Development of Corridor Logistics – Logistics Networks in Transport Corridors

LOGMOS Logistics Processes And Motorways Of The Sea II
Study Tour II: Supply Chain Efficiency – EU Duisburg, Antwerp

Duisburg 24.-25.06.2013

Prof. Dr.-Ing. Herbert Sonntag
Introduction and Agenda

1. EU Transport Corridors and Interface to the TRACECA Area
2. FLAVIA meets TRACECA Area including examples Motorways of the sea
3. Approaches to identify transit and domestic supply chains
4. Activities and Actors, Benefits and Guidelines promoting Regional Logistics Networks
Das Motorways of the sea Beispiel wird in Kapitel 2 behandelt.

CoSchmidt; 17.06.2013
**CV - Herbert Sonntag, Prof. Dr.-Ing.**

**Education:**
- studies between 1968-73 economics and transport engineering at Technical University Berlin with the final degree as Diplomingenieur
- 1975-77 he finished his doctoral studies in computerized traffic planning at TU Berlin with the final degree as Dr.-Ing.

**Professional Experiences:**
- 1976 – 2002 Founder, associate and member of the board of the IVU Traffic Technologies AG
- since 2002 Professor for Transport Logistics at the TH (Technische Hochschule) Wildau and responsible for the Department of Logistics
- 2003 – 2011 Vice-President for Research of the TH Wildau

**International Projects (Selection):**
- INTERIM - Integration in the intermodal goods transport of non EU States: Rail, Inland waterways, EU Interreg IIIC 2006-2008 (Leadpartner)
- FLAVIA Improvement od Corridor Logistics Central Europe, 2010 – 2012 (Leadpartner)
1 EU Transport Corridors and interface to the TRACECA Area
Euro-Asian Rail Routes
Transport Linkages

UNECE-UNESCAP Euro-Asian Links Project
DRAFT RAIL ROUTES

Legend:
- All Routes
- Ferry Links
- Capital

Data Source:
- Data from the EATI countries
- Data from ADC WorldMap Version 4.0, USA (www.adcworldmap.com)

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Only for educational purpose in LOGMOS project
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EU Waterways – used Network

Source: INE
2 FLAVIA meets TRACECA Area including examples Motorways of the sea
The FLAVIA project at a glance

Project duration:
01.03 2010 – 28.02.2013

TUAS Wildau (LP) – DE
Pro Rail Alliance - DE
Ministry of Economic and European Affairs of the Federal State Brandenburg - DE
GVZ Development Cooperation
South West Saxony - DE
University of Pardubice - CZ
Express-Interfracht Czech s.r.o. - CZ
Upper Austrian University - LOGISTIKUM - AT
Institute of Logistics and Warehousing – PL
University POLITEHNICA of Bucharest - RO
Technical University Kosice - SK
Regional Advisory and Information Centre Presov - SK
Interport Servis - SK
Hungarian Logistics Association – HU
Hungarokombi - HU
The FLAVIA project at a glance

- FLAVIA peruses a process-oriented approach:

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<tr>
<th>WP 3</th>
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<tbody>
<tr>
<td>Trade and Transport between Central and Southeast Europe</td>
<td>Quality and Efficiency increases of transport chains</td>
<td>Capacity building and Pre-feasibility Studies</td>
<td>Extension of the corridor towards – Black Sea/ TRACECA countries</td>
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### Content

- Economic and demographic development
- Demands of the market actors
- Analysis of technical and organisational barriers
- Security situation

- Providing of “Best Practice” in the rail freight and inland waterway transport
- Action plans for removing bottlenecks
- Establishment of Pro-Rail- und Terminal alliances

- 10 Pre-feasibility studies
- 7 rail studies
- 3 IWW studies
- Terminal development

- Establishment of a contact group
- Arranging discussion sessions and conferences with interested market actors

### Aim

- Deriving the status quo of the corridor → Bottlenecks, risks
- Strengthening and pushing of the intermodal transport along the corridor
- Stimulating of new intermodal services and connections
- Establishing of cooperative structures in the field of trade and transport

