Grant Agreement Number:	234200	**Document type:**	*Panel meeting 1 (Minutes)*
Project start date:	01/01/2010	**Project end date:**	31/12/2011

POSMETRANS

POlicy measures for innovation in **TRANS**port sector with special focus on **S**mall- and **M**edium sized **E**nterprises
- factors and recommendations for success and sustainability -

Deliverable 3.*2*

Panel meeting to validate the outcomes/analysis by experts (Minutes)
How innovation spreads into the market?

Author: Samantha Michaux (SEZ)

Due date of deliverable: 30.05.2011 (M 17**)** **Actual submission date:** 09.11.2011

Revision: 2.0 (actual date of submission: 22.11.2011)

Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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POSMETRANS
European logistic and transport. Efficiency & Innovation.

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List of attendees

POSMETRANS partners	Experts
SEZ Robert Gohla Aude Pélisson-Schecker	Michael Schygulla - ptv AG Karlsruhe (Germany) Eric Gross - Pôle Véhicule du Futur (France)
ACCIONA Juan Sáenz-Arostegui	Pablo Martinez Alonso, TECNALIA (Spain)
CUT Andrzej Szarata Bogna Grochola Katarzyna Nosal	Piotr Stasiak - Automotive Industry Institute (Poland) Tomasz Zwolinski - Municipality of Krakow – Department of Urban Infrastructure (Poland)
EGE Prof. Cengiz Akdeniz Mustafa Cakir Aykut Gülalanlar	Faysal Yalinkilic - Omsan Logistics A.S. (Turkey) Jan Devrim - Alisan Logistics (Turkey)
URCCPIE Martha Serrano	Massimo Groff - Finpiemonte Partecipazioni (Italy)

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POSMETRANS

SEVENTH FRAMEWORK PROGRAMME

List of participants - Expert Panel 1

Person	Organisation	Signature
Eric Gross	Pôle Véhicule du Futur	
Faysal Yalinkilic	Omsan Logistics A.S.	
Jan Devrim	Alisan Logistics	
Massimo Groff	Finpiemonte Partecipazioni	
Michael Schygulla	ptv AG	
Pablo Martinez Alonso	TECNALIA	
Piotr Stasiak	Automotive Industry Institute	
Renata Koneczna	Polish Academy of Sciences	
Tomasz Zwolinski	Municipality of Krakow – Department of Urban Infrastructure	

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Introduction

Background information about the project

POSMETRANS is a Coordination and Support Action funded by the European Commission within the scope of the Seventh Framework Programme (FP7). It aims at promoting sustainable surface transport by providing policy support for innovative technologies and processes in transport. On the basis of an international network consisting of five partners from five different countries, POSMETRANS will explore the efficiency of European policy measures for innovation in the transport sector with special focus on Small- and Medium-sized Enterprises (SMEs).

POSMETRANS partners:

- Steinbeis-Europa-Zentrum (Germany)
- ACCIONA (Spain)
- Cracow University of Technology – Technology Transfer Centre (Poland)
- EGE University (Turkey)
- Unioncamere Piemonte (Italy)

1. POSMETRANS Expert Panel Meeting – Background Context

1.1. Objectives

The POSMETRANS Expert Panel Meeting I about the topic “how innovation can spread into the market?” is enshrined within the framework of the activities foreseen in WP 3. The main aim of organising the POSMETRANS Expert Panel Meetings is to present before a competent panel of experts the results from the survey emerging of the implementation of four different questionnaires by the POSMETRANS partners in order to critically analyse and complement them.

The main objectives of the Expert Panel Meeting are identified as follows:

1. Validation of the findings presented;
2. Foster dissemination of POSMETRANS and its results.

1.2. Experts invited

This Expert Panel Meeting was composed by independent experts coming from six different European countries. In order to have a balanced composition of experts, POSMETRANS partners coordinated their efforts in order to invite experts covering different – and complementary – fields of expertise. The experts of the Panel Meeting can be grouped in four main categories, namely:

- Researcher /Academics
- Industry
- Networks
- Public Bodies

1.3. Methodology followed

In order to give the experts a general overview about the project and the results of the questionnaires implemented, they were provided in advance with a drafted SWOT analysis summarising the main findings from the questionnaires' implementation.

