

Intermodal Transport Statistics

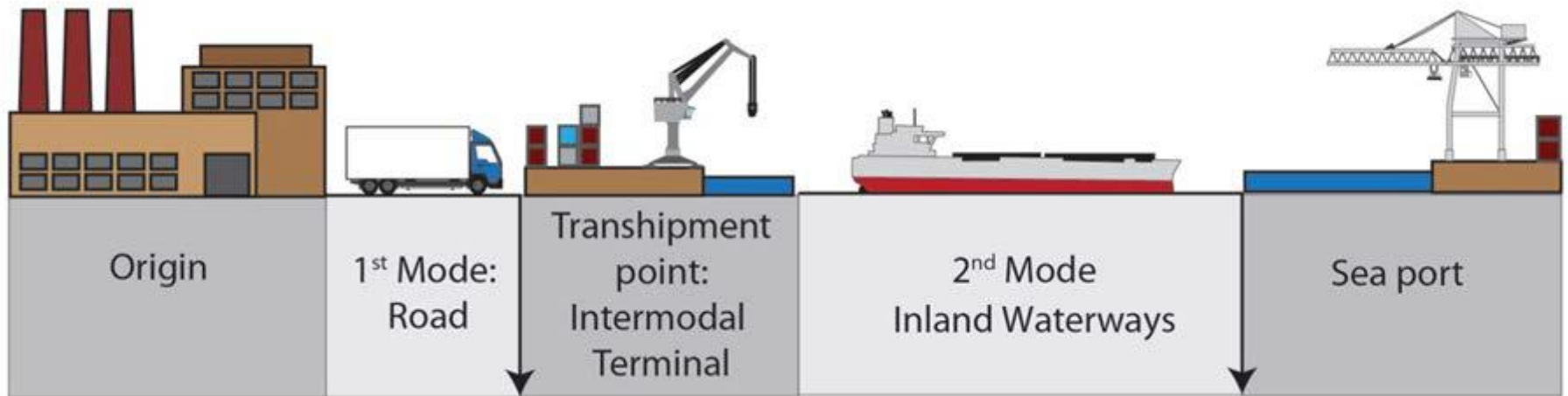
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(Presentation based on work of Georges Xenellis of Eurostat)

Beirut, 16-18 September 2019

Intermodal transport: context

- What is “Intermodal transport (IMT)”?
- The movement of goods in one and the same loading unit/vehicle by successive modes of transport, ***without handling the goods themselves*** when changing modes.



Intermodal transport: why is it important?

- Containerization is increasing, making multimodal transport easier and cheaper
- Analysis of complex transport chains
- Has important applications for hinterland connections to seaports.

Current Situation

- At UNECE, no container or intermodal transport data collection.
- At EU level: No specific data collection on intermodal transport
 - Separate legal frameworks for each transport mode:
ROAD; RAIL; INLAND WATERWAYS; MARITIME
 - Methodological differences between the modal data collections:
Non-harmonized weight concept:
 - ROAD uses *gross weight*;
 - RAIL and INLAND WATERWAYS use *gross-gross weight*;
 - MARITIME uses *estimated gross-gross weight*Non-harmonized collection of container data:
 - ROAD: large containers and other containers;
 - RAIL and INLAND WATERWAYS: all containers and swap bodies;
 - MARITIME: large containers only.
- At national level in different EU Member States:
 - Projects to develop / enhance national intermodal transport statistics:
 - Combining modal data based on EU legislation with further national data sources
 - Supported by Eurostat

