

Simulation and IT-Solutions: Applications in the Baltic Port Areas of the Newly Associated States

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Profile of the Fraunhofer Institute of Factory Operation and Automation (IFF)

Division of Information, Logistics and Automation Systems (ILA):

Planning and Visualisation Techniques (PVT)

Automation (AUT)

Information Logistics (IFL)

Logistics Systems and Networks (LSN)



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Number of Employees 110
Office and Laboratory Area
5000 m2

Virtual Reality and Simulation based Services of IFF

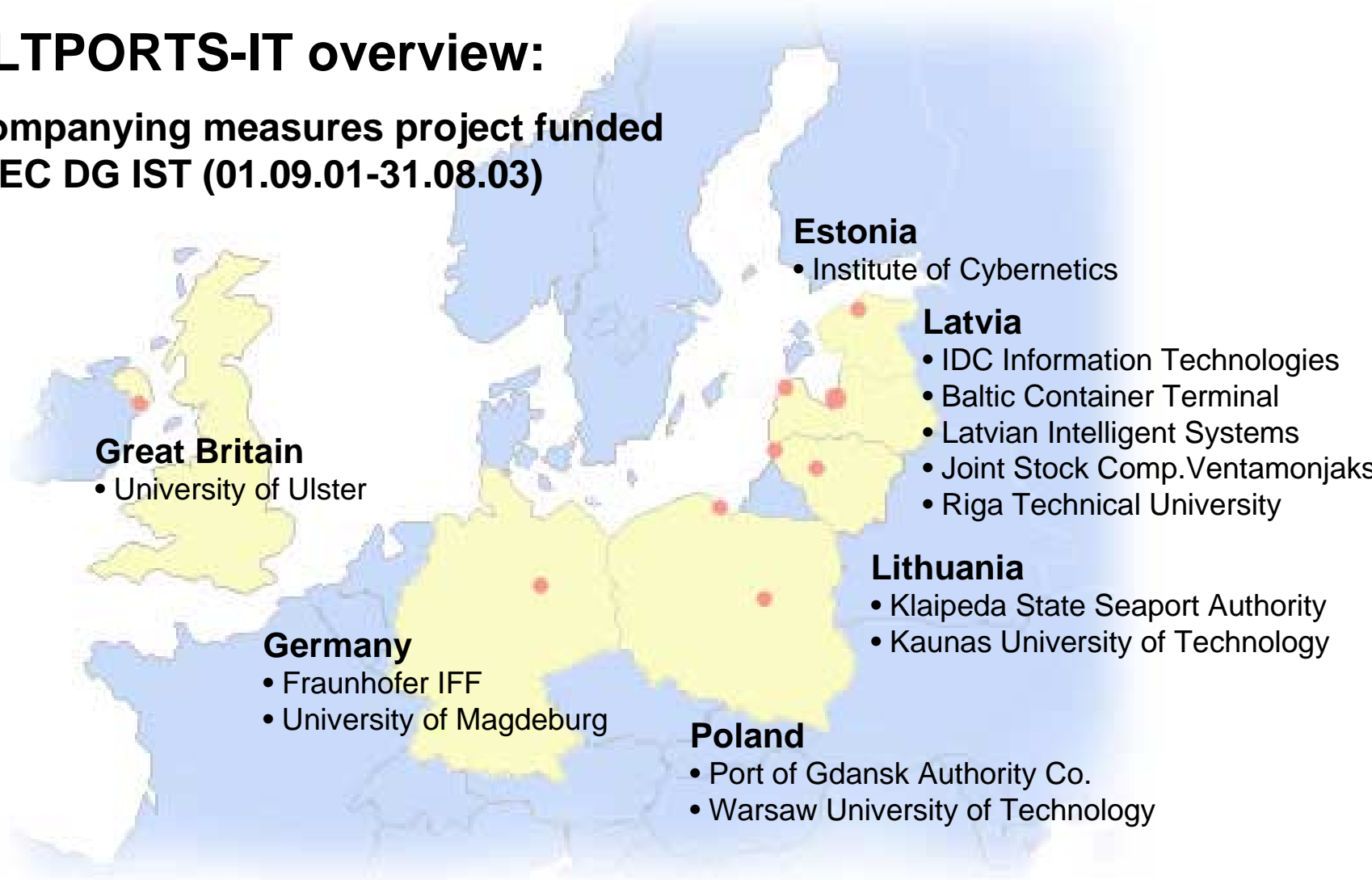
- Visual interactive simulation platforms for the
 - development of complex machines and systems
 - process design and
 - training of technical staff

- Global utilisation of virtual Development and Training Platforms based on information and telecommunication technologies



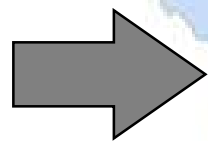
BALTPORTS-IT overview:

Accompanying measures project funded by CEC DG IST (01.09.01-31.08.03)



Reorganisation of Baltic Ports in the Newly Associated States

- Integration in European logistic chains
- Improvement of the ports' competitiveness
- Development of Free Port Areas



