



Baltic Sea Region

Programme 2007-2013

Optimising the implementation of TEN-T Core Network Corridors

A contribution from the Baltic Sea Region Transport
Cluster for 'Sustainable, multimodal and green
transport corridors'



European Union

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A readymade know-how to develop a consistent European transport network

This publication offers an inspiration and conceptual support to the public and private entities in designing measures aimed at more efficient and greener performance of the TEN-T core network corridors.

The TEN-T core network corridors, a new instrument for the implementation of the trans-European transport network – is a strong means of unlocking cooperation potential of the Member States, regional and local authorities, infrastructure managers, transport operators, transport users and other stakeholders to achieve a better development and management of infrastructure. As stated in the draft TEN-T guidelines, 'core network corridors shall provide for a coordinated approach with regard to infrastructure use and investments, so as to manage capacities in the most efficient way'.

The European Commission's aspiration to accomplish a resource-efficient multimodal transport by means of the core network corridors is well recognised in the Baltic Sea Region community. This specific macroregion boast a profound experience in transnational transport corridor development and - with the policy framework of the EU Strategy for the Baltic Sea Region - can serve as a pilot area

in delivering innovative solutions to the identified transport challenges.

Several projects and initiatives co-funded by the Baltic Sea Region Programme 2007-2013 joined forces to exchange knowledge, communicate achievements and promote specific corridor greening solutions, which has resulted in a shared vision of the sustainable multimodal transport system in the Baltic Sea Region.

The path to realise this vision must reflect the specific geographical and socio-economic situation of the Baltic Sea Region. One of the analysed scenarios, named green scenario, seems to best suit this purpose. The green scenario implies well-coordinated transport greening policies, positive market response and public acceptance as motors for sustainable growth and socio-economic and territorial cohesion. One of the instruments to achieve it is a network of green and efficient multimodal transport corridors, which shall connect, cross and integrate different parts of the Baltic Sea Region's territory. Through a joint work in the cluster of projects, a number of blueprints have been created. They feature ideas, which stem from the transport market needs, are



developed together with business stakeholders and are beneficial for the sustainable regional growth. The blueprints are representable for the whole Baltic Sea Region, inclusive of the eastern EU neighbours (Russia and Belarus), and are placed in both the freight and the passenger mobility context.

The cluster know-how on enhancing infrastructure and services along long-distance corridors, with urban centres as transport nodes and last mile sections, may be widely applied throughout Europe. The proposals are concordant with the European Commission's ambitions to create a Single European Transport Area and may be referential to the transport development measures in the EU macroregional strategies.

The cluster achievements are available at: transportcluster.eu

Baltic Sea Region blueprints for the TEN-T core network corridors

This section presents solutions, which have been jointly developed and tested by the public and private stakeholders in the transnational cooperation projects co-funded by the Baltic Sea Region Programme 2007-2013.

Based on real business cases and demonstrated in various locations across the Baltic Sea Region, the blueprints enhance the efficiency of logistics operations, promote modal integration and interoperability, and stimulate a coordinated development and management of infrastructure.



Management structure

Objectives

The business experience shows that corridor management bodies are challenged to combine market-oriented corridor operations with a greener performance footprint. Three specific goals serve this purpose:

- Support the development of the transport solutions in the corridor to the benefit of the regions served by the corridor and the stakeholders involved in the transport operations.
- Support a practical deployment of the green demands on the transport operations in the corridor and monitor their development.
- Engage stakeholders, policy makers and funding organisations in the corridor development and facilitate their involvement.

Stakeholders

Pursuing a strategy to make a transnational corridor competitive, green and efficient requires a governance structure with a wide variety of stakeholders representing both EU and non-EU member states and assigned clear targets, roles and responsibilities.

These are:

- Political supporters who ensure certain stability over time and the engagement of necessary governmental institutions and who promote the corridor services in Europe and beyond.
- National and regional administrations responsible for the road, rail and maritime infrastructure development as well as the customs.
- Business entities, publicly and privately owned, that buy and sell transport services in the corridor.
- Industry associations and other groups of interest for advancing trade, intermodal transport and sustainable corridor management. A right corridor management structure featuring a coordinated policy support, leadership and stakeholder involvement shall depend on the nature of the corridor and the specific functions to be managed. In a policy-driven transport corridor the public administration and infrastructure managers are the main actors. In case of business-oriented corridor, railway entities, intermodal operators, seaport and terminal operators are the primary stakeholders.

