Freight logistic requirements to traffic infrastructure and longterm development of network in Switzerland (subproject C of master research project „strategies for adequate applications of means of transport in freight traffic in Switzerland“) (SVI200)

Anforderungen der Güterlogistik an die Netzinfrastruktur und die langfristige Netzentwicklung in der Schweiz (Teilprojekt C des Forschungspaketes)

Funding: National (Switzerland)
Duration: Apr 2010 - Feb 2014
Status: Complete with results

Background & policy context:

Since the nineties freight transport (tkm) growth is greater than passenger transport growth (pkm). Reasons are the globalisation of markets and tendencies of centralisation in the industrial economy. Development of the Swiss transport networks in next centuries is predominantly focussed on the needs of passenger mobility in Switzerland. Exceptions are the NEAT axis.

This research project demonstrates, how the planning processes of the transport networks can be adapted by reasons of future specific requirements of logistic and freight transport. Further it’s to demonstrate, which special infrastructures for freight transport are needed and which bottlenecks in the networks must be eliminated from the point of view of freight transport. Thereby it's necessary to respect the needs of passenger as well as freight transport.

Beside the development, the network operation and the free access to infrastructure has to be respected.

Objectives:

The project shows the future development of transport network design in Switzerland. The future planning of transport infrastructure needs to be improved and to better consider freight transport and logistic requirements. The project will also propose how to test their efficiency with actual planning processes.

Methodology:

The following steps will take place during the projecess:

- Review and analysis of current plans, literature (road, rail, inland waterways, terminals)
- Interviews with the infrastructure operators (ASTRA, BAV, SBB Infrastructure SBB Cargo, etc., 10 interviews)
- Graphical representation of obstacles on the map of Switzerland

Related Projects:

Research organisation: Swiss Federal Roads Office; Research Roads-Bridges-Tunnels
Project number SVI2009/010
Project title Forschungspaket Güterverkehr: Strategien zum wesensgerechten Einsatz der Verkehrsmittel im Güterverkehr der Schweiz: Teilprojekt G: Effizienzsteigerungspotenziale in der Transportwirtschaft durch integrierte Bewirtschaftungsinstrumente aus Sicht der Infrastrukturbetreiber

Project title (in English) Potential to increase efficiency in the transportation industry through integrated management tools from the perspective of the infrastructure operators
Research organisation: Swiss Federal Roads Office; Research Roads-Bridges-Tunnels
Project number SVI2009/011
Project title Ortsbezogene Massnahmen zur Reduktion der Auswirkungen des Güterverkehrs (Teilprojekt H des Forschungspakets "Strategien zum wesensgerechten Einsatz der Verkehrsmittel im Güterverkehr der Schweiz" (FP GüV)

Project title (in English) Measures to reduce negative environmental impacts of freight transport

Research organisation: Swiss Federal Roads Office; Research Roads-Bridges-Tunnels
Project number SVI2009/009
Project title Forschungspaket Güterverkehr: Beeinflussung der Nutzer durch Regulierung und integrierte Bewirtschaftungskonzepte aus Sicht der Infrastrukturnutzer (Teilprojekt F des Forschungspakets „Strategien zum wesensgerechten Einsatz der Verkehrsmittel im Güterverkehr der Schweiz“)

Project title (in English) Impact of combined measures of regulation and information technologies on transport infrastructure users

Research organisation: Swiss Federal Roads Office; Research Roads-Bridges-Tunnels
Project number SVI2010/005
Project title Branchenspezifische Logistikkonzepte und Güterverkehrsaufkommen sowie deren Trends (Teilprojekt B2 des Forschungspakets "Strategien zum wesensgerechten Einsatz der Verkehrsmittel im Güterverkehr der Schweiz")

Project title (in English) Strategies for adequate application of means of transport in freight traffic in Switzerland

Parent Programmes:
ARAMIS - ARAMIS information system

Institute type: Public institution
Institute name: Swiss Government: State Secretariat for Education and Research
Funding type: Public (national/regional/local)

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Key Results:
The key results and new findings from the project are the following:

- Overview of planning processes and state of the road network planning with its strengths and
Weaknesses, problems with capacity and functionality
- Needs / requirements for the planning and operation of transport infrastructure in terms of freight logistics /
- The evaluation method, which allows to separate from the political aspects of the project assessment and a statement of its priorities
- Evaluation of measures to improve the planning process and the development of networks
- Proposals for modification of the transport planning process and the principles of planning
- Proposals to adapt to the development of transport infrastructure, incl. addiction and coordination with the development plans of neighboring countries and the EU

Other results

The project results provide an important input for the sectoral plans by rail and road, as well as the possible subsequent masterplan logistics / cargo for Switzerland.

- Other principles of integrated planning and transport planning to take better into account the needs of logistics / freight and economy
- Overall view of the coordinated development of transport network in Switzerland and the need to coordinate with other countries

**STRIA Roadmaps:** Network and traffic management systems
**Transport mode:** Multimodal transport
**Transport sectors:** Freight transport
**Geo-spatial type:** Other