

# ***SOS – LOGISTICA***

SUSTAINABLE LOGISTICS: NECESSITY OR OPPORTUNITY?

Business and Public Administration face to face

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## **City Logistics of Berlin – the case of constructing the Potsdamer Platz**

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University of Technology Berlin

Department of Logistics, Prof. Dr.-Ing. F. Straube

Institute of Technology and Management

Faculty VIII – Business and Management

Turin, November 28, 2005

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# Department of Logistics at University of Technology Berlin

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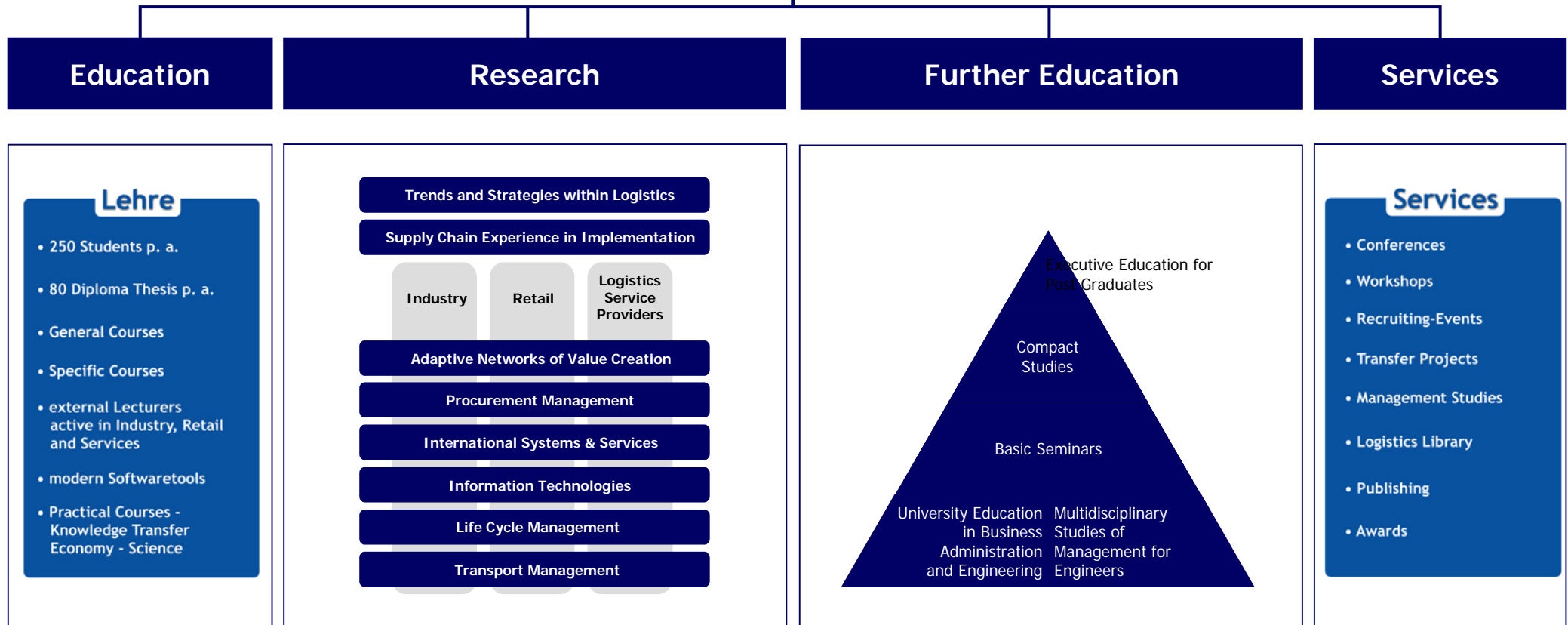
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# Range of services of the Logistics Department at TU Berlin

## Range of services of the Logistics Department (www.logistik.tu-berlin.de)



### Academical international Partners (extract):

Cranfield University, Oxford University, Universität St. Gallen, Universität Paris Sorbonne, Grant MacEwan Institute Edmonton, Universität Tongji Shanghai, Linköping University, Athens University of Economics and Business



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# City Logistics of Berlin – the case of constructing the Potsdamer Platz



# Berlin's challenge: Construction of Potsdamer Platz



Berlin, Potsdamer Platz, Start of construction 1994

## Potsdamer Platz

70.000 sqm

10 streets and 19 buildings,  
120 shops and service provid.

Daimler-City and Sony-Center  
Musical theatre & 2 movie  
theatres, three-storey shopping  
centre, casino, hotels and  
apartments

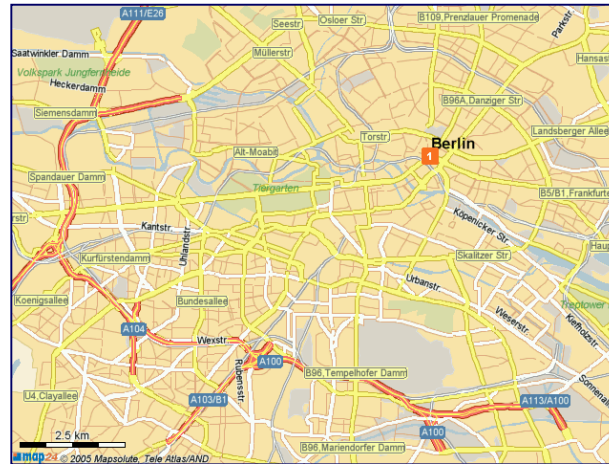
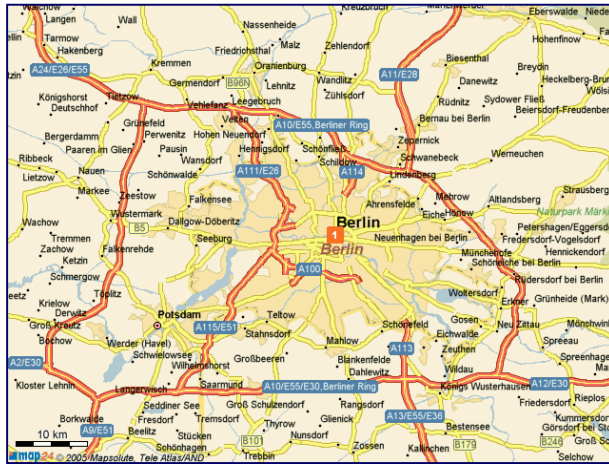
Supply/disposal point (19  
docking stations, 4500 sqm,  
handling of up to 260 trucks  
per day)