The methodology used for the Data Collection was:

a.) Collecting innovative technologies

The data collection was defined in different steps:

- Definition of keywords for search engines
- Web-browsing
- Review of EU and national action plans, papers surveys
- Review of EU and national R&D projects and programmes
- Taking part in workshops, congress, symposia etc.

b.) Completing the list of innovative technologies

In the project, six thematic technology fields in total have been defined. They are categorized in the following topics:

- **Vehicle Technologies**: Greening, New Materials, ICT
- **Infrastructure Technologies**: Co-Modality, Safety and security, ICT

The next step was to identify of the application fields. In this context it was differentiated in the topic of transport mode and transport type:

- **Transport Mode:** Road, Rail, Water
- **Transport Type:** Passenger, Freight and Logistics

c.) Analysis of innovative technologies

The key aspects in this point are shown as follow:

- Identification of the related policies
- Definition of the criteria for analysis
- Assessment of technologies against the criteria defined
- Rankings and selection of technologies for analysis
- Identify best practices
- Analysis of paths of how innovation spreads into the market

d.) Questionnaires

Concerning the questionnaires, following tasks have been done:

- Design of questionnaires
- Surveys among key players
- Data recompilation and analysis
- Conclusions of innovation performances

e.) Expert Panel

The main task of the expert panel is to discuss and validate the preliminary conclusions of the analysis. The results of the discussion and validation process are the basis for elaborating final recommendations about identification of best practice for market adoption.

The results were presented on slides (cf. D3.1) with graphs and tables in order to make them more understandable. The Expert Panel Meeting I was conducted in six chapters:

1. General presentation of POSMETRANS
2. Description of technologies analyzed
3. Description of criteria for assessment
4. Main conclusions of the analysis
5. Main conclusions of analysis of questionnaires to stakeholders
6. Discussion with experts

2. Summary of Expert Panel Meeting discussions

Short introduction by Robert Gohla (SEZ)

- **Presentation of POSMETRANS project (Robert Gohla)**

  - ✓ POSMETRANS objectives
  - ✓ POSMETRANS Work Packages
    - WP 1 → Definition of methodology, identification of technologies and policy measures
    - WP 2 → Identification of key players in innovation
    - WP 3 → Analysis of how innovation spreads into the market
    - WP 4 → Analysis of how innovation could be stimulated in networks
    - WP 5 → Analysis of the impact of policy measures
    - WP 6 → Conceptual framework for policy measures
    - WP 7 → Promotion and Dissemination
    - WP 8 → Management

- **Objectives of the Expert Panel Meeting**

The main objectives and expectations of the Expert Panel Meeting were explained to all participants.

2.1. Short introduction of participants

In this section all participants briefly introduced themselves. All participants mentioned their field of expertise as well as the organisation they were representing.

2.2. Presentation of the findings of the analysis and the survey

In this section Juan Sáenz-Arostegui presented the findings of the POSMETRANS analysis and survey. The topics of the analysis provided a background for the following discussion (cf. Slides in the appendix)

2.3. Contributions of the participants

Different questions have been discussed. Questions and personal comments of the participants are shown as follow:

1. **Are the criterion studied enough for innovation analysis? Should they be weighted with importance?**

- Specific weights are different in different nodes (ship technology ≠ railway technology ≠ road technology). We tried to find common weights for all transport nodes. Why was aeronautics not considered? → Due to higher quality (see Q. 2)

- The criterion “Price” is missing. The price is directly related to the involvement of companies and to the innovation (e.g. tyres).

2. **Should projects aimed at technology transfer and the identification of best practices be (better) promoted?**

- Good example from Krakow → CIVITAS programme / smooth technology transfer (public transport available by phone). Such programmes give SMEs the possibility to work first with a small consortium to implement the product / technology in another country → smaller projects focussed on SMEs are better → EUROSTARS programme.

- It would be good to know, which technologies can be transferred.

- Yes – the more the better: Dissemination. Very important to communicate the project results and organise a workshop → enable also stakeholders to meet on a common subject.

- The main motivations for innovation are the customers. A good project is also the one that has to be conducted without funding → should be taken as criteria for EU.

3. What are the main barriers for SMEs to innovate in transport sector?

- Nowadays, many SMEs have an innovation strategy and structure; they do not know why they should more innovate. Furthermore, their access to information is problematic, as they have limited collaborations with research institutes and public bodies. They also don't have any access to external financial resources, due to the fact that they don't have any money for trainings of the employees. They are limited in achieving financial resources, as they only get limited information about available funding programmes.
About the survey: the numbers of the interviewed stakeholders should be larger. For the most part, the weighting is not good. The innovation culture in the companies is essential.

