PROJECT

APRICOT

Advanced pilot tri-modal transport chains for the corridors West to South/South-East Europe for combined transport

Funding: European (4th RTD Framework Programme)
Duration: Jan 1998 - Oct 1999
Status: Complete with results

Background & policy context:

Combined rail/road transport is currently struggling with high environmental costs along the main traffic corridors from central to southern and south-eastern Europe. The goal is to lower the burden of environmental impacts on the most sensitive Alpine regions along the primary transport routes. The integration of a third mode, i.e. waterborne transport, utilising existing waterway infrastructure such as the rivers Rhine and Danube could help. But this will require co-ordinated efforts to support interoperability and intermodality with dedicated freight terminals.

Objectives:

The main objectives of APRICOT have been:

- to integrate inland waterway systems into optimised door-to-door logistic chains - outside the established catchment area of the river Rhine - by linking with existing rail networks and local road-based distribution services;
- to link south and south-east European destinations and origins to major west European shipping nodes;
- to identify the required database and establish a requirements profile for integrated transport chains;
- to structure advanced tri-modal transport chains for the corridors of interest, from a technical and organisational point of view;
- to prove the cost effectiveness and efficiency of advanced tri-modal transport chains;
- to evaluate the economic and ecological impacts and formulate recommendations for future implementation.

Related Projects:

- EMOLITE: Evaluation model for the optimal location of intermodal terminals in Europe.
- EUDET: Evaluation of the Danube waterway as a key European transport resource.
- EUROSIL: European strategic intermodal links.
- IMPULSE: Interoperable modular pilot plants underlying logistic system in Europe.
- SHIFTING CARGO: Shifting cargo to inland navigation.

Parent Programmes:

FP4-TRANSPORT – Specific research, technological development and demonstration programme in the field of transport, 1994-1998

Institute type: Public institution
Institute name: European Commission; Directorate-General for Energy and Transport (DG TREN; formerly DG VII)
Funding type: Public (EU)
Partners:
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Key Results:

APRICOT has produced:

- an appraisal of tri-modal (waterway, railroad and road) transport chains in order to reduce environmental impacts, in particular for Alpine regions along the main traffic corridors to southern and south-eastern Europe;
- recommendations for the location of a desired tri-modal freight terminal in Basle/Switzerland in order to reduce external costs from the current level;
- recommendations to undertake further environmental impact assessments aimed at establishing additional multi-modal terminals in the middle section of the river Rhine, e.g. at Mainz or Mannheim/Germany, to trigger considerable shifts away from road transport;
- recommendations on how to improve interoperability as a precondition of tri-modal transport chains and terminals, such as integrated terminal designs, advanced design of inland barges, the introduction of common Intermodal Transport Units (ITU), various organisational aspects, and the implementation of efficient information systems.

Policy implications

The opportunities for tri-modal transport chains need to be supported by policy incentives during the implementation stage. The anticipated merger of inland barge, road and rail transport will allow for environment-friendly transport services with considerable impacts on modal shift, thus promoting sustainability. Policy backing is considered crucial to ensure acceptance in the transport market, which earlier attempts to implement tri-modal transport chains have failed to deliver.

Documents:

- apricot.pdf (Final report)

STRIA Roadmaps: Network and traffic management systems
Transport mode: Multimodal transport
Transport sectors: Freight transport