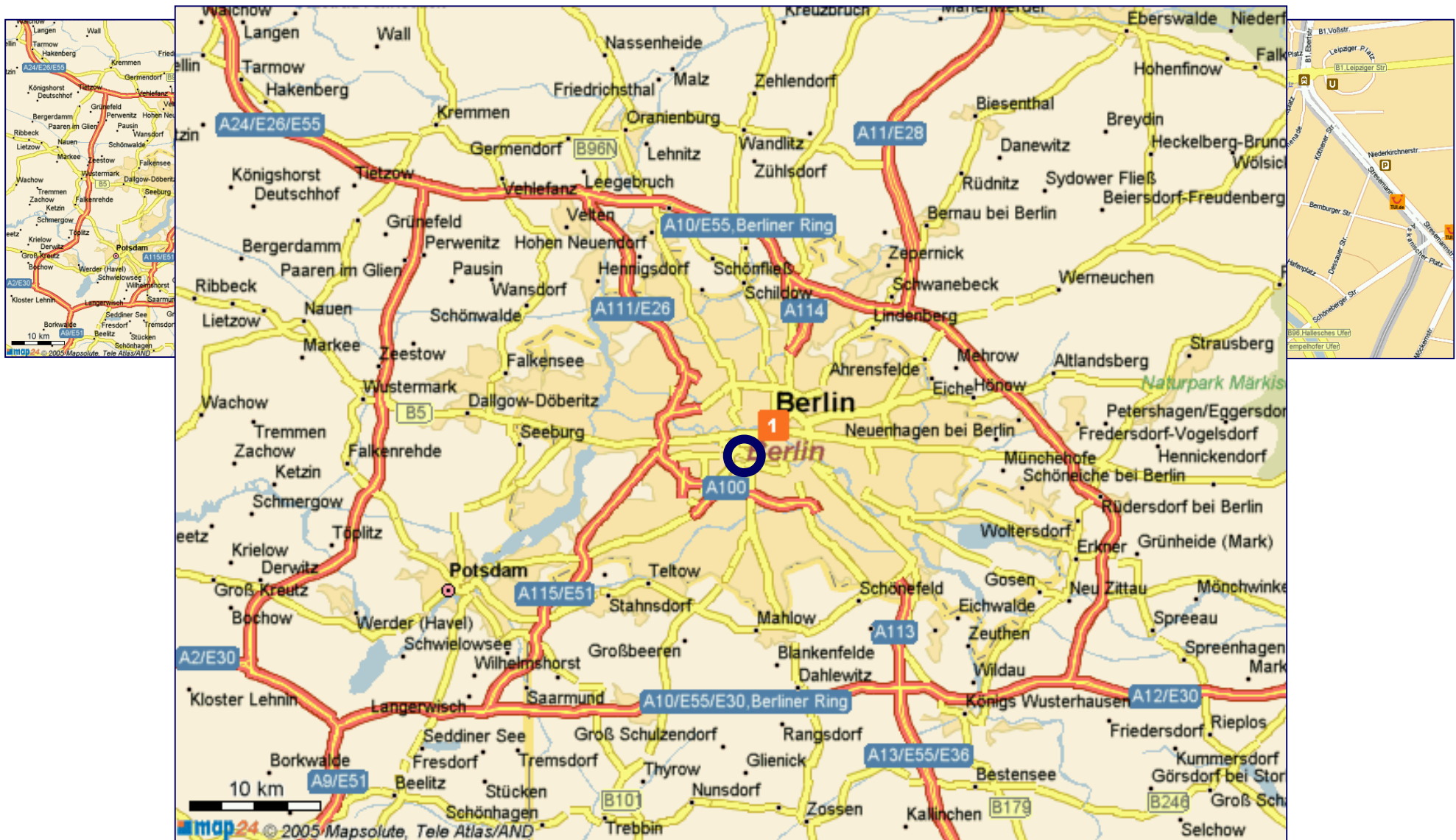
Berlin, Potsdamer Platz, Completed 2001



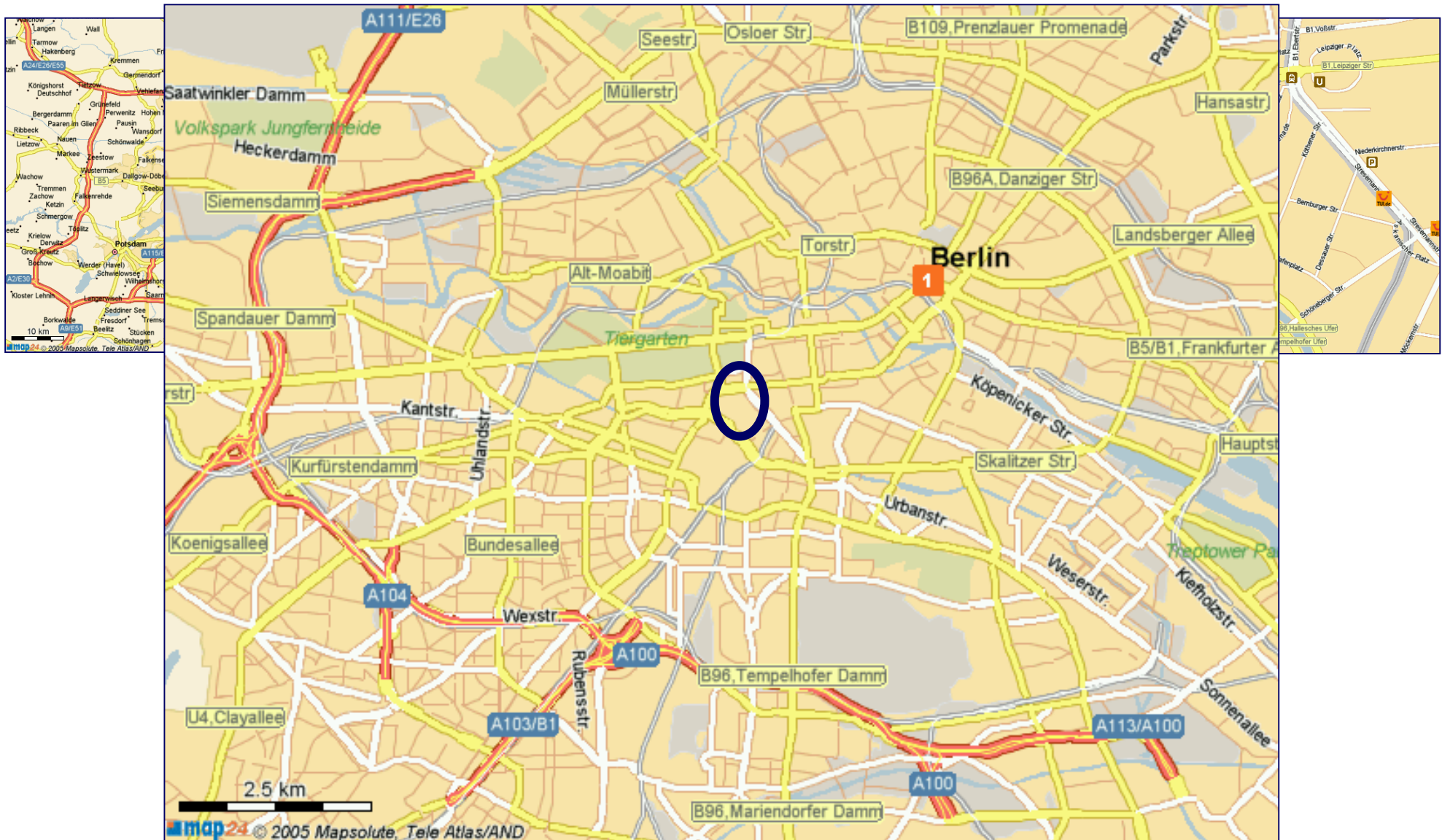
# Potsdamer Platz, Berlin



# Potsdamer Platz, Berlin



# Potsdamer Platz, Berlin