- FLAVIA peruses a process-oriented approach:
Measures of the FLAVIA project to strengthen the rail freight transport

Analysis of technical, organisational and administrative bottlenecks

- Identifying capacity problems
- Analysing cross-border problems
- Identifying security risks for goods, rolling stock and transhipment
- Identifying missing terminals and missing rail liner services (via expert interviews)
Approaches of the FLAVIA project to strengthen the rail freight transport

FLAVIA proposed TEN-T recommendations from a logistics point of view
A strategic linkage: FLAVIA and TRACECA

- The transport flows from Central Europe towards Southeast Europe do not end abruptly at the Black Sea.

- Two directions:
  - Sea route via Bosporus and Suez Channel to the Far East
  - By ferry or by rail to the TRACECA corridor

- The FLAVIA corridor as logical linkage between Central Europe and TRACECA

- Extension and connection of the FLAVIA corridor towards TRACECA as a sustainable "Mega corridor" and land bridge between Europe and Asia
A strategic linkage: FLAVIA and TRACECA

Connectivity of the TRACECA corridor
A strategic linkage: FLAVIA and TRACECA

Developing reliable transport services between the corridors

- Maritime ports are source/destination for international transport flows
- An efficient seaport hinterland transport and feeder services connect the ports via scheduled block trains with the interior
- A logical block train network increases the accessibility of a region significantly

Tasks for the future:

- Developing block trains between the two corridors increases the connectivity and improves the trade relations between the two regions
- The new offers have to be reliable, secure and safe as well as continuously operating
What have been done so far?

- FLAVIA discussion session in Potsdam, Germany (TRACECA representatives, German-Turkish chamber of commerce, DB Schenker, Polzug)

- FLAVIA appearance at the Black Sea Transport Forum in Odessa, Ukraine

- Fair stand of the FLAVIA project at the logitrans in Istanbul

Next steps:
Establishment of an interest group which wants to develop further the relations between both corridors
A strategic linkage: FLAVIA and TRACECA
Activity fields for the future

- Define single target markets and target products for intermodal transportation
- Define single main (competitive) transport corridors for intermodal transport
- Define possible Hubs, sub-Hubs and routes to implement services
- Analyse infrastructure (needs) at the defined routes and Hubs
- Analyse transport and administrative barriers

Businesses

- Building a contact group of associations which support intermodal transport
- Definition of common actions to support intermodal transport in each country and along the whole corridor
- Political Lobbying for use of intermodal transport
- Implement actions to support intermodal transport and disseminate advantage of intermodal transport
- Recommendations for coordinated linkage and common infrastructure programs

Associations

- Discussion about common infrastructure projects regarding to intermodal transport
- Suggestions to support intermodal infrastructure financing/building
- Implementation of regulations/laws to reduce corruption
- Creation of a common intermodal corridor strategy (and implement it for single states)
- Implementation of regulations for common cross border proceeding, security standards ...

Politic

Developing reliable transport services between the corridors

Implementation of actions groups to implement services along different part-corridors

Financial plan and action plan to solve Barriers

Define regulations/requirements/standards which improve cross borders proceedings, security standards, goods operation, shipment tracking ...

Years

0

4
Example - FRES MOS Project Supported by Marco Polo II Program

• Consortium from France and Spain
• Direct Connection between Nantes / Saint Nazaire (France) and Gijon (Spanien)
• Reduces the road traffic in the Pyrenees by around 40,000 trucks annually (~5%)
• Shift a total of 16.8 billion tonne/kilometres of freight away from the roads
• Support by Marco Polo II with about 4 Mio €
3 Approaches to identify transit and domestic supply chains
At the heart of Europe!