Activities

In order to match the three specific goals for developing the



Key Performance Indicators

The primary purpose of Key Performance Indicators (KPIs) is to assess and monitor the operational status of the corridor on the path towards the sustainability. In order to reflect the efficiency and the green context of the corridor performance, the KPIs shall be closely linked to practical logistics operations, and address:

- operational aspects (links and nodes, transport techniques and transport logistics solutions - meant to optimise cargo flows and being important for corridor managers, transport service providers and shippers);
- enabling aspects (hard and soft infrastructures, standards, organisation, policies and regulations – meant to optimise long-term corridor development and being important for infrastructure providers and corridor managers).

The table below presents an overview of relevant corridor-based KPIs divided into three performance areas.

efficient and green transport corridor, seven types of activities in the corridor management are required:

- Policy support (to translate political interests to operational corridor development policies).
- Communication (to explain relation between the political goals and the resulting policies, and to jointly agree on the sustainability objectives to be reached).
- Trade and transport facilitation (to enable removal of infrastructural and administrative obstacles in the corridor operations).
- Performance monitoring (to

assess the corridor sustainability status through a set of indicators).

- Information facilitation (to facilitate efficient communication and information exchange between the stakeholders and the performance monitoring through e.g. an ICT platform).
- Development of a robust and reliable infrastructure (calling for an aligned transnational planning process with a network perspective on the transport corridor infrastructure development).
- Supporting private investments and operations (to open up for spatial and urban planning actions, e.g. property development investments).

Performance area	Operational indicators	Enabling indicators
Economic efficiency and service quality	<ul style="list-style-type: none"> Total cargo volumes On-time delivery 	Corridor ability and capacity
Environmental efficiency	<ul style="list-style-type: none"> Total energy use Greenhouse gases, CO2-e Engine standards ISO 9001 dangerous goods 	Alternative fuels filling stations
Social efficiency	Deployment of risk management systems: ISO 31000 and ISO 39000	<ul style="list-style-type: none"> Safe truck parking Common safety rating Fenced terminals

Differences between KPIs developed by the cluster and the 'SuperGreen' project

The indicators above somewhat differ from the set developed by the 7FP 'SuperGreen' project. First, the cluster experience tells to skip economic data as they are difficult to be retrieved. Second, the energy use and GHG emissions are proposed in accordance with the presently developed CEN standard, while sulphur oxides are suggested to be skipped as they are part of binding legislation and thus are unlikely to be over-performed. Third, some social KPIs are recommended to cover the full range of sustainability.

Policy measures and incentives

In the corridor implementation some policy measures and incentives have to be identified to steer the development towards sustainability. They shall complement the various economic incentives based on higher fuel price or distance-related vehicle charges as those – alone – will not succeed in making a corridor attractive enough for shippers.

Incentives requested from the authorities

For the transport industry and its customers, the accessibility and time-related factors like delivery precision, lead time and high security are of much more importance than transport cost, fuel prices or taxes leading to a higher price on transport services. The corridor-supportive public measures may

encourage them to invest in environmentally sound technology and to improve the load factor.

These public measures may be categorised as:

- infrastructure and open access terminals (with capacity and functions adjusted to the needs of the freight transport sector; achieved through a joint transnational process along the whole corridor combining elements of infrastructure and land use planning);
- well-maintained, well-integrated and open ICT system, providing access to traffic information and route planning;
- safety and security provisions (e.g. theft protection and safe rest areas for truck drivers; improved traffic safety systems for all modes);
- non-bureaucratic and smooth document-handling procedures at customs and borders;
- other incentives to increase the quality of services in the corridor (e.g. permits for high capacity transport and platooning on motorways; night delivery and night-time terminal services; pilot projects and new technology implementation tests; tougher regulations and restrictions for transport outside the corridors etc.).

Incentives requested from the transport industry

In order to make a green transport corridor really 'green' and to motivate the authorities to invest in necessary infrastructure and ICT systems, the industry efforts must meet the expectations on environmental standards as regards a



high load factor and the technology used in the corridor.

It is recommended that a technology neutral system is developed. A baseline of accepted emission levels per tonne transported in the corridor, significantly lower than the average transport service figures in Europe, shall be agreed by the involved actors. The industry actors can then choose how to meet these demands, by investing in new vehicles or vessels, or by actions like increased load factors, eco-driving or shift to other transport modes.

Another baseline shall be set on technology standards for the vehicles and vessels operating in the corridor, as exemplified by the allowed minimum Euro class on trucks, requirement on modern exhaust after-treatment devices, alternative fuels etc. The vehicle and vessels used in the corridor shall also have a high load factor, with a rolling stock exchange and a freight exchange for available capacity in the system as exemplary means to achieve it.



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