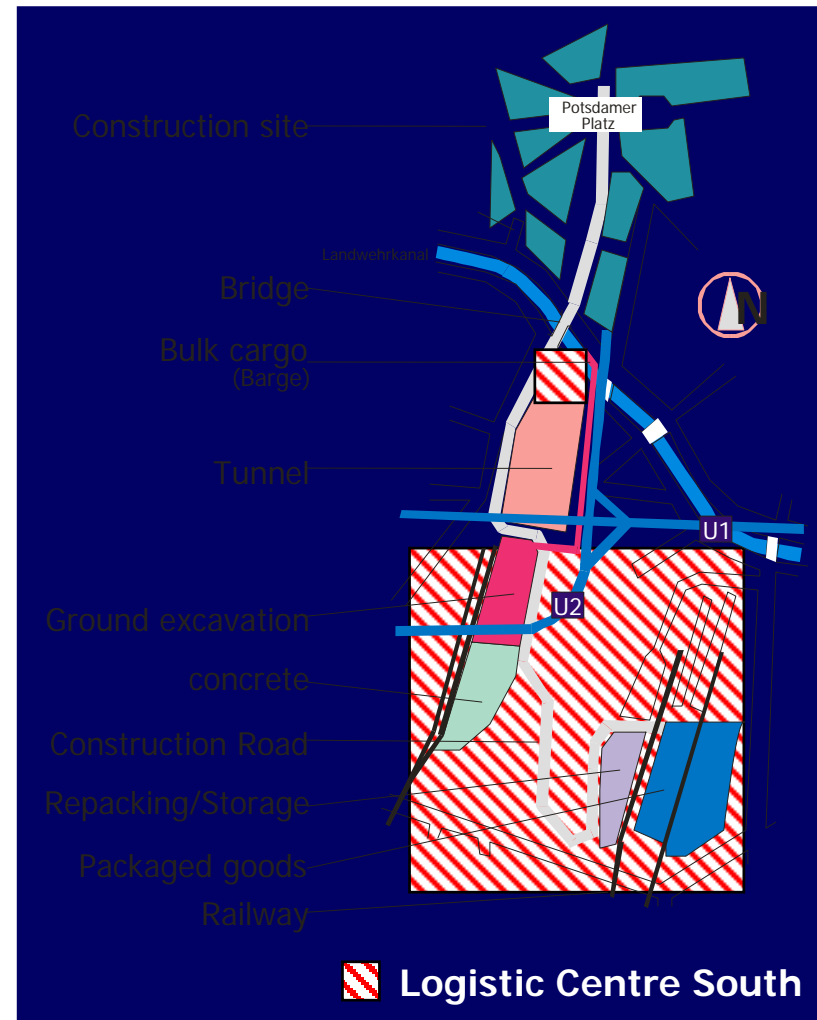
# Potsdamer Platz, Berlin



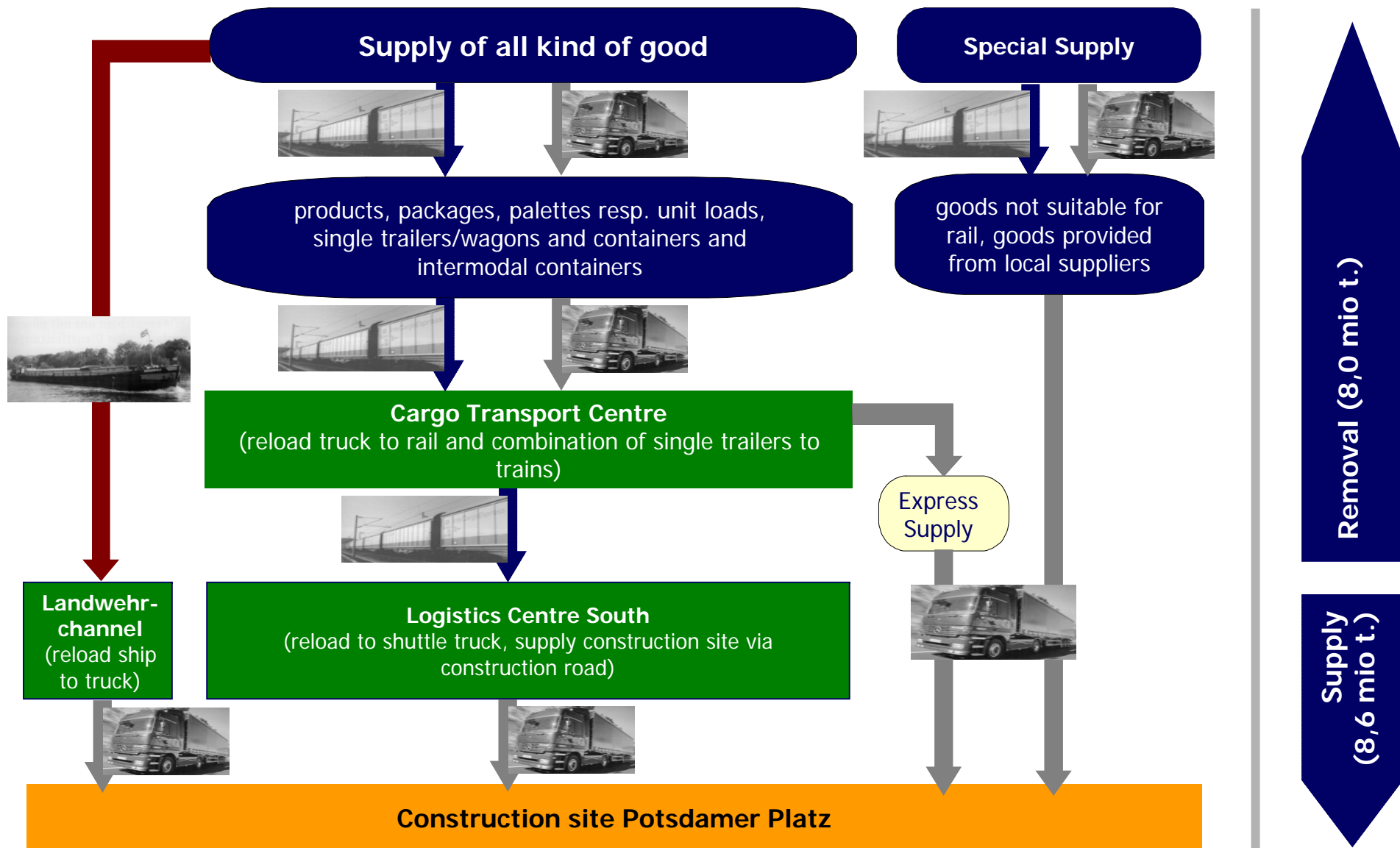
# Logistics centre southbound of Potsdamer Platz

Logistics of construction site  
Potsdamer Platz GmbH (baulog)

