

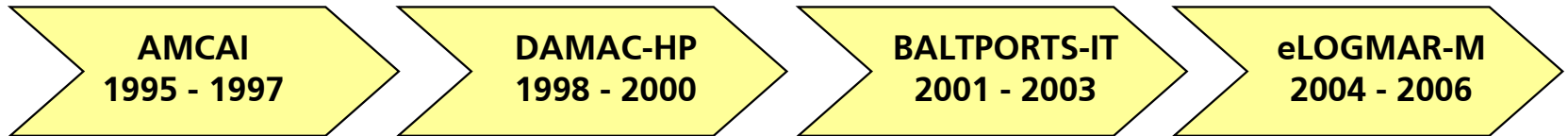
History of the eLOGMAR-M project under the EU Research Programme and Future Networks

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Collaboration from 1994 to 2004



Fraunhofer IFF GER
Magdeburg University GER
Riga Technical University LV
Latvian Intelligent Systems LV
Charles University Prague CZ
TNO Apeldoorn NL
Latvian Maritime Systems LV

+

Baltic Container Terminal LV
Riga Freeport Authority LV
Ventspils Freeport Auth. LV
BALVA LV
Latvian Railways LV

+

IDC Information Techn. LV
KSSA LT
Warsaw University PL
University of Ulster UK
JSC Ventamonjaks LV
Kaunas University LT
Port of Gdansk Auth. PL
BI-Info EST

+

M & S chain Solutions UK
TREDIT GR
China Harvest Dev. CN
Beijing HOPE Software CN
Thessaloniki Port Auth. GR
Logitrans Consult EE
Hafen HH Marketing GER
SONEX LT
RTSB GmbH GER
Port of Kokkola FI
Interbalt EE

Quelle: Prof. Lindemann TU München, 2004



The major AMCAI results:

- the creation of a multinational network of scientists and experts working in the areas of modelling, simulation and animation of harbour logistic processes
- the application of two classical simulation modelling approaches (process-oriented and object-oriented) to study harbour terminal operations
- a methodology for Container Terminal Data Processing System design
- world wide web-based access to simulation and animation studies
- the book "Managing and Controlling Growing Harbour Terminals" published by The Society for Computer Simulation International



