

TREMOVE Contact Group

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Brussels

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TREMOVE 3 Lot 1 Plan

4 Phases

1. December 2005 – April 2006
2. April 2006 – August 2006
3. August 2006 – December 2006
4. December 2006 – March 2007

Phase 1 : Dec '05 – Apr '06

Deliverables

Inception report (delivered)
First interim report

Contact group meetings

None

Phase 1 : Dec '05 – Apr '06

A. Model code development

- Demand module
 - Decoupling train vs tram/metro
 - Decoupling moped vs slow/motorcycle
 - Aggregate small and medium/big cars
 - Explicit split of road freight in
 - LDV
 - HDV <7.5t
 - HDV 7.5t – 16t
 - HDV 16t – 32t
 - HDV >32t

Phase 1 : Dec '05 – Apr '06

- Split passenger air in scheduled vs low budget/charter
- Split maritime in short sea shipping and deep sea
- Add air freight

Phase 1 : Dec '05 – Apr '06

- Vehicle stock module
 - Include CNG cars and busses vehicles
=> already in v2.42
 - Adaptations to match new demand module structure
 - HDV split

Phase 1 : Dec '05 – Apr '06

- Emission module
 - Emission factors for freight and low cost/charter aircrafts
 - Mobile airconditioning
=> (car airco already in v2.42)

Phase 1 : Dec '05 – Apr '06

B. Model Data Collection

- Start data collection
 - Extra data needed for current 21 countries (a.o. new modes)
 - 10 new countries
 - ⇒ Country representatives not yet selected
 - ⇒ Collection of publicly available statistics
 - ⇒ Forecasting

Phase 1 : Dec '05 – Apr '06

Extract of 10 new countries data :

Billion Passenger-Kilometre – Billion Tonne-Kilometre

Country	Mode	2000 data	2020 forecast	Country	Mode	2000 data	2020 forecast
Estonia	Road freight	2.7	6.8	Malta	Road freight	3.7	3.9
Estonia	Rail freight	8.1	14.3	Malta	Rail freight	-	-
Estonia	IWW freight	-	-	Malta	IWW freight	-	-
Estonia	Car passenger	4.3	7.9	Malta	Car passenger	-	2.6
Estonia	Rail passenger	0.3	0.3	Malta	Rail passenger	-	2.6
Estonia	Air passenger	0.2	0.6	Malta	Air passenger	2	3.8
Lithuania	Road freight	7.8	20.2	Slovak R.	Road freight	21.4	42.0
Lithuania	Rail freight	8.9	17.1	Slovak R.	Rail freight	11.2	5.2
Lithuania	IWW freight	-	-	Slovak R.	IWW freight	1.4	2.9
Lithuania	Car passenger	14.3	24.9	Slovak R.	Car passenger	23.9	36.9
Lithuania	Rail passenger	0.6	0.6	Slovak R.	Rail passenger	3.2	2.3
Lithuania	Air passenger	0.2	0.3	Slovak R.	Air passenger	1.6	2.1
Latvia	Road freight	4.8	12.7	Cyprus	Road freight	1.2	1.3
Latvia	Rail freight	13.3	25.8	Cyprus	Rail freight	-	-
Latvia	IWW freight	-	-	Cyprus	IWW freight	-	-
Latvia	Car passenger	6.6	13.2	Cyprus	Car passenger	3.5	4.7
Latvia	Rail passenger	1.3	1.2	Cyprus	Rail passenger	0.7	1.3
Latvia	Air passenger	0.2	0.2	Cyprus	Air passenger	0.2	0.3

Phase 1 : Dec '05 – Apr '06

Country	Mode	2000 data	2020 forecast	Country	Mode	2000 data	2020 forecast
Romania	Road freight	1.4	-	Croatia	Road freight	3.3	-
Romania	Rail freight	1.6	-	Croatia	Rail freight	-	-
Romania	IWW freight	2.6	-	Croatia	IWW freight	-	-
Romania	Car passenger	7.7	-	Croatia	Car passenger	-	-
Romania	Rail passenger	11.6	-	Croatia	Rail passenger	-	-
Romania	Air passenger	2.2	-	Croatia	Air passenger	1.2	-
Bulgaria	Road freight	-	-	Croatia	Air passenger	0.7	-
Bulgaria	Rail freight	-	-	Turkey	Road freight	153.4(2003)	-
Bulgaria	IWW freight	4.9	-	Turkey	Rail freight	7.2(2003)	-
Bulgaria	Car passenger	-	-	Turkey	IWW freight	-	-
Bulgaria	Rail passenger	-	-	Turkey	Car passenger	-16.3(2002)	-
Bulgaria	Air passenger	3.0	-	Turkey	Rail passenger	5.8	-
				Bulgaria	Air passenger	-	-

Phase 1 : Dec '05 – Apr '06

C. Software procedures

- Improved output procedures
⇒ Already in v2.42
- Further developed input dB

Phase 2 : Apr '06 – Aug '06

Deliverables

Second interim report
TREMOVE v3.1

Contact group meetings

– May 2006

Phase 2 : Apr '06 – Aug '06

A. Model code development

- Vehicle stock module
 - Further adaptations to match new demand module structure
 - Small vs medium/big cars purchase choice
 - Integrate short sea shipping and maritime
 - CNG road freight vehicles

Phase 2 : Apr '06 – Aug '06

B. Model Data Collection

- Complete dataset
 - Extra demand data for current 21 countries (new modes)
 - Low cost/charter air transport
 - Air freight
 - Short sea and deep sea maritime

Phase 2 : Apr '06 – Aug '06

- Update fleet data for current 21 countries (all modes)
 - Stocks but also mileages
 - Update fleet baseyear 1995-> 2000
 - Dependency on data collection projects of EC and JRC
- Update non-road emission factors for current 21 countries (all modes)
 - Dependency on data collection projects of EC and JRC
- Complete dataset for 10 new countries

Phase 3 : Aug '06 – Dec '06

Deliverables

Draft final report
TREMOVE v3.2

Contact group meetings

– September 2006

Phase 3 : Aug '06 – Dec '06

A. Model code development

- Demand module (refinement)
 - Endogenous load and occupancy rates
 - Scarcity congestion for non-road modes
- Vehicle stock module (refinement)
 - Explicit modelling of aircraft and vessel fleet
 - Choice between unblended fuels and blended (bio-fuels)

Phase 3 : Aug '06 – Dec '06

- Emission module (refinement)
- Welfare module
 - Larger set of marginal cost of public funds values (tax recycling options)

Phase 3 : Aug '06 – Dec '06

B. Model validation

- Comparison with available statistics (2000-2005)
 - Transport demand
 - Fleets
 - Fuel consumption
- Validation of model parameters (literature – other models)
 - Occupancies, load factors
 - Speeds
 - Elasticities
 - Transport costs
 - Emissions

Phase 3 : Aug '06 – Dec '06

Note

Original TOR/Proposal included

- Second hand car market
- Improved road congestion functions

These tasks are replaced by an extension of the model up to 2030 (Kick-off meeting)



Phase 4 : Dec '06 – Mar '07

Deliverables

Final report

Contact group meetings

- January 2007
- March 2007