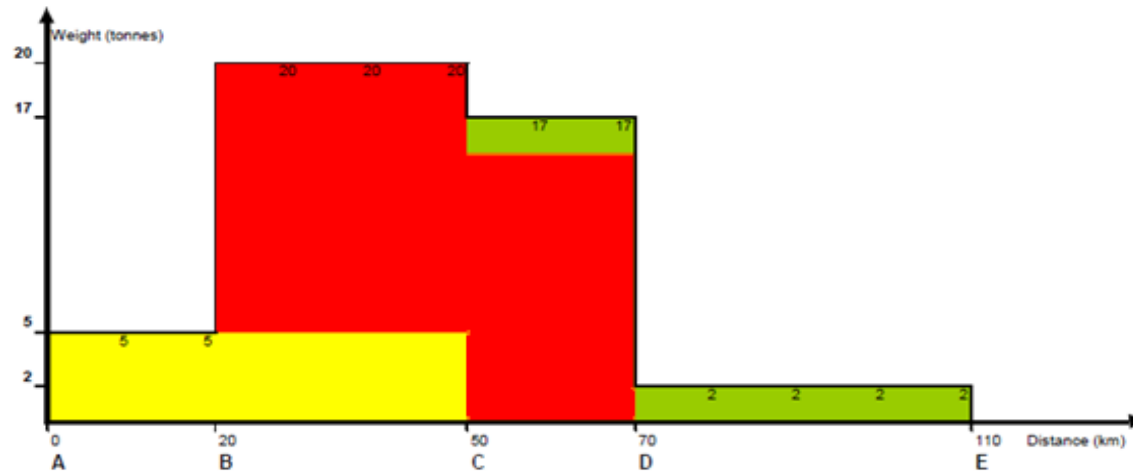
- When the transport operations are not “basic” (1 single loading place, 1 single unloading place, 1 type of goods), we have to focus on the journey OR on the goods.



<- Follow the journey:
Each “stage” records the goods loaded and the goods unloaded. But perhaps some goods loaded at the start of the journey are unloaded only at the very end...

Example of the two reporting methods

The total distance driven was 110 km and the total weight of loaded goods was 22 tonnes.



Reporting by consignments¶

		Weight (tonnes)	Distance (km)	Performance (TKM)*
Goods-related datasets	A-C	5	50	250
	B-D	15	50	750
	C-E	2	60	120
Journey-related dataset	Total	Sum: 22/(22)	Sum: 160/(110)	Sum: 1120

(*) TKM are computed at goods level in order to calculate the TKM performed in the journey as the sum of TKM computed for each good. However, TKM are not reported in goods-related datasets

Reporting by vertical stages¶

		Weight (tonnes)	Distance (km)	Performance (TKM)*
Goods-related datasets	A-B	5	20	100
	B-C	20	30	600
	C-D	17	20	340
	D-E	2	40	80
Journey-related dataset	Total	Max: 20/(22)	Sum: 110/(110)	Sum: 1120

(*) TKM are computed for each stage in order to calculate the TKM performed in the journey as the sum of TKM computed for each part of the journey. However, TKM are not reported in goods-related datasets

Advantages and disadvantages

	Advantages	Disadvantages
Consignment (goods)	Variables on goods directly and correctly collected	Reconstitution of the journey and its total distance (within the total of the day). Risk of an overestimated total distance.
Stages (journeys)	More intuitive if filled in by the driver Journey easily deduced from stops and journey distance correctly calculated	Attribution of the correct goods to the correct places of loading / unloading if several types of goods transported. Risk of an overestimated goods weight.

Data navigation tree

- Database by themes
 - General and regional statistics
 - Economy and finance
 - Population and social conditions
 - Industry, trade and services
 - Agriculture, forestry and fisheries
 - International trade
 - Transport

What Eurostat disseminates: data

- Transport of dangerous goods is in 1 table: road_go_ta_dg (road goods transport, annual, dangerous goods).

