

CAPOEIRA

*Research offer: the point of view of
public researchers in freight transport*

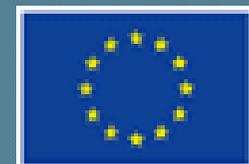
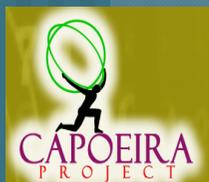
*ECTRI, the European Conference of
Transport Research Institutes*

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ECTRI Working Group "Freight Transport"





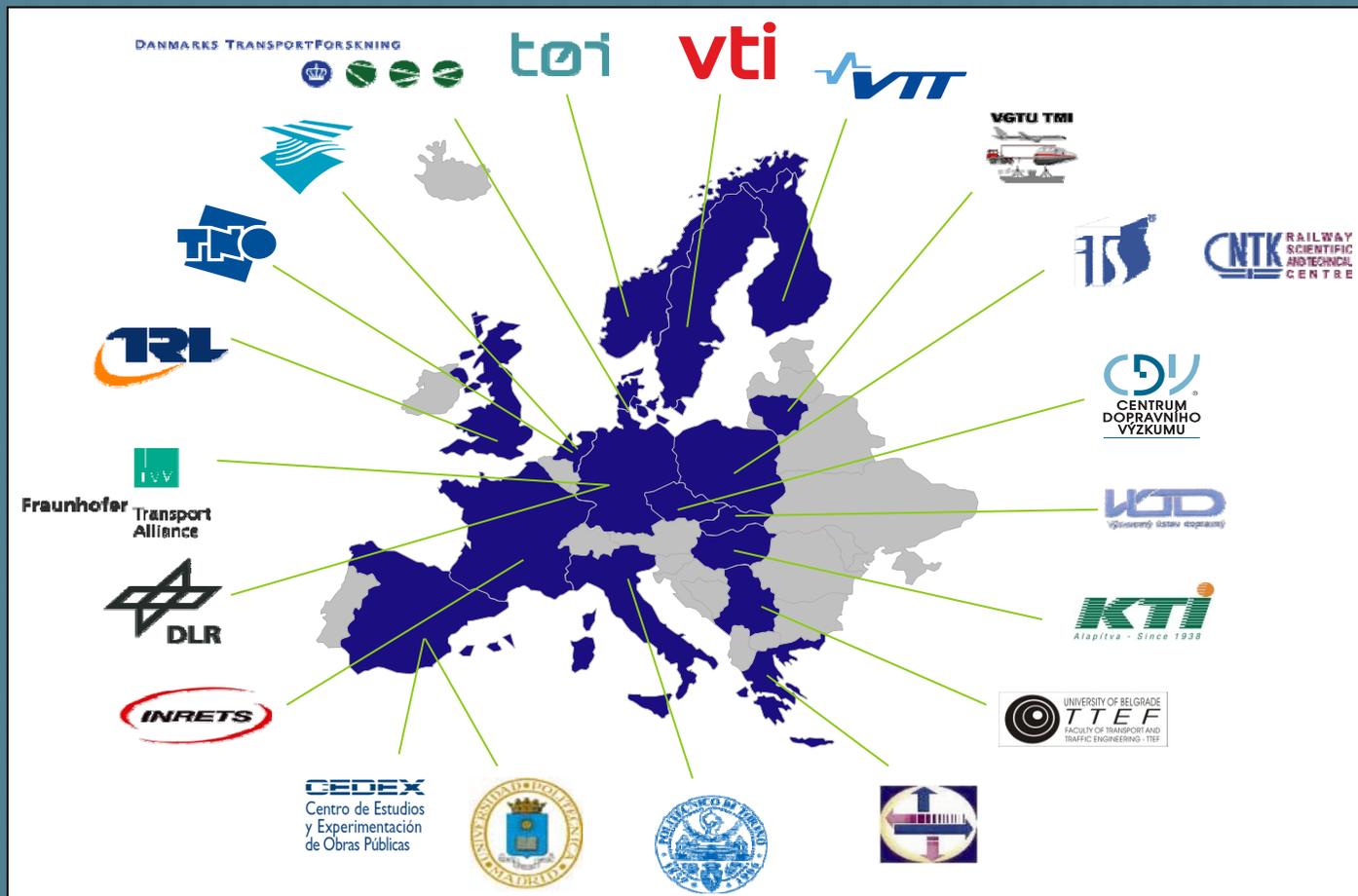
ECTRI Origin

- Established in 2003 as a non-profit association
- Objective: to promote integrated surface transport research and development in Europe
- First attempt to:
 - Unite the forces of the foremost multimodal transport research centres across Europe
 - thereby promote the excellence of European transport research