- Excellent geographic and geopolitical location
- 190,000 jobs in logistics
- New transport corridors and Economic development axes arise (East - West | North - South)
- Access to more than 200 mill. consumers by truck or train within one day.
- More than 6 mill. inhabitants in the German Capital region
Excellent Traffic Infrastructure

- Well developed, fast connections with modern highways, rail-, water- and airways
- 12 highways with 790 km of newly built roads
- Two international airports, new airport Berlin Brandenburg (BER) online: 2013, Europe’s newest air hub
- Almost 1,500 km of main railways, completely updated
- 900 km of federal waterways, removal of last bottlenecks until 2015. (e.g. new ship lift Niederfinow to connect Berlin with Baltic Sea ports).
Macro Logistics – Focus Activity fields

Focus 1: Primary logistics volume
- population therefore - natural growth
- growth in the sector of industrial working places

Focus 2: Secondary logistics volume
- Acquisitions of warehouses for the region but also for interregional distribution - European wide operation
- Economical situation 2008-9 leads to new concepts of logistics chains

Focus 3: Integration of logistics research capacities
- Eminent examples increases the attraction of the location (Corridors, Freight villages, Airports)
- Information and security logistics offers chances for research
Focus 1 – Logistical Supply of economy, industry and trade for the region

The location has its primary logistical volume on the basis of general economy, industry and population.

- Rotary Platform for the intermodal traffic
- Supply of the economy
- By all traffic modes reachable
- Effective bundling logistic nodes (freight villages) for exchange of long- and short-distance traffic

Quelle: nach Senat von Berlin, 2002
Focus 2 – Platform and hub for transregional logistic chains

- Due to the enlargement of the EU the logistics centre of Europe shifts to the German Capital Region
- Local consumer market of 6 million people in the German Capital Region

Infrastructure (Autobahn, freight villages, harbours) and high potential as Transfer platform
- Successful freight villages
- New international Airport Berlin Brandenburg International
**Focus 2 – Integration in Seaport – Hinterland Transport**

**Potentials:**
- New relations will strengthen the logistic markets
- International scientific projects support the development of new relations
- Hub for Sea harbour Hinterland Connections
Focus 2 – Development and integration in corridors

Chances:

- Central logistics hub
- Developing Green Corridor along this relations
Focus 3 – Research and Education in Logistics Innovations

Research Location
- Example Berlin Brandenburg

- 28 Universities with about 180,000 students
- More than 250 institutions of research
- 23 technologies centres (Technologie-Zentren)
- Highest concentration of research capacities in Germany
4 Activities and Actors, Benefits and Guidelines promoting Regional Logistics Networks
Actors of Logistics networks – Successful PPP between Political Admin and Private Economy

PPP = Private Public Partnership

Target groups of the LogisticsNet

- International investors and developers
- Logistics service providers
- Logistics industry and trade
- Media and other multipliers
- Public Administration
- Consulting and IT SW+HW
- Research and Universities
- Transport and Transshipment
Governing Bodies, Innovation Clusters BB

Governing Bodies:
- LNBB | Board of directors
- LNBB | Advisory board
- LNBB | Head office

LNBB Steering Committees:
- LK Infrastructure
- LK Marketing
- LK IWT (Inland Waterways Transport)
- LK Intermodal Services

Innovation Clusters in Berlin and Brandenburg
- Cluster 1: Health economics
- Cluster 2: Energy technologies
- Cluster 3: Transport, mobility, logistics
- Cluster 4: ICT and media
- Cluster 5: Optics
Key data for the Capital Region:

- **190,000** employees (7%) in the logistics sector (2012)
- **University** and training facilities in Logistics
- **Well-qualified** professionals, **high readiness** for work
- **Longer** working times than in the DE average

Example Employees in the Capital Region Berlin 2012 - ca. 190,000

Source: Update of Branchenstrategie zur Unterstützung des Branchenkompetenzfeldes Logistik im Land Brandenburg from 2008
Activity fields of Logistics Networks

The Logistics Network: A full range of services

- Information on available infrastructures and properties
- Promotion of partnerships, in particular with European projects
- Expertise in Eastern Europe and Russia, good connections to Asia (China)
- Organisation of events such as conventions, trade fairs, press conferences and business meetings
- Investor support services
- Marketing support services
- PR for member organisations
Activity fields of Logistics Networks – details 1