**baulog**  
5 investors



# Route of Transport



# Scope of activities, range of performance and acceptance of BauLog

## Activities and Performance

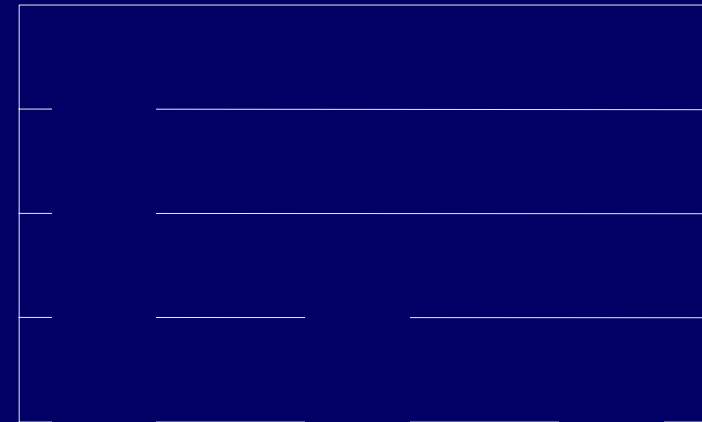
### Scope of activities

- Erection and maintenance of necessary common used infrastructure
- Selection of firms, that perform various services
- Conclude basic agreements with selected firms
- Coordination of firm performance and material transports to or from the construction sites

### Range of performance

- Management of excavation
- Supply of concrete and steel
- Logistics of packaged goods
- Waste management
- Management of groundwater

## Acceptance



Ground excavation: 5.625 trains à 24 wagons and 1.000 ships instead of 300.000 trucks

Ready-mix concrete: 2.400 trains à 24 wagons instead of 115.000 truck

Packaged goods: 1.350 trains à 24 wagons instead of 65.000 truck



# City Compatibility

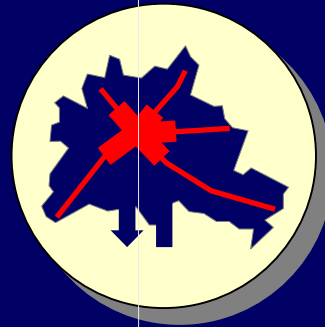
## City compatibility of actions

Relieve of roads

Decoupling of construction site/traffic

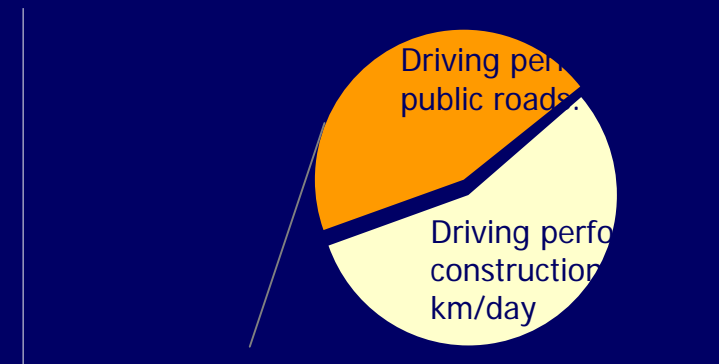
Reduction of emission

Noise-reduction



City compatibility of actions is the biggest success and most important argument of construction site logistic at the Potsdamer Platz

## Figures of city compatibility



93% reduction in driving performance of LKW on public roads  
Reduction of emissions from 200 t/year to 60 t/year



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# BestLog

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# BestLog – Logistics Best Practice



ENERGY, ENVIRONMENT  
AND SUSTAINABLE DEVELOPMENT



6th FWP –  
Coordination  
Action



## Energy, Environment and Sustainable Development

- ▶ Produce, disseminate and use enabling knowledge
- ▶ Increase economic growth and/or create new jobs
- ▶ Sustain continuing innovation and modernisation for EU-enterprises
- ▶ Implications for enabling policies

## Overall Objectives

- ▶ Dissemination and promotion of best practices within Europe
- ▶ Improve practice within all organisations at all levels of the supply chain
- ▶ Enhancing the improvement of logistics education throughout Europe
- ▶ Initiate an ongoing process of logistics related best practice exchange and education



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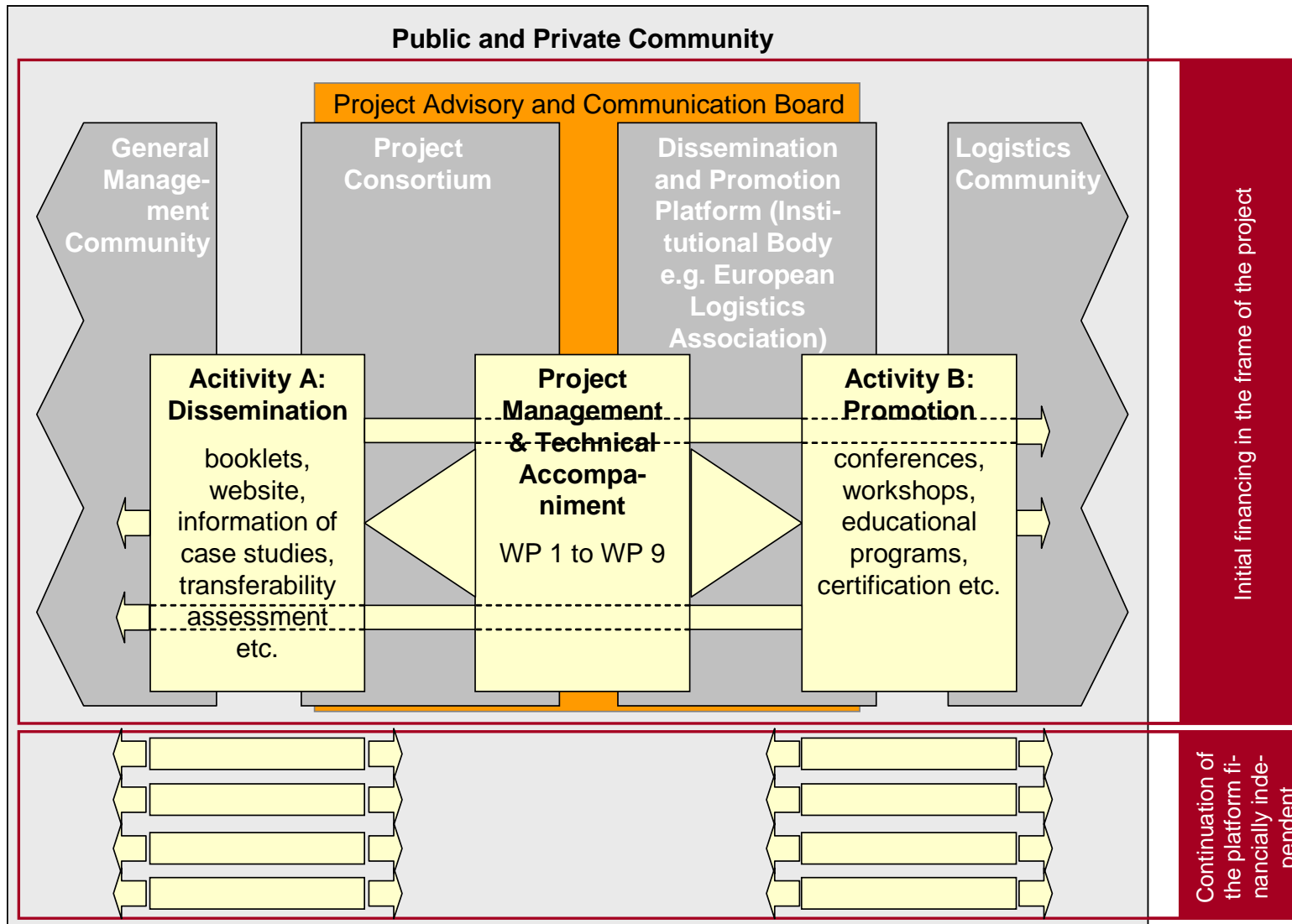
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# Organisational Integration of the Advisory and Communication Board





