

EVA TREN IMPROVED DECISION-AID METHODS AND TOOLS TO SUPPORT EVALUATION OF INVESTMENT FOR TRANSPORT AND ENERGY NETWORKS IN EUROPE

CLIENT: *European Commission*

YEAR: *2006 - 2009*

DESCRIPTION OF ACTIVITIES

The EVA TREN project was a research study supported by the European Commission and developed within the VI Framework Programme.

Objectives of the project

The main objectives of the study were:

- reviewing the ex ante assessment approaches for large infrastructure projects;
- selecting the best practices;
- improving the assessment methodologies for the ex-ante evaluation through the ex post evaluation;
- developing a document containing evaluation guidelines on the topic.

The project results met the EC and Member States effort in developing a methodology able to effectively assess the impacts of large infrastructural projects and European policies. The scientific debate concerning this issue is quite intense, both at research project level and about the evaluation guidelines used in some Member States countries.

Results

The final output of the project was twofold. On one side, the comparison between results of ex-ante and ex-post analyses for different case studies allowed to identify several possible improvements of the traditional ex-ante assessment procedures, in order to provide more reliable evaluations of infrastructural projects, adopting methodologies currently not universally applied. On the other side, an assessment procedure was defined taking into account the whole project life, from initial appraisal to ex-post evaluation. This second result provided more details on almost neglected aspects of economic assessment.

The question to which the EVA TREN project answered is extremely relevant and regards the effectiveness of the current assessment tools and practices compared with the problem complexity to deal with. As a matter of fact the evaluation tools should establish a dialogue with the other projects phases and, at the same time, to manage the several dimension of the policy decision support.

Methodology and activities

The adopted methodology can be summarised as follows:

1. identification of the most critical aspects concerning the implementation of large infrastructure projects;
2. identification of good practices already implemented at national level;
3. definition of the possible improvements for the assessment of transport and energy networks.

All these activities were supported by the available scientific literature but above all by a deep analysis and re-examination of the eleven case studies. These have been selected both according to their dimension relevance and to their work advancement stage. The selected case studies are:

1. Madrid-Sevilla AVE (ES)
2. Eurotunnel (FR, UK)
3. Magdeburg Waterways Cross (DE)
4. Frankfurt-Köln route inter city express network (DE)
5. Lyon Marseilles HST line (FR)
6. Malpensa 2000 airport (IT)
7. Paris Lille HST line (FR)
8. The Baltic Sea Motorway -Germany-Poland (Benelux, DE, PL)
9. The Oresund connection (DK, SE)
10. The CH-IT electricity cross border connection (CH, IT)
11. Iberian Electricity Network interconnection (ES, PT)

The re-appraisal of the case studies adopting a standardized procedure allowed both to pinpoint the most common pitfalls and to suggest possible solutions, like the following:

- consider the whole project cycle;
- adopt a dynamic approach to ex-ante appraisal;

- use a progressive approach to environmental analysis;
- perform quantitative risk analysis;
- monitor project development;
- adopt risk management and mitigation strategies;
- systematically perform ex-post evaluation;
- use harmonised models and data;
- disseminate to the public the outcomes of the evaluations.

Partners

The consortium included eight important public and private research centres.

A Scientific Committee supervised the project activities. The members of the Scientific Committee were:

- Prof. Marco Ponti, Transport economics;
- Silvia Maffii, Transport and spatial development;
- Prof. Werner Rothengatter, Transport economics;
- Prof. Massimo Florio, Regional development;
- Christian Reynaud, Transport evaluation;
- Prof. Otto Rentz, Energy and industrial production

TRT role

TRT was the project leader of EVA-TREN. Furthermore it was involved in several parts of the study, namely it was responsible for the review of national approaches, the analysis of Malpensa 2000 case study and the issue of final evaluation guidelines.

More information on the project web-site:

<http://www.eva-tren.eu>

EVA TREN consortium

Company Name	Country
TRT Trasporti e Territorio - co-ordinator	Italy
IWW Institute for Economic Policy, University of Karlsruhe	Germany
ISI Fraunhofer - Institut fuer System und Innovationsforschung	Germany
JRC-IPTS Institute for Prospective Technological Studies	Spain
CSIL Centro Studi Industria Leggera	Italy
EPFL-LEM Ecole Polytechnique Fédérale de Lausanne, Chaire Logistique, Economie, Management	Switzerland
NESTEAR Nouveaux Espaces de Transport en Europe (Application Recherche)	France
IIP Institute for Industrial Production, University of Karlsruhe	Germany