- The access to venture capital is not available. Often the innovation is funded but not the implementation (the costs are 5 times as high as the initial development), as there is a lack of co-financing. Decisions are made by the board of management, which are not the individuals who should make decisions concerning innovation, as the priorities are different (e.g. business plan). There should be an innovation manager or trend scouts. Innovation is often not the focal point. EU funding is not targeted at SMEs, but at large companies. The achieved surveys are too little, should represent at least 10% of the whole SMEs in EU in order to achieve a representative sample.
→*Critique*: we cannot interview 10% of all SMEs in Europe. The goal of the project is to identify cases of best practices.

- *Critique*: best practices cases have not been explicitly named yet. The number of the surveys should be increased. Not only good practices, but also bad practices should be identified, the numbers may mislead.
- The financial aspect is missing.
- The human aspect should not be forgotten → Trainings! Human aspect should also be considered concerning the adaption of new technologies.
- Risk management should be a priority. Risks lay in the future, when the technology is implemented, but it still needs to be financed on the long term as well.

- More surveys are necessary, at least more than 50! Large Companies should also be questioned (25% of the revenues included in this section of the survey go especially to logistics). Customers should specifically be integrated, as they determine the conditions. There is also a problem with the resources, not only in the development, but also in the implementation.

- Culture of employees → training in innovative solution is missing when it comes to ICT
- Price of development of the innovative concept/product
- The access to / for funds is limited → if necessary, best practices must be asked again.

- The average number of employees in SMEs in France: 50. The size of the company is relevant regarding the opportunity for collaboration.
e.g. Small companies with 5 employees who have 3 clients ≠ medium-sized companies with 50 employees ≠ large companies with 250 employees who have 3000 clients → large companies have more opportunities to promote collaboration and build new cooperation. Their gain of research project → reinforce link with existing clients and acquire other clients. Subject should be sharpened, precise and with immediate application i.e. no broad subjects.

- SMEs are often the last link in the value chain. The speed of development often overstrains SMEs.

4. In your opinion, are research strategies / agendas in compliance with the needs / demands of users?

- Strategies don't define the needs of users (frame level).
- Very important to speak to customers / end users e.g. from municipality in Krakow about the transport for people with reduced mobility (for e.g. elderly people) → e.g. problem with ticketing machine.
- Strategy and agenda are no that detailed and it is the job of the projects to define the need afterwards (demand / analysis missing; user-needs analysis missing).

5. Should policy measures aim at minimising the risk of innovative technologies?

- No, the decision should lie by the SMEs / industry, these are the specialists. It is not the aim of policies; it is the job of specialists.

6. **Should external costs be considered in the transport prices in order to promote co-modality?**

- Yes, the condition of the market will change and this will definitely be an issue.

7. **How Europe should face decarburisation of transport to lead this change?**

- The development of biofuels could be one solution. Another is a technological revolution in engine construction → nowadays there is only a 40% efficiency which must be improved. For SMEs, the problem is how to use the energy environment-friendly. In Poland, there are no profits for environmentally-friendly work → encouragement and motivation for innovation is not given.

8. **What do you consider as key factors to be the best innovative organisation in the transport sector?**

- Services are very important and should be significantly considered.
- Life cycle analysis and life cycle costs are important (nowadays only part of life cycle is taken into account)
- It is important not to think only in terms of the product, but also in terms of services e.g. service of taking freight from point A to point B → before: only rolling stock, now: rolling stock + ticketing + management system solution i.e. full service.
- There are enough funding programmes, the problem is the measurement of risks → a market analysis should normally be done. Risk analysis is crucial → products & services are important.

9. **Please identify cases of best practices for Public-Private-Partnerships (in particular how to improve research / industry partnerships in order to encourage applied research and its implementation in industry)?**

- The problem is the long-term sustainability (e.g. E10 fuels: engines are not ready to use the fuels.
- Another problem is the end of life management e.g. recycling of batteries → not addressed enough → think global (i.e. do not only sell cars, but sell transportation!)
- Big companies should play a decisive role in this issue, because if there is any insurance that the technology will be adopted, the investment for SMEs would not be worst.

3. Conclusions

3.1. Summary of experts observation

- The sample size of survey is too small to evaluate the market potential of innovation, but the cases of best/worst practices gave a good idea of what should be improved regarding the cooperation possibilities between the different stakeholders in order to promote innovation.
- Good analysis although it is not easy to evaluate the innovation potential in this sector.
- SMEs often don't trust themselves to invest in innovation because they cannot afford the risks if the new technology will not be implemented or not successful.