# Functions, Benefits & Expectations of Advisory and Communication Board

## Functions

- ▶ Form a communication platform for the dissemination and promotion of logistics best practices
- ▶ Provide access to national institutions relevant for the process of collecting logistics best practices
- ▶ Reflect the identified best practices in regard to their transferability under different national framework conditions
- ▶ Advise the consortium on the barriers and constraints to policy implementation
- ▶ Advise the consortium on the best channels for communication to the relevant industries and to propose relevant events for the presentation of best practices

## Benefits

- ▶ Deepen knowledge about best practices in logistics
- ▶ Enlarge own network Europe-wide
- ▶ BestLog will support e.g. conferences by presenting the developed contents of the project

## Expectations

- ▶ Participations in 2 Meetings per year (1 in Brussels)
- ▶ Acting as a communication platform to disseminate and promote best practices
- ▶ Actively participate in discussion, expertise, and give access to their own personal networks

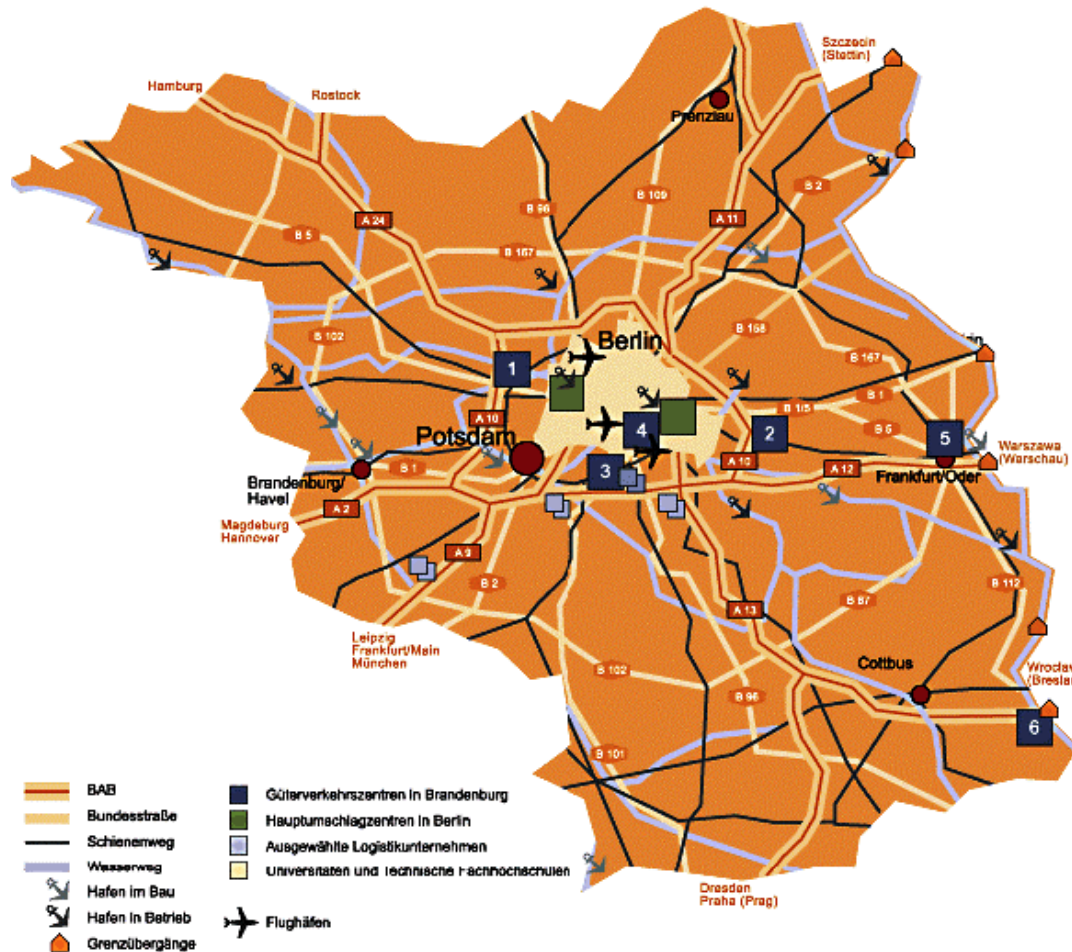
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# Logistics Initiative Berlin-Brandenburg

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# Characteristics of the region Berlin-Brandenburg



## **Logistic competence within the region:**

More than 150 thousand employees in logistics  
(9% of Berlin Brandenburg)

## **Industry:**

Daimler Chrysler, BMW, Gillette, VW, Schering, Berlin-Chemie,

## **Logistic service providers:**

Fiege, Dachser, DHL and Transfracht

## **Scientific institutions:**

Department of Logistics at TU Berlin, University of Applied Sciences Wildau

## **Events:**

The biggest Logistics symposium “Deutscher Logistik Kongress” of the Bundesvereinigung für Logistik (BVL) is held every year in Berlin



# Logistics Initiative Berlin Brandenburg

## Industry, Politics and Science take joint efforts to facilitate and strengthen the logistics potential of the region

- ▶ Strengthen the profile of Berlin-Brandenburg as a logistic location
- ▶ Creation of marketing strategies for the region
- ▶ Demand oriented development of logistic areas
- ▶ Promote further development of logistic infrastructure
- ▶ Increase information transfer and communication among the involved players

- ▶ Increase information transfer and communication among the involved players
- ▶ Offer professional education activities for skilled labor
- ▶ Foster German wide and international networking with other logistic initiatives
- ▶ Support companies through optimization of transaction cost for infrastructural and administrative activities

## Organisational Structure

Speaker

Project Manager and Administration

WP 1 – Location Marketing

WP 2 – Excellence in professional Education

WP3 – Logistics Networks and Transfer of Innovation



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# Summary

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## Summary

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- ▶ TU Berlin is leader among scientific logistics institutions in Germany offering a wide range of services, including professional education
- ▶ The configuration of the logistical system represents an innovation and technology in construction site logistics further projects have to take into account
- ▶ Potsdamer Platz has to be seen as a milestone in integrating rail into huge construction projects within crowded metropolises
- ▶ Construction of Potsdamer Platz illustrates logistics competence of Berlin Brandenburg
- ▶ Berlin-Brandenburg is a logistics region within the centre of Europe with a highly developed infrastructure to raise further interests from industry, retail and LSP
- ▶ Berlin-Brandenburg started a Logistics-Initiative to increase the awareness for the region among industry and LSP
- ▶ Cooperation with other initiatives is requested
- ▶ Department of Logistics at TU Berlin leads the EC Project BestLog collecting Best practices in logistics – results will improve professional education through promotion and dissemination