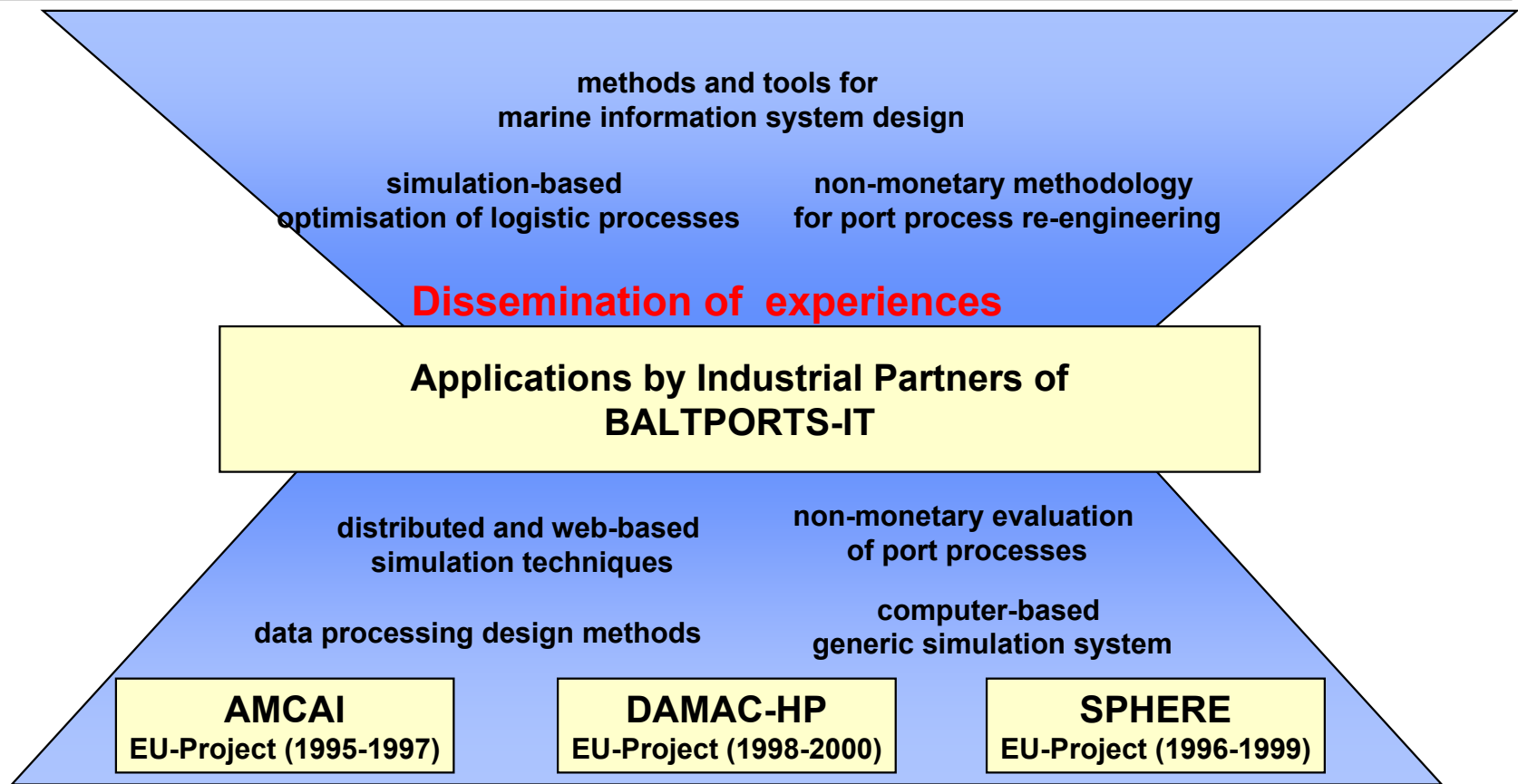
Five Subprojects of DAMAC-HP

Application	Expected results	Co-operation
Layout and Equipment improvement	Simulation based support tools for layout and equipment planning and evaluation	Baltic Container Terminal
Control of Container Terminal Processes under external influences	Simulation tools for controlling of Container Terminal Processes under different weather influences	Baltic Container Terminal
Structuring the business information	Static and dynamic infological models of business process	Riga Freeport Authority Ventspils Freeport Authority BALVA
Reorganisation of business information of Data Flows	Guide for Reorganisation of business processes by using LISTechnology	Riga Freeport Authority Ventspils Freeport Authority BALVA
Scheduling of incoming train processing	Decision support software for scheduling of incoming train	Latvian Railways

BALTPORTS-IT



General Approach



► **Simulation as a Method for the evaluation of solutions of logistic problems in Ports**

- Structuring and Spreadsheet based Evaluation of Port Processes
- Simulation based layout planning
- Simulation based Re-engineering of logistic processes
- Design and visualisation of information flow processes
- Process control by interconnection of simulation and terminal information system

Selected Results

▶ **Baltic Container Terminal Simulation System:**

The study concentrated on the logics of the basic technological and informational processes in the Baltic Container Terminal (BCT) serving operations.

▶ **Distributed and Web-based Simulation:**

Websim: New Method of e-work for studying harbour processes and combining simulation models (Collaborative Simulation studies using web-based communication)

