

TRANSPORT & MOBILITY LEUVEN

TREMOVE Contact Group Meeting

27-28 May 2004

The Rail Vehicle Stock Module in TREMOVE

Focus on baseline modelling
(Bart Van Herbruggen)

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Rail modes in TREMOVE

- ◆ Passenger
 - Metro
 - Tram
 - Train
- ◆ Freight
 - Train

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Output demand module

- ◆ Passenger-kilometres
 - Metropolitan
 - Other Urban
 - Non-Urban : Short Distance (< 500 km)
 - Non-Urban : Short Distance (> 500 km)
- ◆ Ton-kilometres
 - Non-Urban : Short Distance (< 500 km)
 - Non-Urban : Short Distance (> 500 km)

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Train Types in TREMOVE

		Diesel	Electric	Steam
Passenger	Railcars			/
	Locomotives			/
	HST	/		/
Freight	Locomotives			/
	Railcars (BE,FR,NL)			/

HST: FR : '87 DE : '92 SE : '95 BE,SP,FI,IT,NL : '96

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Data Sources

- ◆ UIC vehicle fleet by type 1995 / 2000
- ◆ UIC fleet age distribution 1995 / 2000
- ◆ TRENDS vkm by type 1995 & forecast
- ◆ TRENDS pkm/tkm by type 1995 & forecast

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Baseyear vehicle stock module

Pkm (region, dist.class) Tkm (region, dist.class) SCENES

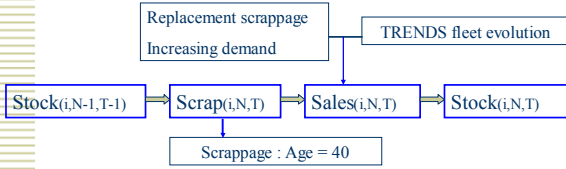
Occupancy / Load factor
Vehicle usage
Fleet Composition
Age Distribution

TRENDS
UIC

Train-km by train type, train vintage, region, dist.class

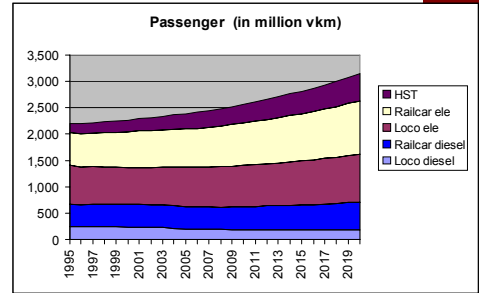
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Forecast vehicle stock module

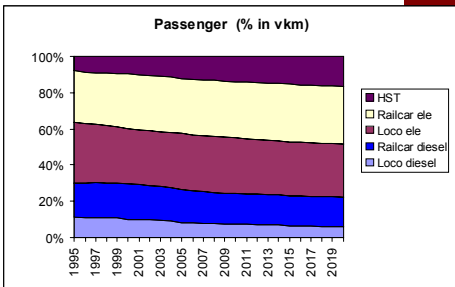


No short-term consistency with TRENDS fleet composition
(endogenous fleet turnover rate limited)

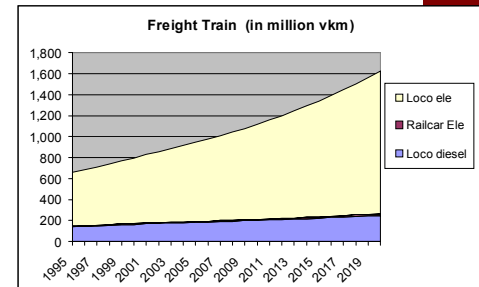
Results : Vkm by train type EU 15+2



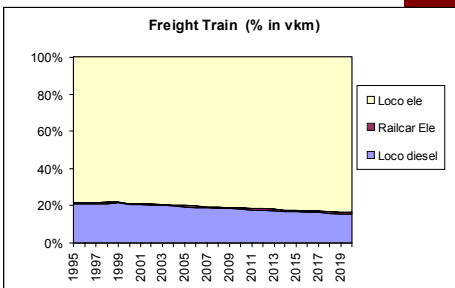
Results : % Vkm by train type EU 15+2



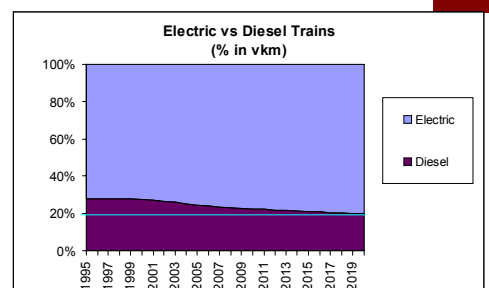
Results : Vkm by train type EU 15+2



Results : % Vkm by train type EU 15+2



Results : Vkm Electric vs Diesel



Further Work on Rail

- ◆ Include 4 Accession countries
 - Data collection ongoing in peer reviews
- ◆ Stakeholder comments and suggestions