3.2. Recommendations

- ✓ A similar survey and analysis would be very interesting and instructive in the sector of aeronautics.
- ✓ The information about funding programmes should be better disseminated in order to motivate SMEs to invest more in innovation; therefore, the access to those programmes should be easier for SMEs.
- ✓ SMEs should promote new collaboration with large companies
- ✓ Regarding R&D projects, the project partners should more disseminate the results in order to promote innovation and motivate new stakeholders to build new cooperation.
- ✓ A market analysis about risk measurements in the transport sector should be done.

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4. Appendix


Innovation in TRANSport
POSMETRANS
ICT (vehicles)
The main driver in ICTs implantation in vehicles, is to complement the human deficiencies and integrate perfectly the vehicle and the human in the control loop, making the driving easier, safer and more efficient regarding the energy usage and the environmental point of view.
Subgroups
Technologies
DRIVER-ASSISTANCE SYSTEMS
Inter-Vehicle communications
Anti Lock Breaking System (ABS)
GPS devices
Adaptive Cruise Control (ACC)
Adaptive Headlights
Lane Change Assistant / Blind Spot Detection
Driver Drowsiness Monitoring and Warning
Electronic Brake Assist System
Electronic Stability Control (ESC)
Gear Shift Indicator
Lane Departure Warning
Night Vision
Obstacle and Collision Warning
Pedestrian/ Vulnerable Road User Protection
Tyre Pressure Monitoring System (TPMS)
Lateral support system
AWAKE system
Human Machine Interface (HMI)
Ultra wide band (UWB) automotive radar (SRR)
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Innovation in TRANSport
POSMETRANS
Co-Modality
Co-modality is the use of different modes of transport on their own and in combination in the aim to obtain an optimal and sustainable utilisation of resources.
The objective of co-modality oriented technologies is to make easier the shift of one mode to another, and reduce any inefficiencies susceptible to occur in these shifts.
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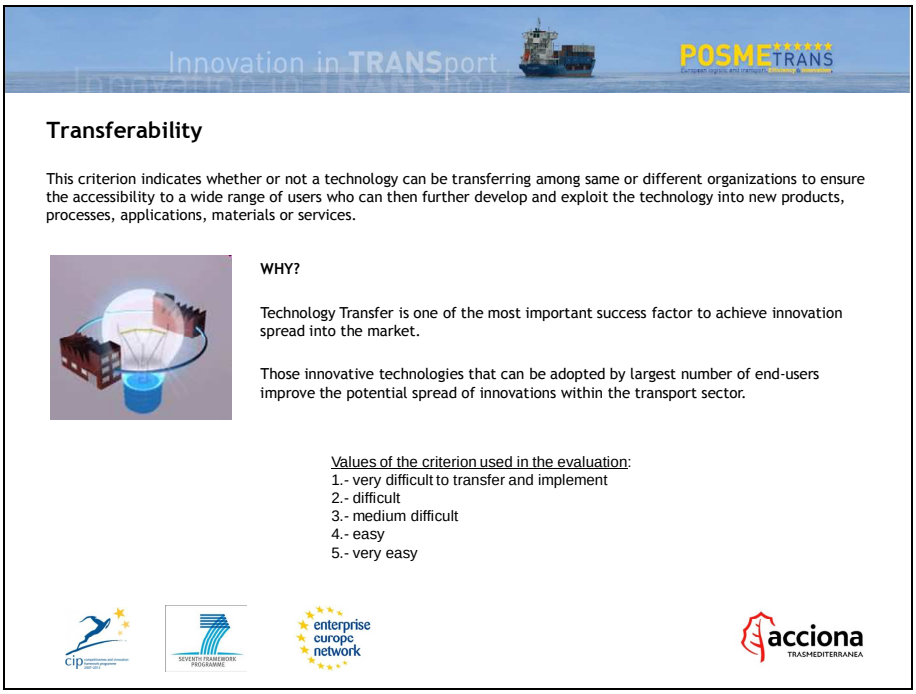