- Road transport (road)
 - Road transport infrastructure (road_if)
 - Road transport equipment - stock of vehicles (road_eqs)
 - Road transport equipment - stock of vehicles - historical data (road_eqs_h)
 - Road transport equipment - new registration of vehicles (road_eqr)
 - Road transport equipment - new registration of vehicles - historical data (road_eqr_h)
 - Road transport - enterprises, economic performances and employment (road_ec)
 - Road traffic (road_tf)
 - Road traffic - historical data (until 2012) (road_tf_h)
 - Road transport measurement - passengers (road_pa)
 - Road freight transport measurement (road_go)
 - Total road freight transport (road_go_tot)
 - Summary of annual road freight transport by type of operation and type of transport (1 000 t, Mio Tkm, Mio Veh-km) (road_go_ta_tot)
 - Summary of quarterly road freight transport by type of operation and type of transport (1 000 t, Mio Tkm, Mio Veh-km) (road_go_tq_tot)
 - Annual road freight transport, by type of goods and type of transport (1 000 t, Mio Tkm), until 2007 (road_go_ta7tg)
 - Annual road freight transport, by type of goods and type of transport (1 000 t, Mio Tkm), from 2008 onwards (road_go_ta_tg)
 - Annual road freight transport by region of loading (1 000 t, Mio Tkm, 1 000 Jrnys) (road_go_ta_rl)
 - Annual road freight transport by region of unloading (1 000 t, Mio Tkm, 1 000 Jrnys) (road_go_ta_ru)
 - Annual road freight transport, by distance class (1 000 t, Mio Tkm, Mio Veh-km, 1 000 BTO) (road_go_ta_dc)
 - Annual road freight transport by distance class with breakdown by type of goods (1 000 t, Mio Tkm, Mio Veh-km, 1 000 BTO), until 2007 (road_go_ta7dctg)
 - Annual road freight transport by distance class with breakdown by type of goods (1 000 t, Mio Tkm, Mio Veh-km, 1 000 BTO), from 2008 onwards (road_go_ta_dctg)
 - Annual road freight transport by axle configuration (Mio tkm, Mio Veh-km, 1 000 Jrnys) (road_go_ta_axle)
 - Annual road freight transport, by age of vehicle (Mio Tkm, Mio Veh-km, 1 000 Jrnys) (road_go_ta_agev)
 - Annual road freight transport by maximum permissible laden weight of vehicle (Mio Tkm, Mio Veh-km, 1 000 Jrnys) (road_go_ta_mplw)
 - Annual road freight transport, by load capacity of vehicle (Mio Tkm, Mio Veh-km, 1 000 Jrnys) (road_go_ta_lc)
 - Annual road freight transport by NACE Rev. 2 - Mio tkm, Mio Veh-km, 1 000 Jrnys (road_go_ta_nace)
 - Annual road freight transport vehicle movements, loaded and empty, by reporting country (Mio Veh-km, 1 000 Jrnys) (road_go_ta_vm)
 - Annual road freight transport vehicle transit movements, by transit country, by loaded/empty and by MPLW, total of all reporting countries (1 000 t, 1 000 tM) (road_go_ta_trat)
 - Quarterly road freight transport vehicle transit movements, by transit country, by loaded/empty and by MPLW, total of all reporting countries (1 000 t, 1 000 tM) (road_go_tq_trat)
 - Annual road freight transport vehicle transit movements, by transit country, with breakdown by reporting country (1 000 t, 1 000 tM) (road_go_ta_tra)
 - Annual road freight transport of dangerous goods and broken down by activity (Mio Tkm, Mio Veh-km, 1 000 BTO) (road_go_ta_dg)**
 - Annual road freight transport by type of cargo and distance class (1 000 t, Mio tkm, Mio Veh-km, 1 000 BTO) (road_go_ta_tcrng)

- National road freight transport (road_go_nat)
- International road freight transport (road_go_int)
- Road cabotage transport (road_go_cab)
- Archived road freight tables (road_go_arc)
- Territorialised road freight transport (road_tert)
 - Territorialised road freight transport, by transport coverage - annual data (road_tert_go)



Classification of dangerous goods

ANNEX V

In regulation
(EU) No
70/2012...

CLASSIFICATION OF CATEGORIES OF DANGEROUS GOODS

- 1 Explosives
- 2 Gases, compressed, liquefied or dissolved under pressure
- 3 Flammable liquids
 - 4.1 Flammable solids
 - 4.2 Substances liable to spontaneous combustion
 - 4.3 Substances which, in contact with water, emit flammable gases
- 5.1 Oxidising substances
- 5.2 Organic peroxides
- 6.1 Toxic substances
- 6.2 Substances liable to cause infections
- 7 Radioactive material
- 8 Corrosives
- 9 Miscellaneous dangerous substances

Annual road freight transport of dangerous goods, by type of dangerous goods and broken down by activity (Mio Tkm, Mio Veh-km, 1 000 BTO)

online data code: ROAD_GO_TA_DG last update: 14/10/2022 23:00 view: DEFAULT

Source of data: Eurostat

About this dataset

Explanatory texts

Add to 'My datasets'

Selection

Format

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Row

Column

Page

Geopolitical entity (reporting) [36/36] 36 values displayed

Drag and drop here for breakdown

Time [10/23] 10 values displayed

Drag and drop here for breakdown

Dangerous goods [5/15] Search by label

- 1. Explosives EXPLOSIF
- 2. Gases, compressed, liquified, dissolved und. pressure GASES
- 3. Flammable liquids FLAM_LIQ
- 4.1. Flammable solids FLAM_SOL
- 4.2. Substances liable to spontaneous combustion SUB_SP_COMB

Time frequency: Annual

Annual road freight transport of dangerous goods, by type of dangerous goods and broken down by activity (Mio Tkm, Mio Veh-km, 1 000 BTO) (online data code: ROAD_GO_TA_DG) Source of data: Eurostat

Table Line Bar Map

It	TIME	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
GEO											
European Union - 27 countries (from 2020)		418	450	631	530	678	451	658	775	710	849
European Union - 28 countries (2013-2020)		492	478	649	553	690	457	677	775	:	:
European Union - 27 countries (2007-2013)		490	476	641	539	681	456	671	749	:	:
European Union - 25 countries (2004-2006)		414	437	600	526	666	369	659	717	:	:
European Union - 15 countries (1995-2004)		320	298	379	348	307	269	444	382	:	:
Belgium		: (u)	: (u)	4	45	42	28	124	106	115	146
Bulgaria		: (u)	7	27	8	7	16	7	4	7	1
Czechia		12	4	16	52	98	31	25	4	9	33
Denmark		: (u)	1	7	8	6	7	10	15	22	27

Road_go_ta_dg on Eurobase

What Eurostat disseminates: a “*Road freight transport methodology*” manual, 2016

- Part A - Recommendations for sample surveys on the transport of goods by road
- Part B - Recommendations for the variables - Definitions and explanatory notes
- Part C - Rules for transmission of data to Eurostat and dissemination recommendations





What Eurostat disseminates (metadata): inventory of national methodologies, 2021

- For each country:
 - Sampling register used for the survey
 - Sampling methodology
- Table 1: scope of surveys
- Tables 2-4: sampling rates in space and time
- Table 5: response rate
- Table 6: register quality
- Table 7-9: precision of results
- Table 10: optional variables

Thank you



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