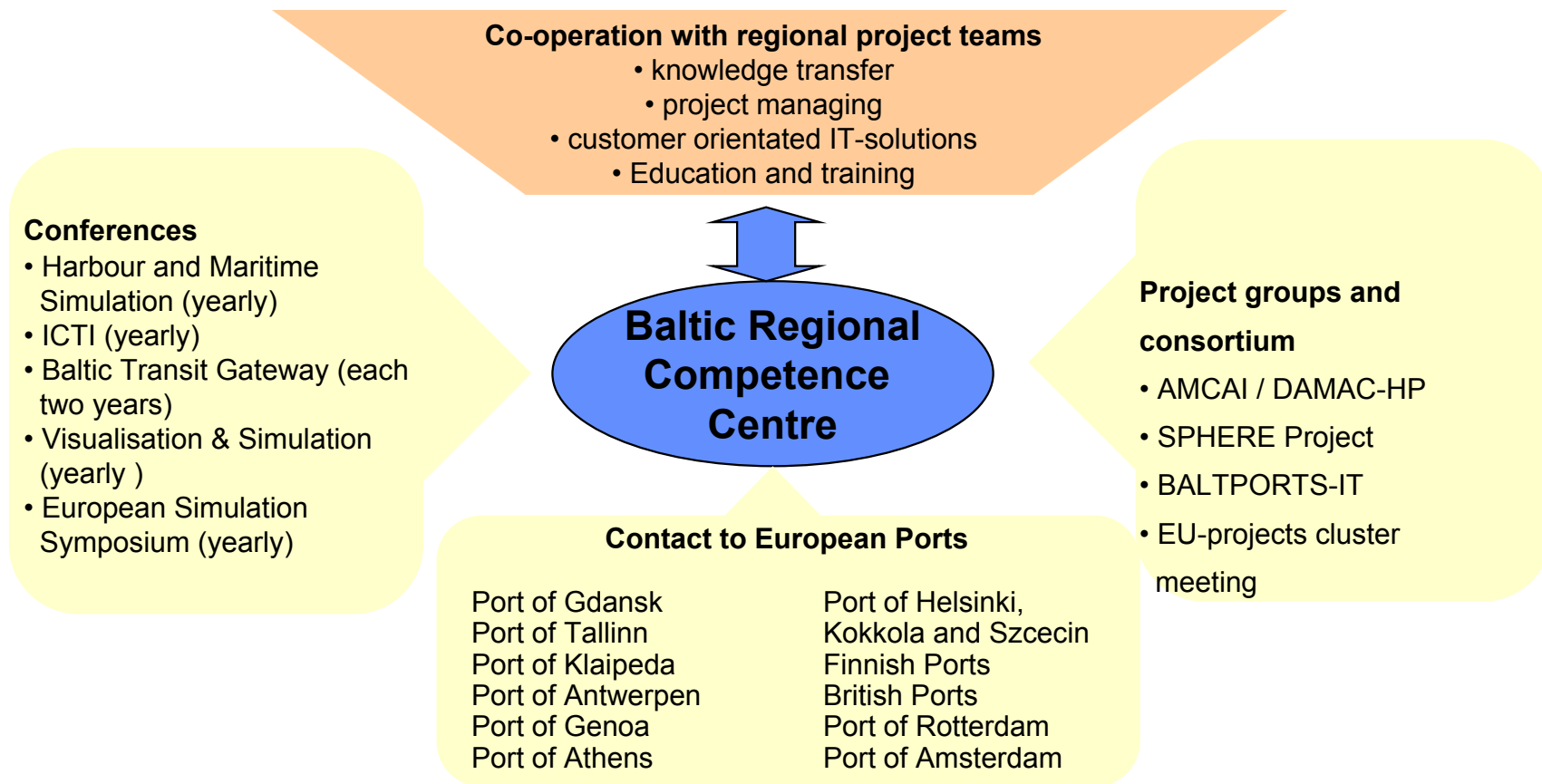
▶ **Port Process Simulator:**

Generic System to simulate a complete port and its processes, i.e. infrastructure, suprastructure, aquastructure, equipment as well as the movements of ships and land vehicles.