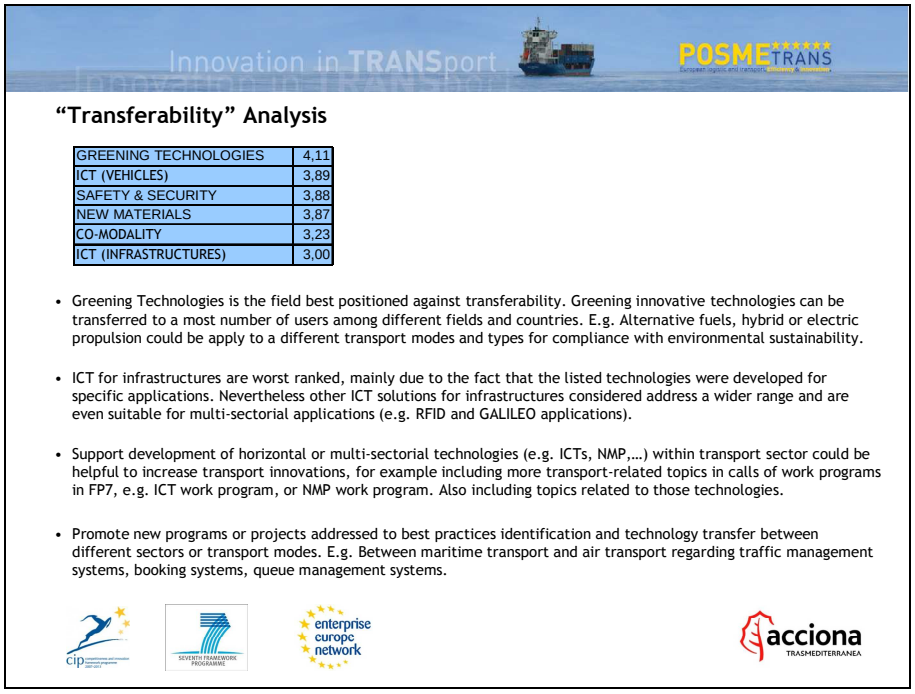

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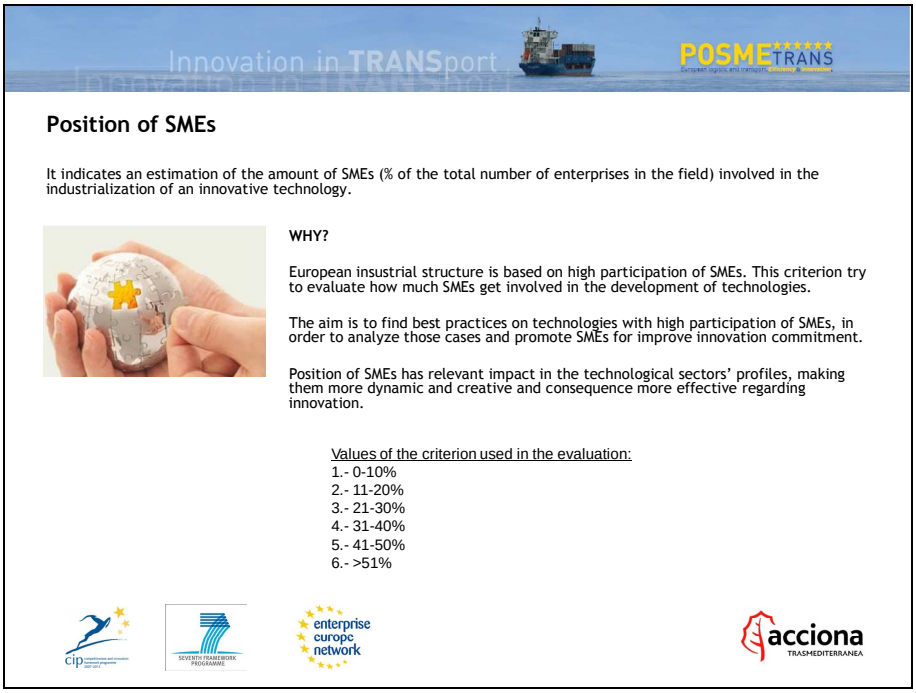