			Rail transport	Inland shipping	Maritime transport		Road transport
					Deep-sea shipping	Short-sea shipping	
Intermodal transport units (ITU)	Container		Containers and swap bodies grouped together, lifted on or lifted off	Containers lifted on or lifted off	Large containers lifted on or lifted off Voluntary data collection of Ro-Ro containers		Other containers + (Large containers and swap bodies grouped together)
	Swap body				YES (New voluntary dataset)	NO	
	HGV accompanied		Road vehicles (accompanied)	NO	Not relevant	Road goods vehicles and accompanying trailers	Not applicable
	Trailer (unaccompanied)		Semi-trailers (unaccompanied)	NO		Unaccompanied road goods trailers and semi-trailers	
Quantities	Number of units	loaded	YES	NO	YES		NO
		empty	YES	NO	YES		NO
	Number of TEUs	loaded	YES	YES	NO, but calculated by Eurostat based on the number of containers		NO
		empty	YES	YES	NO, but calculated by Eurostat based on the number of containers		NO
	Tonnes (t)						
	Gross weight of goods		NO	NO	YES		YES
	Gross-gross weight of ITUs	loaded	YES	YES	NO, but can be calculated for containers using standard weights		NO
		empty	NO	YES	NO, but can be calculated for containers using standard weights		NO
	Tare weight of ITUs	loaded	NO	NO	NO		NO
		empty	NO	YES	NO		NO
Tonne-kilometres (tkm)		YES	YES	NO, but calculated by Eurostat using a distance matrix		YES	
Geography	Loading region (NUTS 2)		NO (only for total transport and only every 5 years)	YES	Data provided at port-to-port level; NUTS regions can be obtained via a Port-NUTS correspondence table (this correspondence table seems to be incomplete for the time being)		YES (even at NUTS 3 level)
	Unloading region (NUTS 2)		NO (only for total transport and only every 5 years)	YES			YES (even at NUTS 3 level)

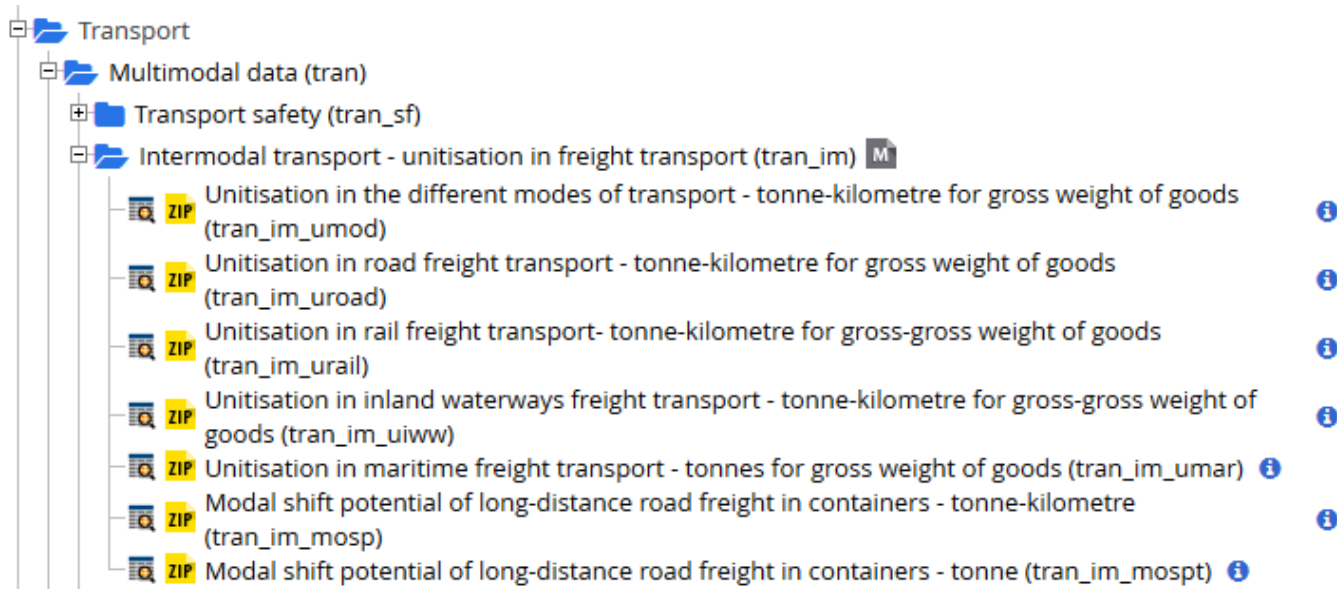
data legally required to be transferred to Eurostat

data not legally required to be transferred to Eurostat

data not legally required to be transferred to Eurostat but that can be calculated