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## Back-Up

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# Key data of the Berlin University of Technology

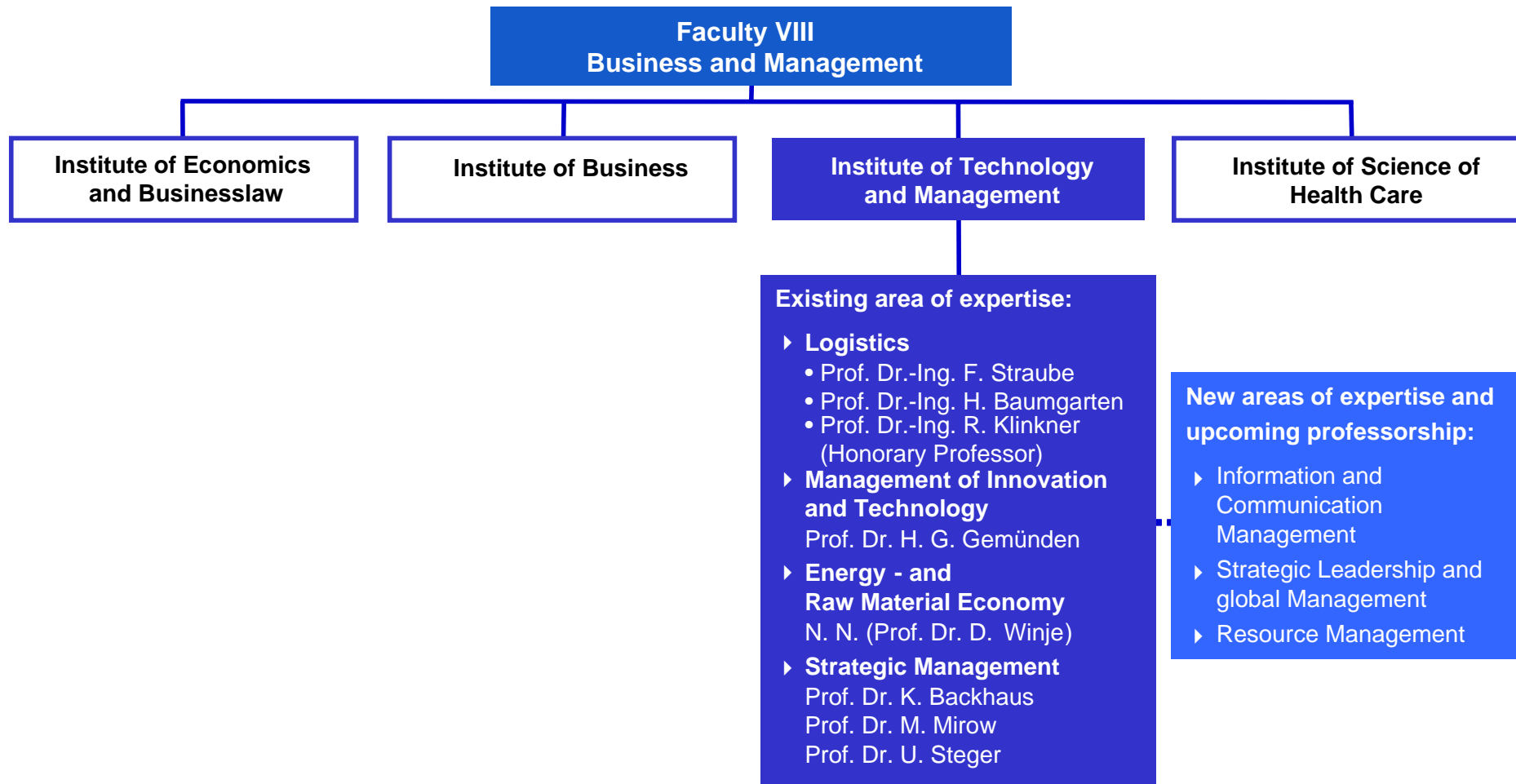
- ▶ 347 Professorships (inkl. Juniorprofessorships)
- ▶ 1.732 Research associates
- ▶ 30.706 Students,  
therefrom 6.140 international students (20%)
- ▶ average 30 Habilitations per year
- ▶ average 420 Promotions per year



- ▶ Budget 2003: 359 Mio. €
- ▶ third-party-funds 2003: 75,3 Mio.€
- ▶ Close cooperation with centers of research and business like Siemens, Bertelsmann, DaimlerChrysler or Heinrich-Hertz-Institute
- ▶ Numerous cooperations with well-known international universities



# Logistics Department within the Berlin University of Technology



# Das Team am Bereich Logistik der TU Berlin



**Leiter des  
Bereichs Logistik**  
Prof. Dr.-Ing. F. Straube



**Gründer des  
Bereichs Logistik**  
Prof. Dr.-Ing. H. Baumgarten



**Honorarprofessor**  
Prof. Dr.-Ing. R. Klinkner



Frau  
V. Miersch  
**(Sekretariat)**

**Studierendensekretariat:**



Frau  
M. Hoyer



Frau  
M. Hannemann

## Habilitand



Dr.-Ing.  
C. M. Butz



I. Beyer



W.-C.  
Hildebrand



T. H. Huynh



S. Hermann



A. Mayer



N. Pietschmann



J. Pohl



T. Beckmann



M. Richter



F. Rösch



C. Schneiders



M. Bohn



A. Thom



J. Thoms



Dr.-Ing.  
P. Tufinkgi



A. Schmidt



N. Nürbchen

Wissenschaftliche Mitarbeiter



# Range of services of the Logistics Department



## Consulting

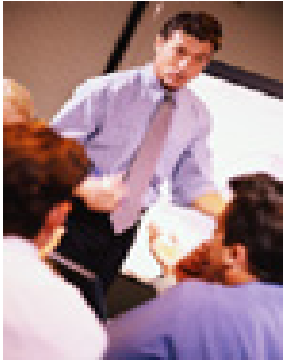
The service field **Consulting** addresses companies from industry, retail and logistic service providers. The companies are supported in the strategic adjustment of their business units and logistics activities. Starting point of the consulting service of the logistics department is an individual **Logistics Analysis**. This enables a structured assessment of the status of logistic development and constitutes the basis for company specific solutions.