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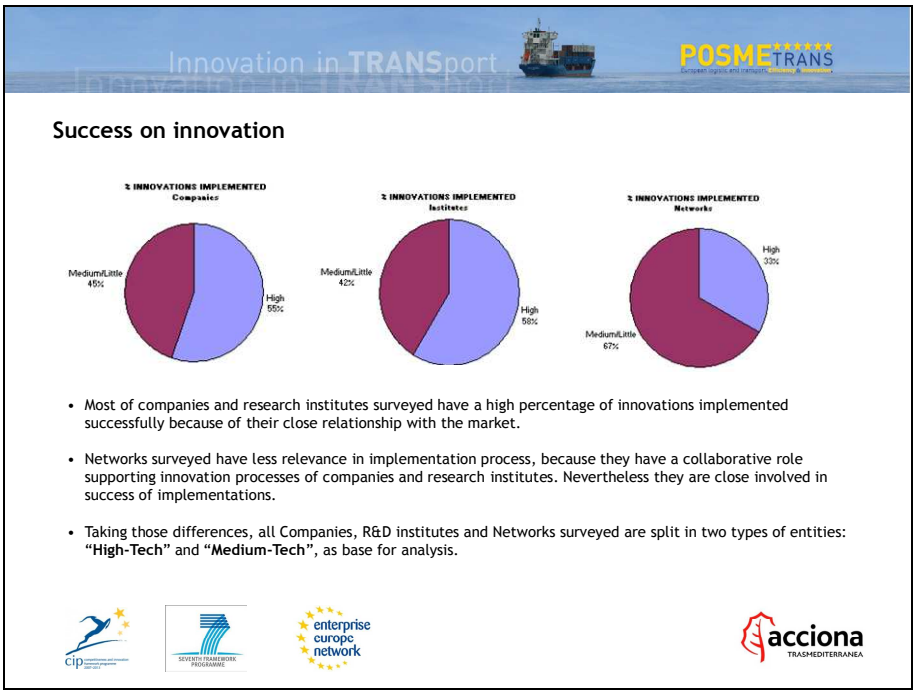