ECTRI Members

20 major transport research institutes or universities from 17 European countries



Vision

“An efficient, integral European transport system that provides completely safe, secure and sustainable mobility for people and goods”



Soria Moria castle, by T. Kittelsen. Travelling towards a far away vision.



Mission

To provide the **scientifically based competence, knowledge, and advice** necessary to move towards its vision

To this purpose, ECTRI:

- endeavours to **provide practically applicable answers** to questions of **policy formulation**
- brings together the **foremost, policy relevant, interdisciplinary scientific competence** available in Europe, capable of carrying out state-of-the-art primary and applied research in transport
- strives to continually **improve the quality and overall efficiency of European transport research**
- continually **looks for innovative solutions** to the present and future challenges in the field of transport
- endeavours to **provide European transport research institutes with the conditions** necessary for the **development, maintenance and exploitation of their scientific excellence**





WG Electronic Journal

- European Transport Research Review (ETRR)
 - an open access journal; wide availability to all researchers with a minimum of constraints and costs
 - provides focus on issues of special interest to European transport research, its funding bodies and supervising organisations
 - first issue end 2008-early 2009
 - published by Springer through contract with ECTRI



Thematic Working Groups

- A. Urban mobility (*lead: INRETS*)
- B. Traffic safety & security (*DVS*)
- C. Energy and climate change (*DLR*)
- D. *Freight transport* (*DLR*)**
- E. Intelligent transport systems and infrastructures (*INRETS*)
- F. Mobility (socio-economic, demographic, policy aspects) (*DTU-Tr.*)
- G. Transport economics and policy (*INRETS*)
- H. Transport, Urban Environment, and Health (*TOI*)



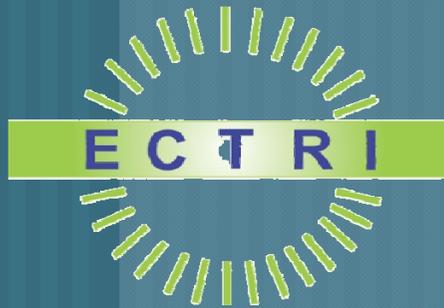
Purpose

- increase ECTRI's competence in science, research and development
- promote interaction between researchers of member institutions
- enhance international transport research cooperation
- support establishing of consortia



ECTRI and European Policies (including FP7)

Advice / recommendations based on societal needs in surface transport



Inputs / contributions

- FP 7 updates / work programmes
- Consultations to EC papers and policies (green / white papers, regulations, directives,... etc)



Benefits:

"Economies of scale" of a collaborating European research community

Position reflected in European Policies

Members find areas of interest covered in calls





Research activities in the past and the present for ECTRI Institutes

- Coordinated research activities in the context of ECTRI for ports and freight transport has not been conducted in the past
- Each Institute participated in port research activities separately in a European, National, or local level activities
- For example CARTH-HIT has undertaken research activities for strategic planning activities in ports, the establishment of new terminals, demand studies for the Mediterranean ports, optimisation issues for freight transport operations in terminals, governance issues (policy) in ports, and port choice modeling studies
- INRETS/SPLOT has participated in analyses of port terminal evolutions in the last decade, hinterland transportation from European ports, port governance and devolution.
- TOI has taken part in analysis of decision making processes at policy and operational level, network development and intermodal transport in the North Sea Region, demand analysis for coastal transport, analysis of duties and port tariffs connected to ship calls and port performance studies
- VTI has been involved in port infrastructure project with the port of Gothenburg which its main goal was to develop a sustainable pavement construction in a harbour environment, considering the specific requirement of heavy intensive traffic.



