

EX-TREMIS (EXPLORING TRANSPORT EMISSIONS) – DEVELOPMENT OF A REFERENCE SYSTEM ON EMISSIONS FACTORS, ENERGY CONSUMPTION AND TOTAL EMISSIONS FOR RAIL, MARITIME AND AIR TRANSPORT

CLIENT: JRC-IPTS Seville

YEARS: 2007 – 2008

DESCRIPTION OF ACTIVITIES

Objectives of the project

The overall objective of the Ex-TREMIS project is to build a comprehensive database of specific energy consumption, emission factors and total emissions covering the 27 EU member states for rail, maritime and air transport for the years 1980-2005 and with projections for their development up to the year 2030. Collected data and results can be extracted through a web-based interface and directly plugged into models or used by the general public.

Transport and environment models available in the European context (such as TRANS-TOOLS, TREMOVE, SCENES, ASTRA, POLES, etc.) require data on emission factors of vehicles in order to estimate the environmental impacts of the policies they simulate. There is however no reliable and periodically updated source of such information for all EU member states. This service aims to provide such a source of data that could be used as a common point of reference for all models analysing the environmental impacts of transport.

The new and open-source inventory Ex-TREMIS brings together the most comprehensive and up-to-date information on non-road transport vehicle emission rates and activity statistics which, together, make it possible to estimate the emissions resulting from different transport operation.

The database will be available on a web site realised for the project: www.ex-tremis.eu. Great attention is given to make this updated inventory available to a wide range of users and not only to modelers. Through a separate download section, also non expert users (media, politicians, groups of interests and other stakeholders) will find in a more user-friendly way information they can directly extract, understand or use.

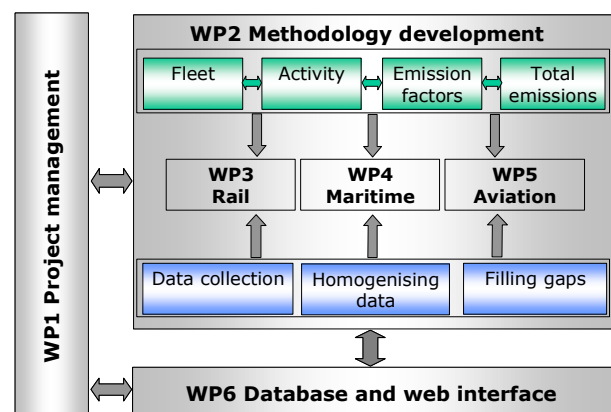
Activities

The database will be built around four main targets (*fleet data, transport activity data, emission and consumption factors and total emissions data*). At the same time, three specific and parallel activities are envisaged:

- collecting available data;
- homogenising data from different sources and
- filling gaps to cover the whole set of information required.

Study activities are organised in separate Work Packages, each addressing a specific task or dealing with one of the three domains.

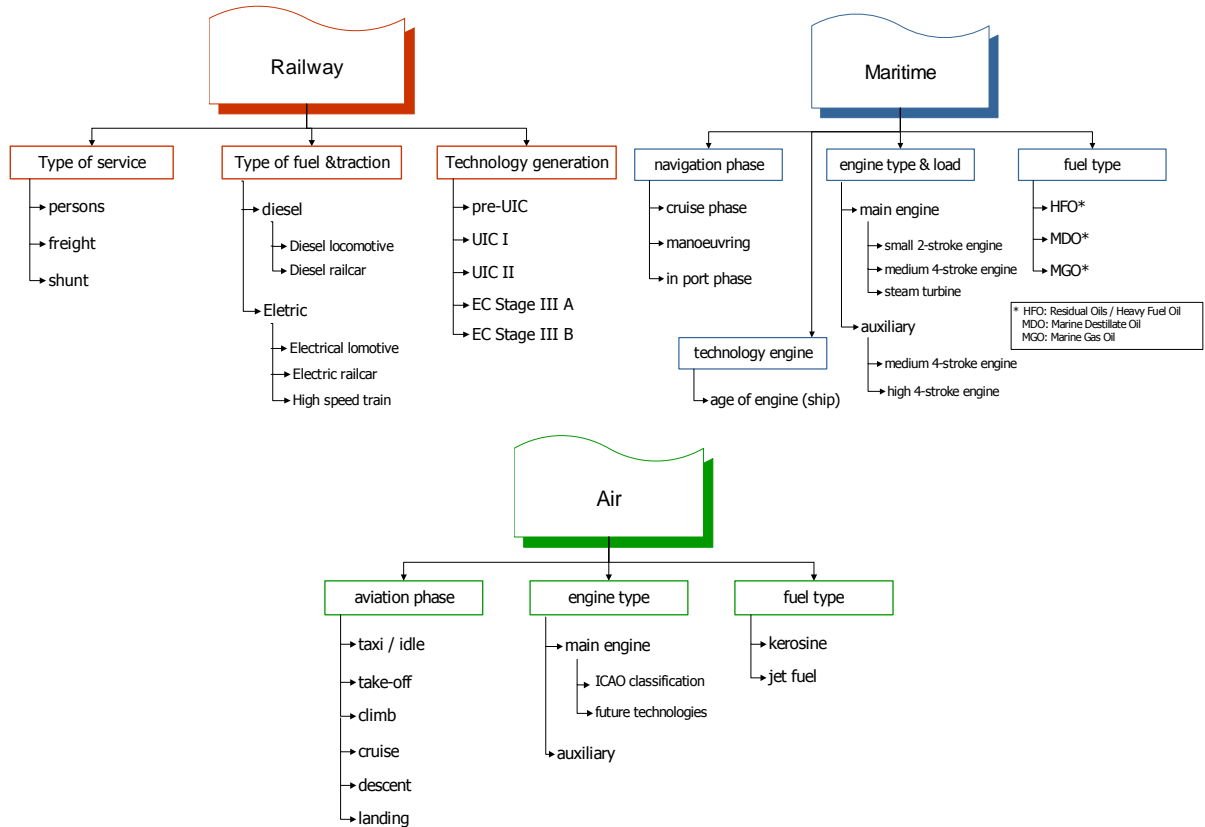
Together with transport mobility data and fleet composition, specific energy consumption and emission factors can be extracted from Ex-TREMIS for different pollutants: CO₂, NO_x, SO_x, CO, VOC, CH₄, NMVOC, PM.



The team

TRT is developing the project with the support of VITO *Vlaamse Instelling voor Technologisch Onderzoek*, The Flemish Institute of Technological Research (Belgium) on behalf of the European

Commission Directorate General Joint Research Centre - Institute for Prospective Technological Studies (IPTS).



Main influencing factors and classifications adopted in EX-TREMIS for Railway, Maritime and Air transport