<b>Supply Chain Management</b>	<ul style="list-style-type: none"> <li>Management of SCM Implementation</li> <li>Assessment of SCM-software</li> <li>Process analysis and Optimization</li> <li>Decentralized planning concepts</li> <li>Supplier integration</li> </ul>	<b>Retail logistics</b>	<ul style="list-style-type: none"> <li>Concepts of distribution and transport</li> <li>Development of performance profiles with regard to flexibility, visibility and process control</li> <li>Analysis of RFID-potential and implementation</li> </ul>
<b>Procurement</b>	<ul style="list-style-type: none"> <li>Sourcing-strategies</li> <li>Supplier evaluation and selection</li> <li>Outsourcing-decisions</li> <li>Performance-Measurement</li> </ul>	<b>Logistics for production</b>	<ul style="list-style-type: none"> <li>Concepts of production control</li> <li>Start-up management</li> <li>Risk-management in production and logistic systems</li> <li>Flexibility concepts</li> </ul>
<b>Management of international Networks</b>	<ul style="list-style-type: none"> <li>Analysis of markets and regions</li> <li>Strategies of internationalization</li> <li>Security strategies in international networks</li> <li>Strategic network-planning and redesign</li> </ul>	<b>Logistik-Services</b>	<ul style="list-style-type: none"> <li>Network management of service providers</li> <li>Strategic development of business units – process analysis and optimization</li> </ul>



## Range of services of the Logistics Department (II)

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### Professional Education

The conception and realization of **Seminars and Workshops** is a support for key customers in the distribution and application of logistic knowledge between companies. Basis for development of employees knowledge in logistics is the company specific professional education of skilled employees and management. Knowledge of State-of-the-Art management concepts from the field of logistics and strategic company management are conveyed via seminars, workshops and case-studies. Furthermore new methods and logistic approaches are part of the program.



### Symposiums, Research Groups and Recruiting

To facilitate exchange of experience and knowledge transfer conjoint events with industry and science are organized. Significant benefit could be derived from **topic specific research groups**. In this respect design approaches and methods are discussed regarding their transferability to other industries. Companies are supported in their **recruiting activities** through special recruiting events with outstanding students and graduates of the logistics department from TU Berlin.



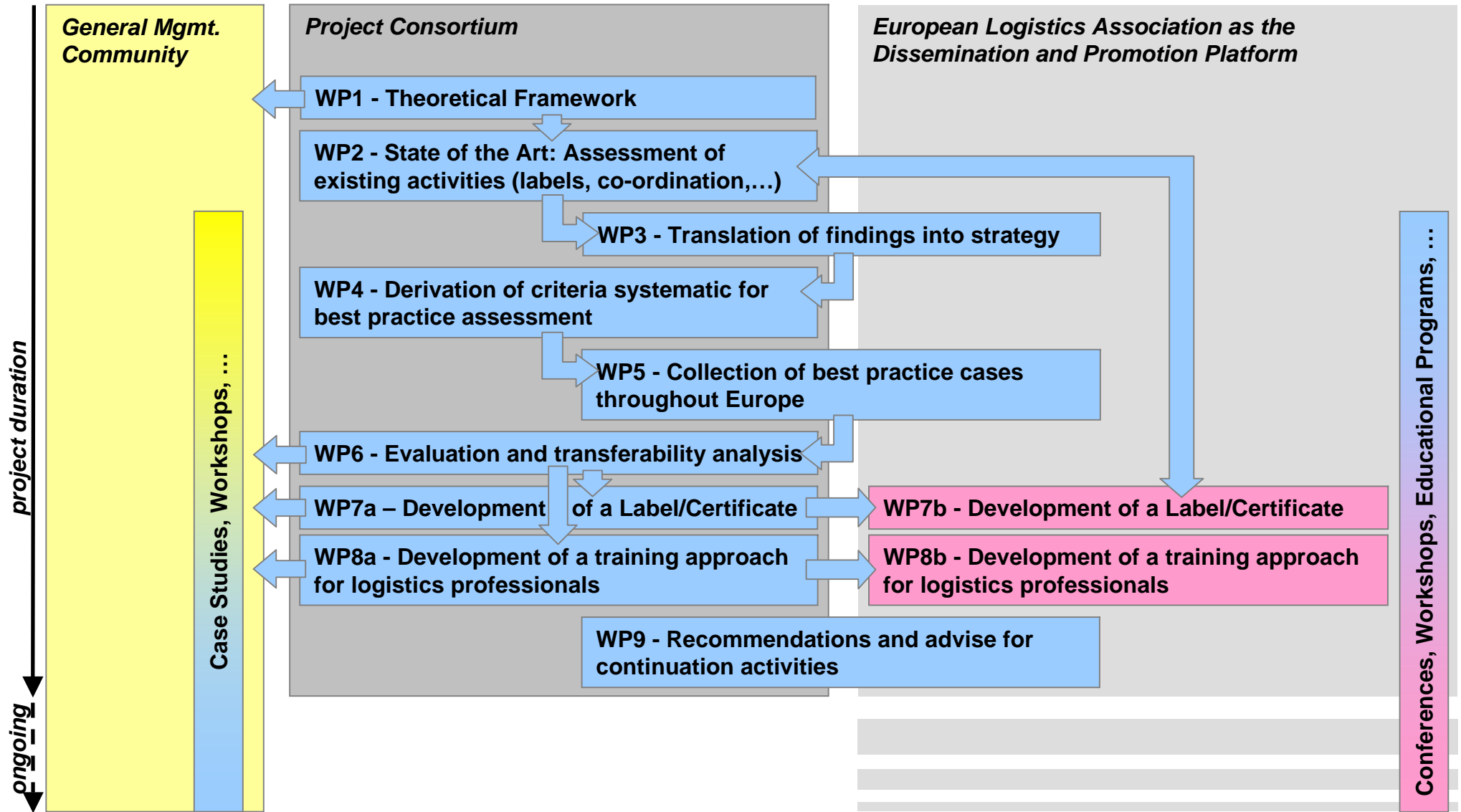
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# BestLog