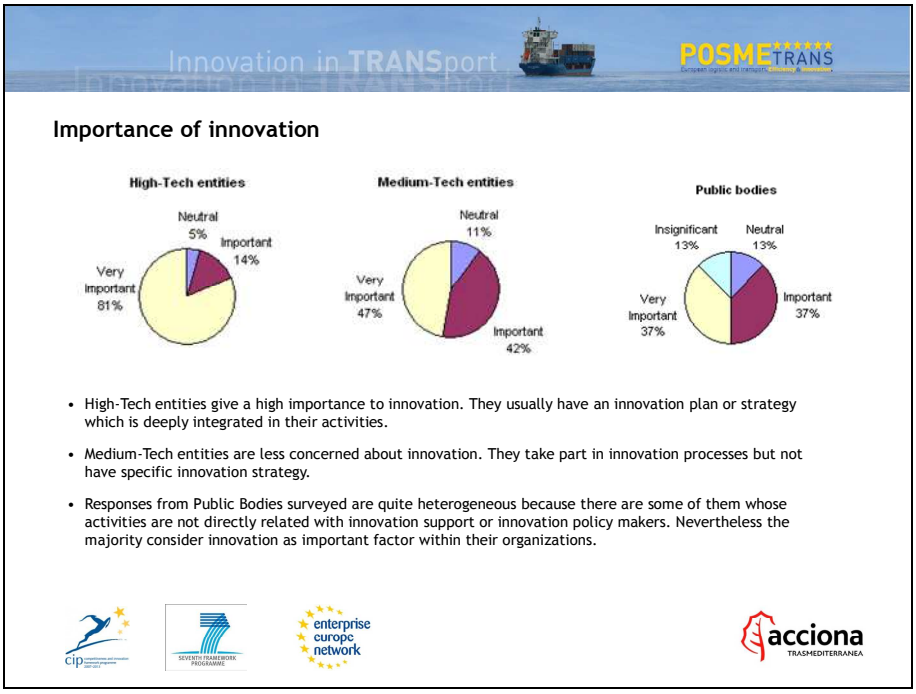

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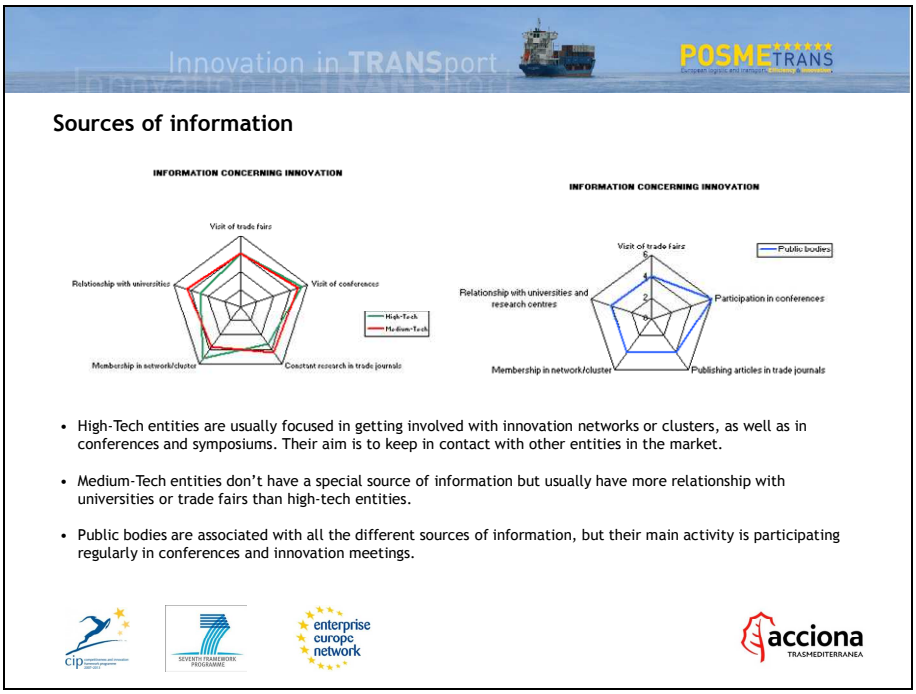