Research activities in the past and the present for ECTRI Institutes

■ The main thematic topics of yesterday and today are related to:

- Feasibility analyses for port development and strategic planning
- Port performance and governance
- Environmental issues (air quality, coastal environment, etc)
- Port infrastructure, superstructure, equipment and IT integration
- Port Policy and port competitiveness
- Integration of ports in the intermodal networks
- Socio-economic impact of Port development

Still, these issues are not just present and past research activities as business and social drivers pose new research challenges in each one the research topics



Research activities in the past and the present for ECTRI Institutes

■ Problems encountered

- Difficulties in aligning innovative research issues with business opportunities and quantification of benefits
- Reluctance of the authorities to share data for research purposes
- Lack of vision and deviation from traditional role of ports
- Contradicting user needs in freight transport and also within the port community

■ Success

- Integration of ports in freight networks
- Improvement of port infrastructure
- Increased port performance and enhanced services
- Raise environmental awareness
- *Transformation of research results into business opportunities contributing to rational port development and investment plans*



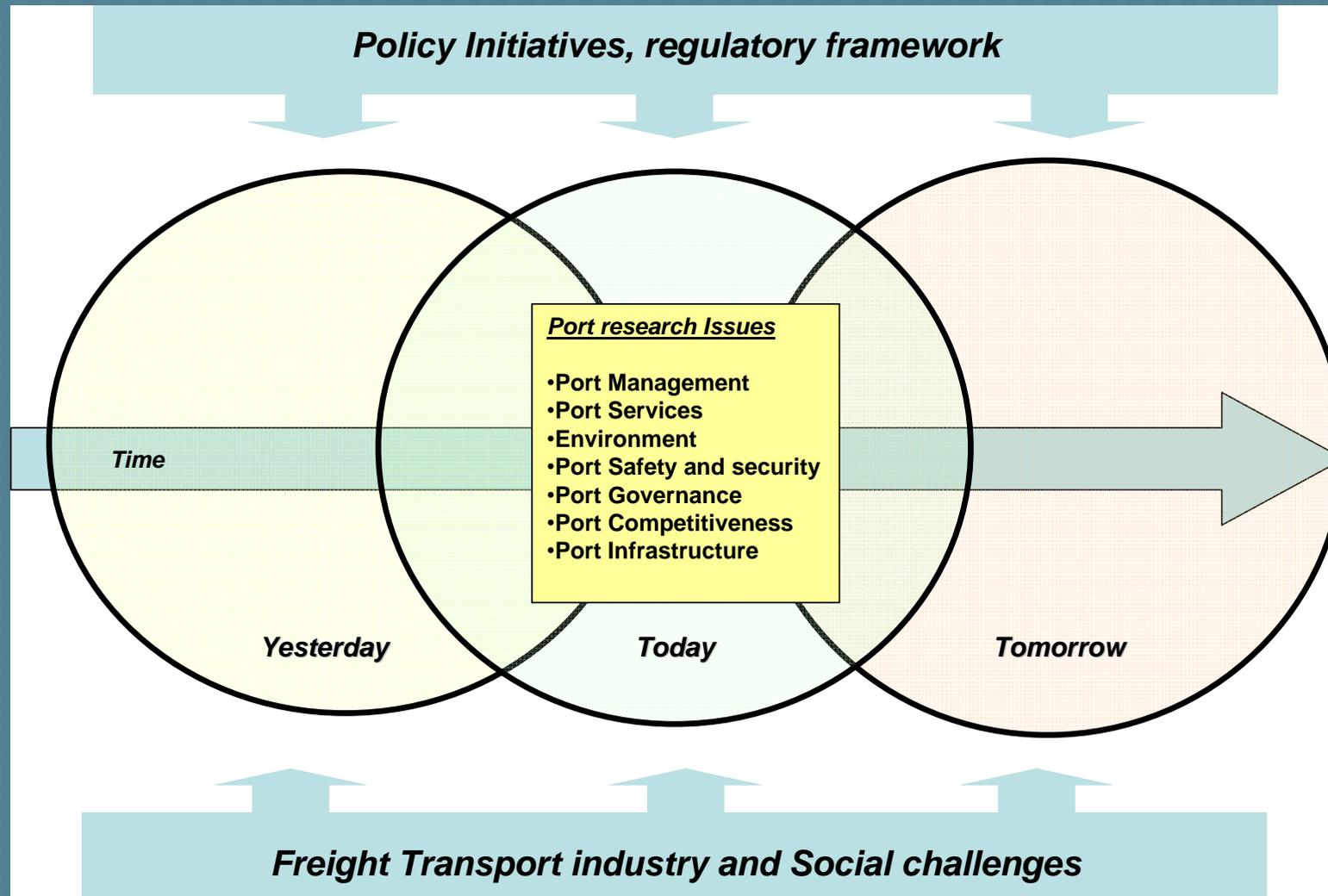


The role of ECTRI Freight WG towards ports today and tomorrow

- The role of the ECTRI Freight Transport WG is *inter alia* to concentrate the knowledge dispersed in the different members in applied research for freight transport and ports
- The objective is to create a freight transport research agenda for the future by understanding the challenges of today including topics for ports
- The research agenda will be based on the knowledge base of each member and assessment with port community needs
- The future research agenda would be proposed to the EC and other international bodies for consideration for the next research calls of the FP and create new funding opportunities for Port Authorities
- Cooperation among the members of the WG would be achieved through the participation in European Research projects based
- In addition the WG will be active in commenting EC strategic papers and open consultations on ports research and policy.



Research issues of today with a future perspective for ECTRI



Future challenges for port research

- The research topics for the future that would be looked into port vis-à-vis freight operations may be:
 - Further assessment, impact analysis and bringing forward of contemporary research fields
 - Advanced modelling approaches for:
 - Research and development on the role of ports in the supply chains
 - Research on scenarios on operational environment and the impacts on freight operations for ports and logistics
 - Research on decision-making processes in ports and logistics networks
 - Modelling on cargo movements within the port (freight terminal management optimisation)

Future challenges for port research

- Increase of value-added logistic services and upgrade of the role of the ports
- Support viability of the modal-shift through the ports
- Development of ICT solutions for complex logistics supply chains