▶ **The Klaipeda Oil Terminal Simulation System**

▶ **Non-Monetary Evaluation Methodology for Small and Medium-Sized Ports**

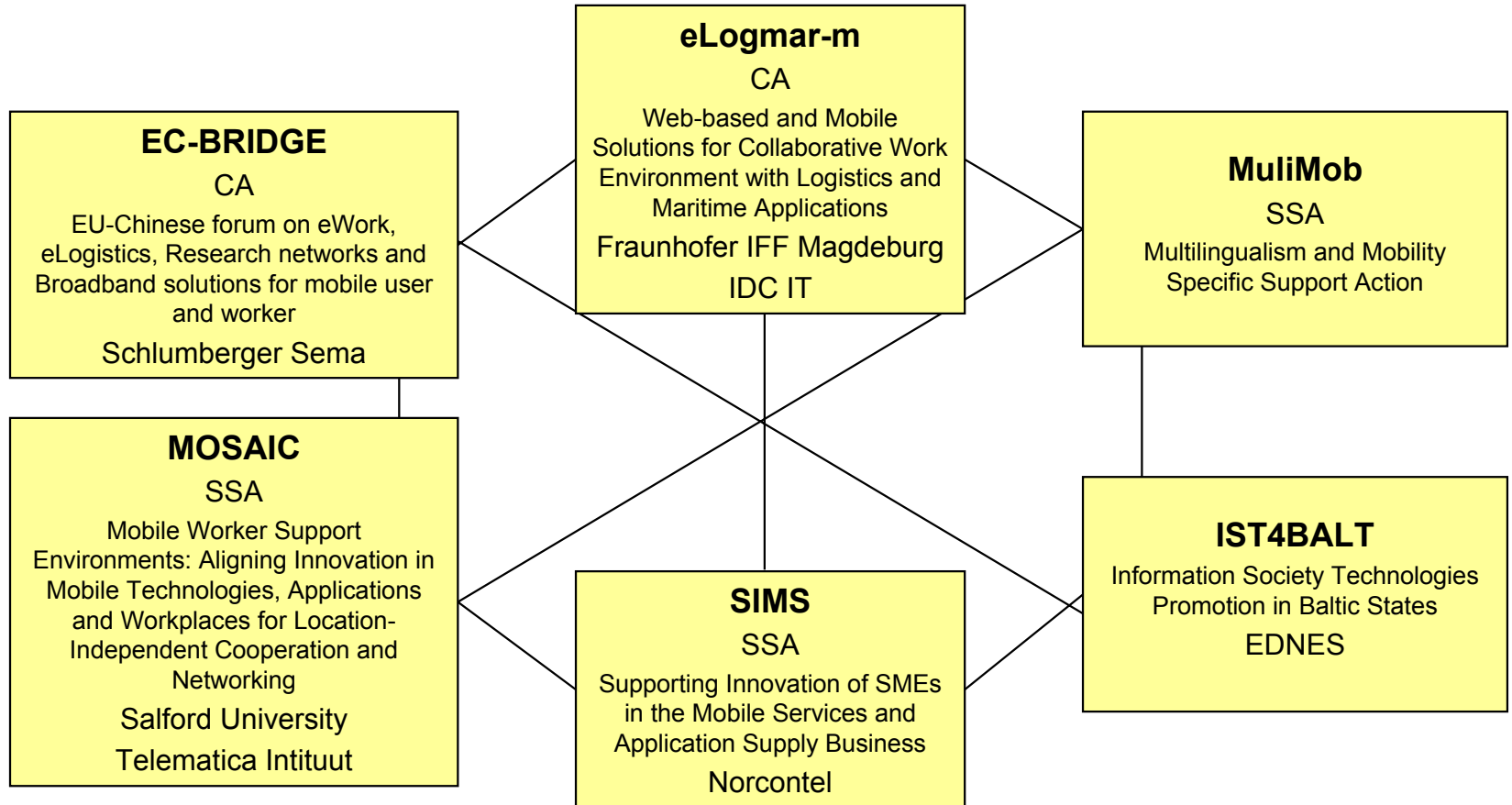
Exploitation: Network of knowledge dissemination





Provide services and new work methods for the mobile actors
(traders, shippers, brokers, consignees, forwarders, railways, etc.)

Project Network



Thank you for your Attention !