

RATIONALE OF THE PROJECT

TRANS-TOOLS ("TOOLS for TRansport Forecasting ANd Scenario testing") is a European transport network model that has been developed in collaborative projects funded by the European Commission's Joint Research Centre's [Institute for Prospective Technological Studies \(IPTS\)](#) and [DG MOVE](#).

The various Commission services addressing transport issues have agreed to use TRANSTOOLS as the **main model for policy analysis** and have appointed IPTS as the model's Reference Centre.

The objective of the recent project (TT3) is to upgrade and further develop the current TRANSTOOLS model to a new and improved European transport network model – in short the TT3 model framework.

PROJECT CONCEPT

The mission is to improve the methodological basis of the model, improve and validate its data foundation, deal with known deficiencies of the existing model, **make the software more efficient, and focus on the user needs**, model documentation and model validation.

The project will develop TT3 to be a **validated user friendly model** that will provide policy makers with a tool for assessing and developing better transport policies.

The final model of TT3 will be **Intellectual Property Right free as far as possible** and more open than the present model.

TRANSTOOLS 3 WEBPAGE

A screenshot of the TRANS TOOLS 3 webpage. The top banner features the TRANS TOOLS 3 logo on the left and a collage of transport-related images (train, ship, highway) on the right. Below the banner is a navigation menu with links: 'berki.zsolt', 'My account', 'Home', 'Transtools3 at a Glance', 'News', 'Events', 'Publications', and 'Deliverables'. To the right of the menu is a 'Home' section with a blue header and a white box containing the text: 'The Transtools 3 webpage is now up and running. Visit the project and follow the progress at: www.TransTools3.eu'.

PURPOSE OF THE PROJECT

Even though the existing model, TT2, is used for policy and project appraisals, a number of issues have been raised by users, reviewers and the model developers themselves. **Our project** thus builds upon our very significant base of experience and **solves the problems and issues that have been raised**. We have identified the following key objectives with regard to the need of model, data and software improvements and updates:

Model objectives

The present project **will develop completely new thorough scientific documentation** as well as a user guide which will be much more detailed than previously; it will build on experiences from maintaining the discussion forum and from conducting training classes. As model implementation is separated from model development within the consortium, the documentation as regard software implementation will mirror the exact mathematical structure of all model components.

Data objectives

The project will **build primarily upon the new ETIS+ data**. Since this project will improve the existing data from TT2 and update them to 2010, we expect that the quality will be much better than the present data. The project will also increase the data foundation and these improvements will be integrated.

Software and user objectives

Our model philosophy is thus to build upon the well-functioning parts of TT2, and **replace the parts of the model that are black boxes** and/or cannot be sufficiently modified and calibrated to give good, or at least adequate, results. The TT3 will be flexible in terms of both use and configuration. The **user interface will have two levels**, namely one simple interface for standard usage and a detailed interface where experienced users will be able to adjust and customize the model.

ASSOCIATED WORK PLAN

A **core concept was, is and will be the tool-box approach**, which means that the linkage between sub-models is carried out in an open format that can be easily modified by (expert) users, in most cases even without any programming expertise. Prior projects have laid the main focus on work packages for each sub-model. Based on our experiences **more resources are allocated to cross cutting activities and research cooperation**. These include management and support for co-operation

and general research co-operation, specification of the model architecture & configurations, and development and implementation of a flexible modelling framework. The cross cutting activities also include data collection and validation in the beginning of the project and validation of the model in the end. Finally, the project concerns the development of a user guide and deployment of the model software.

TRANSTOOLS 3 LIFT OFF

Research and development of the European Transport Network Model is ready to take the present user interface and technical structure to the next level.

The TRANSTOOLS 3 project will analyse issues of cost, capacity and externalities of transport in the EU. It is a tremendous and ambitious task involving universities, research institutions and private enterprises across Europe. Though the project is still in its very initial phase the consortium management is established and the responsibilities of the management described in Work Package 1 are well on the way.



Project manager professor Otto Anker Nielsen, DTU Transport expresses optimism regarding the overall project momentum: *“We now have a reasonably straightforward and logical framework for the coordination structure that enables the proper execution of all the deliverables. Furthermore the structure allows the use of budget and time allocations according to the schedule for all project participants. Responsibility and assignment for the various tasks have been distributed among the participating partners and we are moving fast forward”*. Otto Anker Nielsen further mentions that the five university key partners have a well functioning and dynamic Steering Group and he encourages everyone to visit the project web page: *“It was an interesting process to develop the graphics and the overall design features. Seeing the result I’m very glad we took the time. I hope that the page will be used as an important project tool and that all partners will contribute to the content in order to make the site interesting and appealing also for stakeholders outside the partnership”*.

PROJECT PARTNERS

Our consortium includes key modellers (DTU) and software developers (RAP from TT1 and TT2), the consortium leader from TT2 (TP) and has links to several other relevant EU-projects. This includes ETIS+ (TP) and the consortium leader of

LOGMAN and FREIGHTVISION (AT). These partners secure continuity with regard to the development of TT3.

Beneficiary name	Beneficiary short name	Country	WEB page
Technical University of Denmark (Coordinator)	DTU	DK	www.transport.dtu.dk
Institute of Transport Studies, Leeds	ITS	UK	www.its.leeds.ac.uk
Royal Institute of Technology	KTH	S	www.abe.kth.se
Rapidis	RAP	DK	www.rapidis.com
Tetraplan	TP	DK	www.tetraplan.dk
University of Oxford	UOXF-JG	UK	www.ouce.ox.ac.uk
National Technical University of Athens	NTUA	GR	www.ntua.gr
John Bates Services	JB	UK	www.tsu.ox.ac.uk
Swedish National Road and Transport Research Institute	VTI	S	www.vti.se
Nouveau Espaces de Transport en Europe Application de Recherche	NEST	F	www.nestear.net
ETH Zürich	ETH	CH	www.ivt.ethz.ch
University of Belgrade	UB-FTTE	RS	www.sf.bg.ac.rs
FÓMTERV Zrt.	FT	HU	www.fomterv.hu
AustriaTech - Federal Agency for Technological Measures Ltd.	AT	AT	www.austriatech.org

Link to ASSIST, another FP7 project

TRANSTOOLS 3 will develop guidelines on how to link external economic models to the TT3 framework. This provides flexibility to choose the most relevant model for the specific purpose. One such model is provided by the ASSIST project, which runs in parallel under FP7.

ASSIST (Assessing the social and economic impacts of past and future sustainable transport) is coordinated by Fraunhofer ISI (Germany) with partnership of NEA (The Netherlands), TRT (Italy), ProgTrans (Switzerland), FOMTERV (Hungary) and CNRS-LET (France). The two-year project was launched in April 2011.

The main objective of ASSIST is to provide the EU with sound policy advice on the possible direct and indirect social and economic impacts of future sustainable transport policies that would bear the potential to contribute to the strategic objectives of the EU given by the Lisbon Strategy, the Sustainable Development Strategy and the EU-2020 strategy.

More details on the ASSIST project, the current status of the project, workshops and deliverables will be published soon on the ASSIST website (www.assist-project.eu).