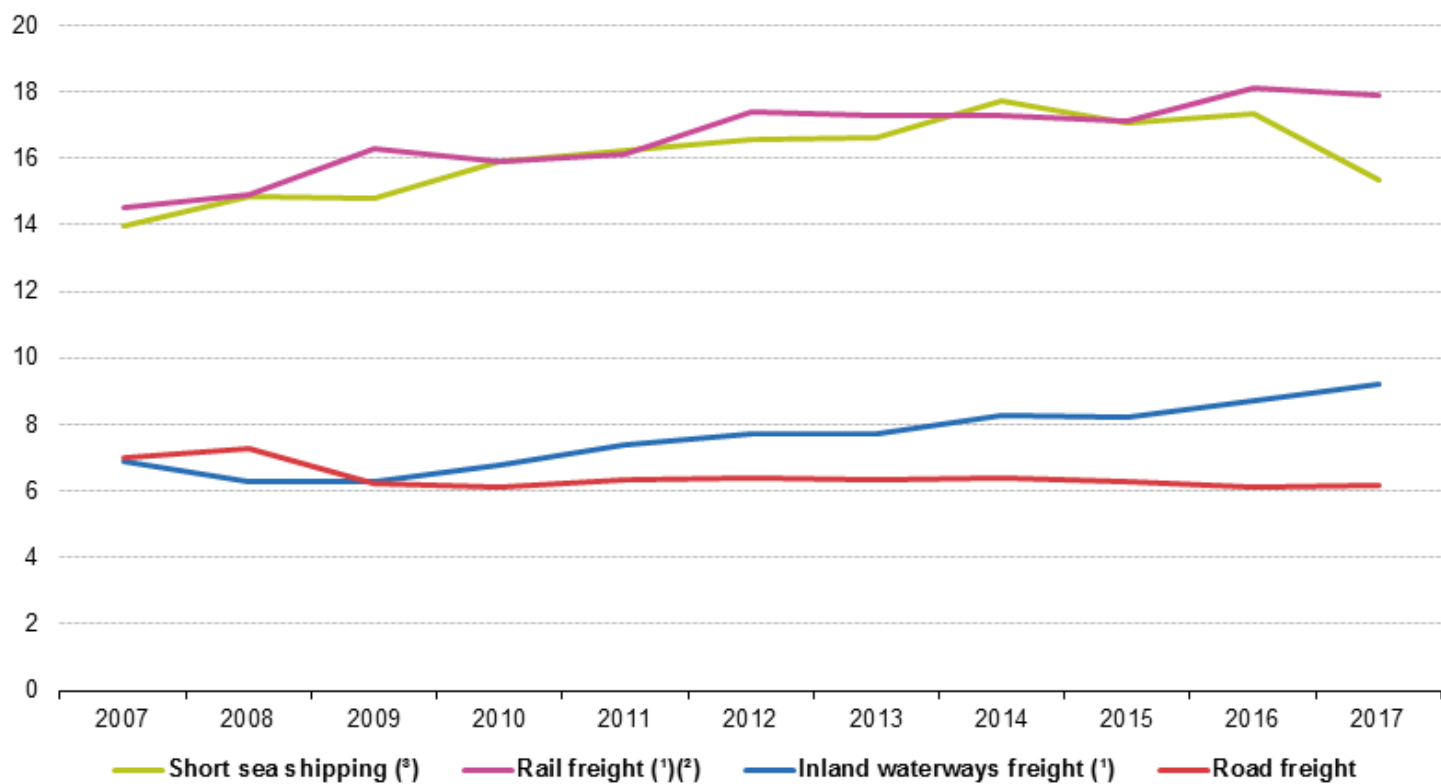
Eurostat work on Intermodal statistics

- Currently intermodal statistics produced using the “German approach”, which means:
 - Use **available** statistics from each mode to calculate indicators, with a number of adjustments and hypotheses
 - Use available location data to identify the main intermodal transport corridors
- 7 key Intermodal transport indicators calculated by Eurostat:



Containers transport by mode of transport, EU-28, 2007-2017

(% share on total freight transport in tonne-kilometres)



Note: Based on gross weight, including weight of packaging but without tare weight of containers.

(¹) Gross weight estimated.

(²) Containers and swap bodies.

(³) Tonne-kilometres estimated.

Source: Eurostat (online data code: tran_im_umod)

Further reading

- Metadata concerning the seven chosen indicators on unitization and modal shift potential (based on % of goods moved >300km done by road)
http://ec.europa.eu/eurostat/cache/metadata/en/tran_im_esms.htm
- Statistics Explained article on European intermodal transport statistics
<https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Freight transported in containers - statistics on unitisation>