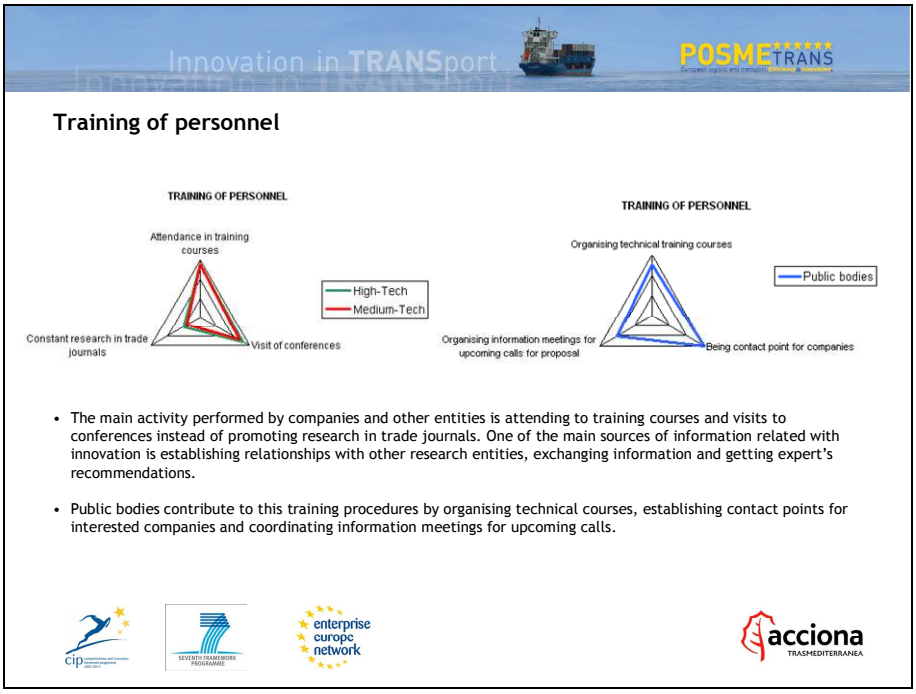

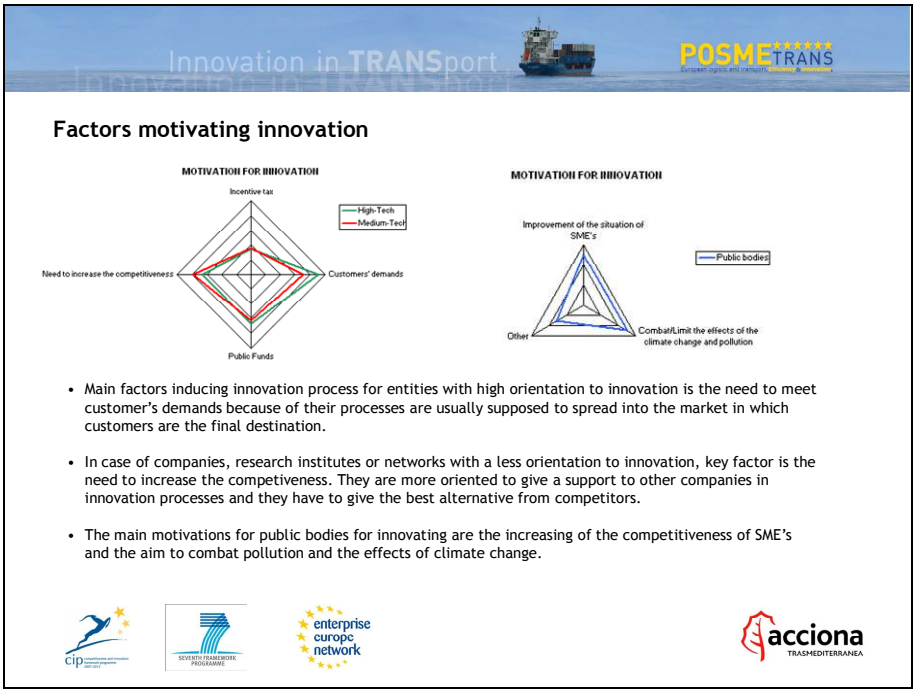
Innovation in TRANSport
POSMETRANS
Factors motivating innovation
MOTIVATION FOR INNOVATION
Incentive tax
High-Tech
Medium-Tech
Need to increase the competitiveness
Customers' demands
Public Funds
MOTIVATION FOR INNOVATION
Improvement of the situation of SME's
Public bodies
Other
Combat/Limit the effects of the climate change and pollution
• Main factors inducing innovation process for entities with high orientation to innovation is the need to meet customer's demands because of their processes are usually supposed to spread into the market in which customers are the final destination.
• In case of companies, research institutes or networks with a less orientation to innovation, key factor is the need to increase the competiveness. They are more oriented to give a support to other companies in innovation processes and they have to give the best alternative from competitors.
• The main motivations for public bodies for innovating are the increasing of the competitiveness of SME's and the aim to combat pollution and the effects of climate change.
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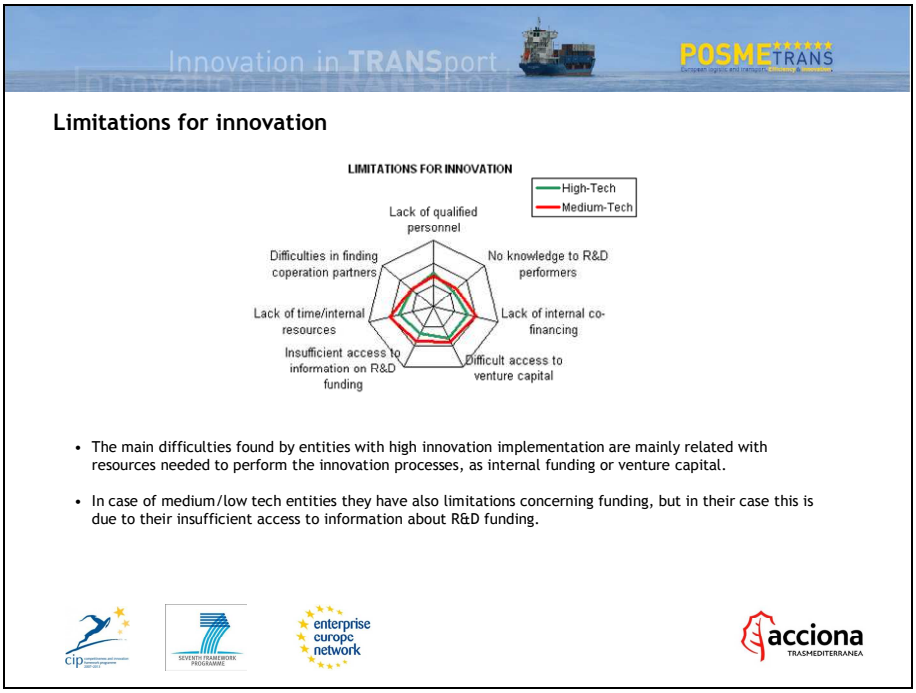
Innovation in TRANSport
POSMETRANS
Limitations for innovation
LIMITATIONS FOR INNOVATION
High-Tech
Medium-Tech
Lack of qualified personnel
No knowledge to R&D performers
Lack of internal co-financing
Difficult access to venture capital
Insufficient access to information on R&D funding
Lack of time/internal resources
Difficulties in finding coperation partners
• The main difficulties found by entities with high innovation implementation are mainly related with resources needed to perform the innovation processes, as internal funding or venture capital.
• In case of medium/low tech entities they have also limitations concerning funding, but in their case this is due to their insufficient access to information about R&D funding.
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