

## **Further development and application of the TREMOVE transport model**

### *Minutes of the First Steering Group Meeting*

Minutes by: Griet De Ceuster

**Date:**

8 September 2003, 9h50

**Location:**

DG ENV, Beaulieu 5, Brussels

**Attendance :**

Matti Vainio	DG ENV C.1. (chairman)	<a href="mailto:matti.vainio@cec.eu.int">matti.vainio@cec.eu.int</a>
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**Presentation:**

[TREMOVE Steering Group 20030908.pdf](#)

Only a part of the slides have been shown at the meeting.

## **1. Welcome and purpose of the meeting**

This is the first Steering Group, the last meeting of this group was the kick-off meeting, 5 November 2002.

Matti Vainio welcomed everybody and explains the CAFE programme. TREMOVE is one of the 3 major contracts within CAFE, the other 2 are the IIASA RAINS model and the CBA.

Within CAFE there are 2 milestones:

- Baseline: March 2003 – will probably be later
- Thematic Strategy on Air Pollution: Summer 2005

Also, the review of the ACEA agreement will take place. TREMOVE will also be used for that.

## **2. Presentation of the TREMOVE project**

Stef Proost briefly presented the objectives and scope of the project (see slides).

## **3. Presentation of the preliminary moell results of Germany**

Presentation by Bart Van Herbruggen and Joeri Van Rompuy (see slides).

It was stressed that the purpose of these runs was to show the working of the model – with preliminary or even dummy data.

Two runs were presented:

- PM trap regulation (to demonstrate the new freight module)
- Sulphur fuel tax for inland waterways combined with a fuel-dependent circulation tax level (to demonstrate the new inland waterways module)

Stef Proost and Bart Van Herbruggen responded to questions on these runs.

- There were some discussions about the results of the runs. Stef Proost stressed once more the fact that the numbers are not validated with real numbers, only the functioning of the model is shown.
- Karl-Heinze Zierock pointed out that people not only make choices based upon costs, but also driven by attitude changes.

Stef Proost responded that TREMOVE will take into account economic behaviour, e.g. the performance of the car and the amount of luggage space. This is an improvement upon the previous TREMOVE model. Changes in ethical and other attitudes cannot be taken into account due to lack of data, we assume these preferences do not change. So, all behaviour is included, only some part of it is considered fixed and cannot be changed by model parameters – usually due to lack of data.

- Marion Le Louarn was interested in having a feedback loop in the welfare module.

Stef Proost explained that several feedback mechanisms are included in the current model. TREMOVE-II is however no macro-economic model. Macro effects can be simulated with other models as GEM-E3.

#### 4. TREMOVE work plan

Stef Proost presents the work plan; the achieved results and the issues still to be resolved (see slides).

##### Transport Demand Module

WSP explained in more detail the issues to be resolved. Then the meeting discussed these points.

- Paula Cuthbertson: The NUTS zoning in the Slovenia, Czech Rep., Poland, Hungary, Norway and Switzerland is outdated. Eurostat apparently cannot deliver the new geographic boundary. So we will have to work with the old boundaries.
- Paula Cuthbertson: For Switzerland and Norway detailed freight matrices are still missing. WSP keeps looking for them.

Matti Vainio pointed out that these are small countries. It is better to focus efforts on large & new countries, as Poland. But, as Karl-Heinze Zierock said, it is a matter of timing; at the end every country must be modelled in a satisfactory way.

- Paula Cuthbertson: Validation of Switzerland and Norway with national forecasts (pkm, tkm, vkm) seems impossible, unless the CAFE baseline can provide some information.
- Paula Cuthbertson: For vehicle operation cost, a preliminary methodology was developed. The main problem in this is to convert fixed prices into prices per km. Detailed numbers are hard to get, especially for inland shipping, maritime shipping, rail and aviation.

Marion LeLouarn is willing to help WSP out. She also suggests to look at the UNITE project.

- Ian Williams: The SCENES model can deliver passenger-kilometre, but not disaggregated according to vehicle type (car – not big car, small car; rail – not tram, metro, train). If WSP doesn't manage to solve this issue, the disaggregation can be derived from the Vehicle Stock Module, but then the share of e.g. big cars in the vehicle km will be the same for each trip purpose, which is not fully realistic.

There is a similar problem for trucks, SCENES models only HDV trucks, not LDV trucks.

Stef Proost: This can probably be solved in TREMOVE with e.g. the COWI modelling techniques. So, better stick to what SCENES can deliver and do the disaggregation in TREMOVE.

##### Linkages with other models / baselines (PRIMES, CAFE, RAINS)

- TREMOVE will use the latest GDP numbers from PRIMES – this job is not yet completed at the moment. The problem left is transit traffic numbers for freight, this will be resolved soon. New runs, and comparison with PRIMES will be available in the course of September 2003. Changing GDP numbers in SCENES is quite easy.
- Bilateral meetings / CAFE consultations on country emission forecasts were scheduled for the end of this year, but no dates are known yet. The aim is that the TREMOVE team joins IIASA for some large countries in order to get some feedback from the countries on transport demand forecasts. The TREMOVE team will contact IIASA in order to make further arrangements.
- The RAINS model will provide emission forecasts. The TREMOVE forecasts need to be in line with them (and vice versa). Both baselines (RAINS and TREMOVE) will be developed together and in

good cooperation – the one will not be input for the other, but both will be based on the same sources.

#### Vehicle Stock Module

- Lloyds maritime movement data is currently unavailable at Lloyds. A suggestion is to look at the harbour registration data of some big harbours.
- Eurocontrol promised to provide aviation data, but it is not expected that they will deliver on time.. TRENDS data (based on 1996-2000 Eurocontrol data) will be used as backup.
- For road, the Eurostat data and the Trends data differ, although they should not. Also, HDV mileage is not available. Action is to contact ACEA and ask for help.
- The cost data for vehicles is not yet okay for rail and HDV. Rolf Turchard – CER might help out for rail.

#### Emissions Module

- The PARTICULATES data will probably be delivered in October 2003, with a 6 months delay. For REMOVE, PM2.5 data will be used, mass-based (not number-based).
- The ARTEMIS project (DG TREN) has huge delays and contract problems. It will probably not be able to deliver the right data in time for REMOVE.

Therefore, in the meantime, REMOVE will be based on the COPERT data, although this data is 10 years old. The REMOVE modelling will be done in a way that a future update to ARTEMIS can be done relatively easy.

### **5. Follow-up & timing**

- The overall timing remains:
  1. March 04 draft REMOVE model (3 modules)
  2. November 04: final model with extensions and approved baseline
  3. During 2005-2006: policy runs
  4. Contracts for AC per reviews expected to be signed by end of 2003
- All data should have been available by now. Some are not, mainly due to external reasons, but solutions are in process. The lack of good data in some areas does not affect the modelling at this time. However, cooperation of other EC organisations (DG TREN, Eurostat, ..) is required.

End of the meeting: 13h20