Location Marketing:
- Eastern Europe and Far East
- Seaport hinterland transport
- BBI / Airfreight
- Cluster management
- Networking with other branches

Location advantages communicated to the right target groups:
- Logistics by industry
- Regional and supraregional distribution (trade, spare parts, etc.)
- Transport & Logistics (Intermodal Carriers, Transport Services)
- Promotion of Projects, incl. investor guide and flyers
Present on many occasions:
- LogTrans 2008 in Frankfurt (Oder)
- Bremer Logistiktag
- TransRussia, Moscow (2008-2010)
- transport logistic (tl), Shanghai
- Logistics industry and trade

Organized Events:
- automotive meets logistics (2008-9)
- Lindstedter logistics talk (2008-12)
Short profile of LogisticsNet Berlin-Brandenburg

The **LogisticsNet** was founded and is financed as PPP „Public Private Partnership“ and has been operating since 2007.

- 65 active members (status 03/2013) of all logistics sectors
  - 15 regular members
  - 50 sustaining members
- Over 20 international and national cooperations (status 08/2010)
  - LNBB | Chairman of the board: Prof. Dr.-Ing. Herbert Sonntag
  - LNBB | Network Coordinator: Mark Renner
Successful Founding of several Logistics Initiatives as a Public Private Partnerships in several states of Germany in the time 2005 - 2009
### Partner initiatives and international cooperations

**Regional in Berlin Brandenburg:**

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<tr>
<td><img src="logo1.png" alt="BTL" /></td>
<td>Branchentransferstelle Logistik</td>
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<td><img src="logo2.png" alt="Flughäfen" /></td>
<td>Berliner Flughäfen</td>
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<td><img src="logo3.png" alt="TSB FAV" /></td>
<td>Forschungs- und Anwendungsverbund Verkehrssystemtechnik Berlin</td>
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**Networks in Berlin-Brandenburg:**

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<td>BBAA Berlin-Brandenburg</td>
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<td>GEO Kommunikation</td>
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<td>BEN Brandenburgs Entwicklungs Netzwerk</td>
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<td><img src="logo10.png" alt="SeSamBB" /></td>
<td>SeSamBB Security und Safety made in Berlin-Brandenburg</td>
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**National:**

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**International:**

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Ini-Pj 1: Inland Waterways – support in political discussion „Vision Waterways Plus“

Resolution for East-German-Infrastructure

Resolution zum geplanten Investitionsstop für die Wasserstraßen

Verantwortlich: Initiative „Weitblick – Binnenschifffahrt PLUS“ und das LNBB | LogistikNetz Berlin-Brandenburg
Information about the actualities in the Capital Region of Berlin Brandenburg

- Home page and web-side in German, English and Russian language
- Newsletter every 2 months
- Press Distributor: more than 140 contacts
- Partnerships with other Media
Development of innovative solutions for intermodal transport chains of rail, inland barges and road in Seaport-Hinterland. Transport Performance, Attractivity and Efficiency of the transport operators and terminal operators as well support as industrial location of enterprises.

Better operating grade of Container-Moves by improvement of strategic and operational IT solutions

Shift of seaport hinterland transport to the so-called dry ports with additional services
Ini-Pj 4: Development of the logistics nodes – Freight villages

- Freight Villages around Berlin appearing successful in the European rating list

Quelle: DVZ 2010

Verkehrs drehscheibe Berlin kommt auf Touren

Logistikstandort Berlin-Brandenburg gut positioniert


Quellen: DB Research 2008
Shipping Lines and Quay-Operators increases there foundation of „Hinterland Harbours“

- Inbound and Outbound processes at transhipment terminal
- Truck pre and post haulage
- Settlement and location
- Asset management terminal organisation.

Quelle: Dusburg Rotterdam 2007
Ini-Pj 5: Seaharbour-Hinterland Transport Partner

[Map of Germany showing logistics routes and connections]
Thank you for your attention

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