Re-design of IT-processes and simulation based decision support

Specific objectives of small and medium sized Baltic Ports

- **Simulation based layout planning**
- **Re-engineering of logistic processes**
- **Design and visualisation of information flow processes**
- **Process control by interconnection of simulation and terminal interaction system**

Expected Results for Baltic Regional Maritime Companies

methods and tools for
marine information system design

simulation-based optimisation of logistic processes non-monetary methodology for port process re-engineering

Dissemination of experiences

Applications by Industrial Partners of BALTPORTS-IT

Customisation of results

distributed and web-based
simulation techniques

non-monetary evaluation
of port processes

data processing design methods

computer-based
generic simulation system

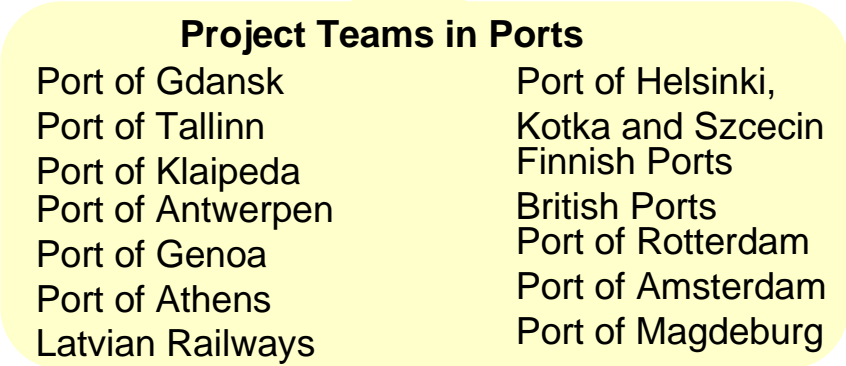
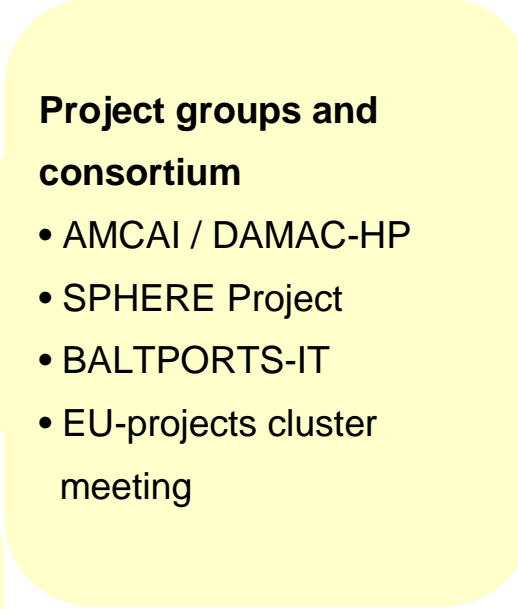
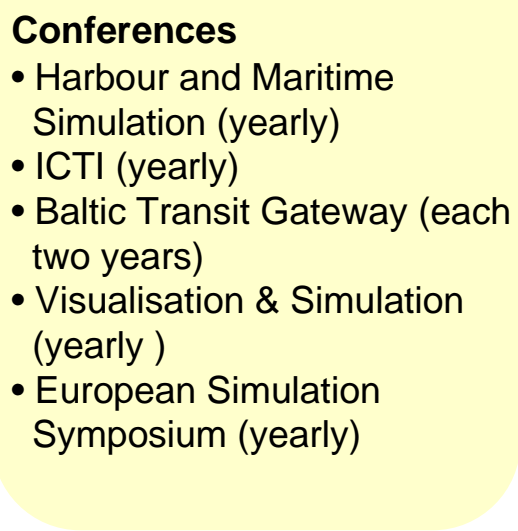
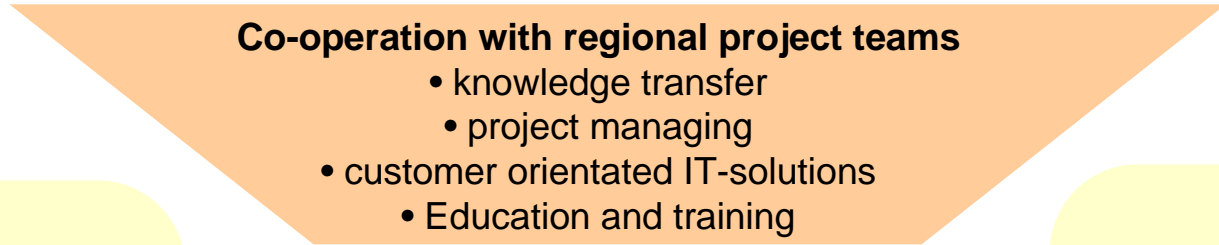
AMCAI
EU-Project (1995-1997)

DAMAC-HP
EU-Project (1998-2000)

SPHERE
EU-Project (1996-1999)



Exploitation: Network of knowledge dissemination



Conclusion

The challenge of an EU-funded project includes

- **the research work itself**
- **to enable the consortium working together**
- **permanent exchange of experiences
with external partners**
- **exploitation of results**