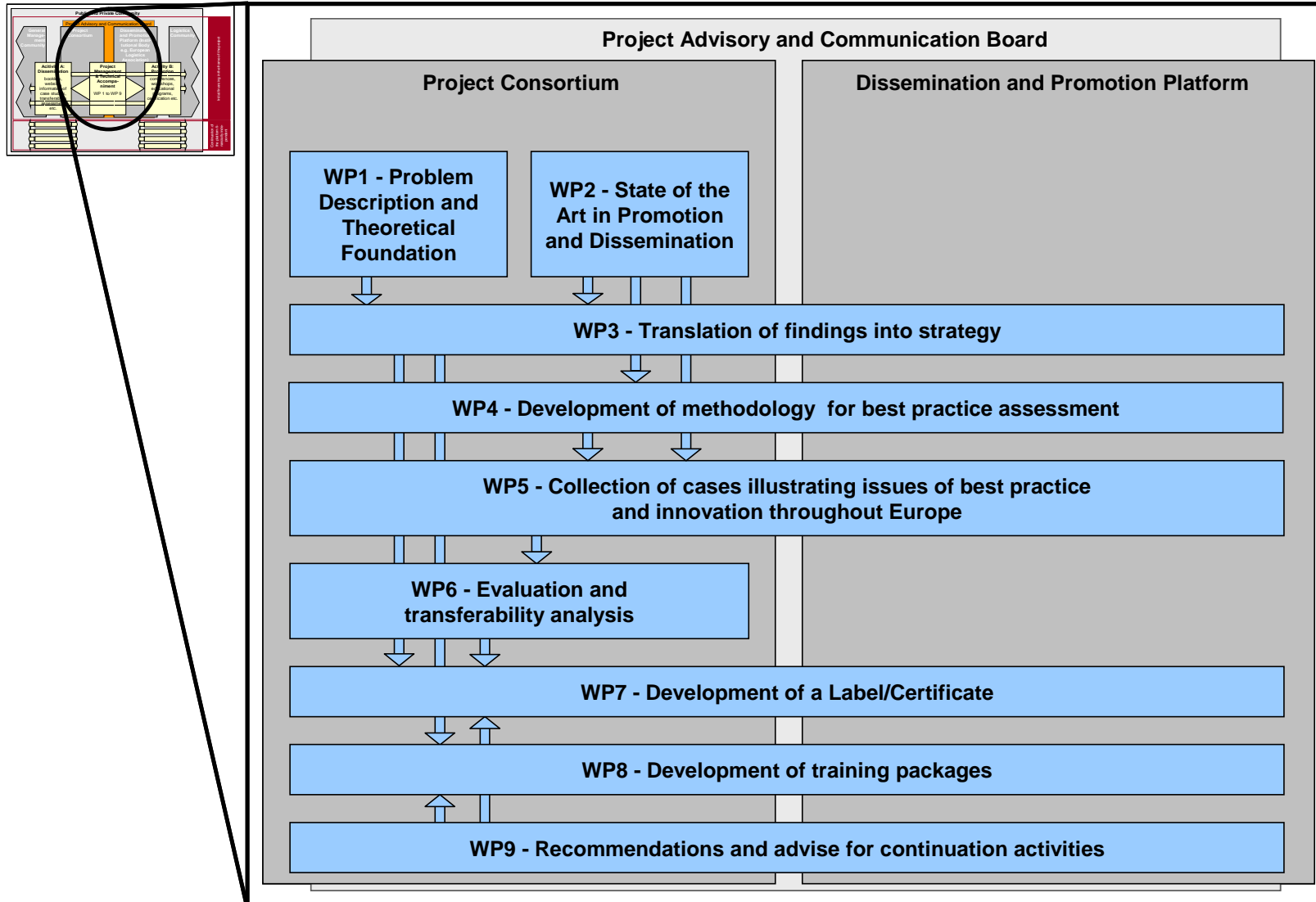
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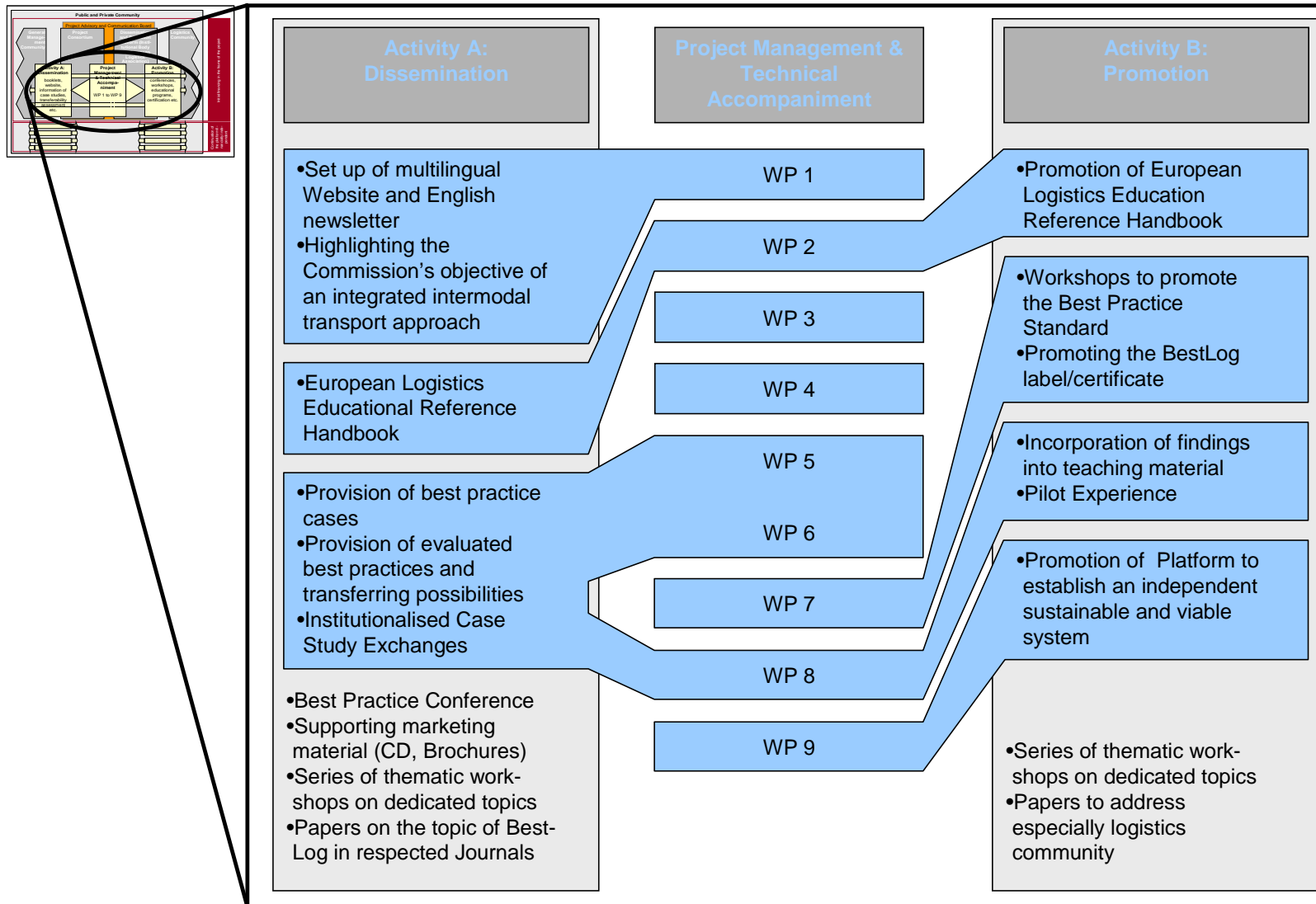
# Interrelation of the Work Packages



# Work Packages



# Interdependencies among Work Packages





# Work Packages

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The Project is divided into Work Packages to reach finally the overall project objectives

WP 0 : Project Management

WP 1: Problem Description and Theoretical Foundation

WP 2: State of the Art in Promotion and Dissemination

WP 3: Translation of findings into strategy

WP 4: Development of methodology for best practice assessment

WP 5: Collection of best practice cases throughout Europe

WP 6: Evaluation and transferability analysis

WP 7: Development of a Label/Certificate

WP 8: Development and implementation of training approaches

WP 9: Recommendation and advice for continuation activities

Activity A: Dissemination of Logistics best Practice

Activity B: Promotion of Logistics Best Practices