- Development of ICT tools for efficient risk management and contingency planning increasing port security
- Development of concepts enhancing logistic and port security without affecting the supply chains effectiveness
- Port incentives for stimulating more environmental friendly technologies

Future challenges for port research

- Virtual concepts for transport and port infrastructure
- Future role of governments in ports
- Optimised port systems for Europe
- E-Freight and ports' implications

In other words Future research in ports cannot be considered as a nutshell but will follow the future research in supply chain management, logistics and the needs of the freight transport industry for efficient, secure, and quality services. Any research activity in ports would aim at enhancing port competitiveness in the national European and global environment.

Barriers to be overcome in research

- Diversification of port user needs in relation to size and role
- Difficulties in having integrated approaches in specific ports' operations due to different roles in the port system
- Immature conditions for applied research in different ports
- Reluctance from port Authorities to share know-how and research results due to confidentiality and competitiveness issues
- Reluctance to adopt/invest in innovative concepts in port management due to uncertain or long term revenues
- Gap in communication between the research community and port Authorities

Solutions to be identified...

- *Overcoming difficulties related to current port research is also a research activity for the future...*
- Simulation and Pilot projects for testing and assessing innovative solutions and tools aiming at increasing maturity levels of innovation
- Ex-post impact analysis of any innovation proposals and implementations in the port communities
- Integration of risk management techniques for ensuring efficiency in introduction of innovative concepts
- Achievement of Balance between dissemination of research results and confidentiality of sensitive information and commercial products for avoidance of competition distortion
- Achievement of balance between user needs within the port community and local/national/global environment aiming at system optimum approaches

Conclusions

- Future research in ports will be determined by the user needs of the stakeholders of the entire supply chains
- The Role of the research institutions is to optimise the port operations and based on research outcomes propose solutions for business integration and enhanced port management operations and sustainable development bridging Policy with business objectives
- The role of ECTRI and in particular the Freight Transport WG would be to:
 - start with the creation of a research agenda and communicate it to EC and the freight transport community for influencing next generation research in cooperation with the port authorities
 - Promote cooperation between the research community of ECTRI and ports for successful initiatives in Europe
 - Contribute efficiently in future research activities exploiting the resources of ECTRI



Need Further Information – Have Questions?



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On behalf of
ECTRI WG: Freight Transport

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