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 4.3

Network policies for innovation including the analysis of the survey and validation/identifying of “best practices” in relation to different policy measures

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Due date of deliverable: 30.05.2011 **Actual submission date:** 07.11.2011

Revision: 1.0

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)	

Project co-funded by the European Commission
within the Seventh Framework Programme (2007-2013)

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1. SUMMARY

This report has the intent to present the conclusions of the results of the Experts Panel Meeting, which took place on 11th May 2011 at the Transport & Logistic Fair in Munich (Germany).

Previously, an introduction will be dedicated to a short analysis of the kinds of networks, which have been considered for the POSMETRANS survey, with particular attention to innovative clusters, as they result to be among the main addressees of European policies for innovation, being recognized as key actors on this purpose.

An overview of the main policy measures for networks will follow, considering major European programmes on this regard, and their linkages with national policies. To conclude, an analysis will be conducted concerning the methodologies and tools mostly used by networks to support innovation processes. On this concern, the survey will highlight as a critical aspect the frequent lack of a precise strategy for innovation. Anyway, the services most required are related to networking and technology transfer activity, as well as to information and representative functions. In order to provide such services, networks mainly use tools such as technology missions, participation in trade fairs and platforms. In particular, platforms result to be widely funded in the framework of several European programmes: that is why some good examples of successful technology platforms will be provided, with particular attention to models specifically related to the Transport and Logistic sector.

Then, the crucial section of the deliverable will have the aim to present considerations and outcomes from the discussion on the POSMETRANS survey, reporting the remarks and the considerations suggested by experts recognised worldwide, in order to provide a general framework for the improvement of network-related measures dealing with laws and regulations, action plans and guidelines and funding programmes.
Laws and regulations will result to be the measures, which mostly influence the innovation processes, considering the significant advantages and/or disadvantages, which may derive to networks and their members complying with regulations. Thus, a reflection will be made to the relevance of networks regarding their lobbying activity, as they can fill the gap of knowledge of ministries and public bodies regarding the field of experience. The need to enhance policies in this direction will be stressed, with particular suggestions on how to involve SMEs in such processes, and how to better represent their needs during the phase of policy making.
Following, the reflection will be focused on action plans and guidelines, starting from the critical aspect related to the frequent lack of continuity in network policies, due to political reasons, while the need for a rationalization of the resources will be stressed. Referring to SMEs, the discussion will point out the necessity of further branding efforts aimed at increasing networks visibility, in order to make companies more aware of networks services, and, on the other hand, to actually set up networks according to concrete SMEs needs.
A specific reflection on the TEN -T programme will then be taken over, pointing out the need to include in such big investment programmes also specific measures for R&D activities: the discussion on this point will also be focused on how to increase the involvement of SMEs in such strategic projects.
Finally, talking about funding programmes, the crucial aspect of self-sustainability of networks will be highlighted, thinking about how to properly balance private and public funds. Referring to SMEs, it will be warmly suggest involving them in short-term projects, which can be better retailed on their way of thinking, to enhance their awareness on the benefits coming from the participation in EU projects.

The last section of the report will then present a comparative analysis of the questionnaires collected in order to identify further Best Practices for the identification of key factors for the development of innovation through the networks.
Among the most relevant aspects which emerged from the questionnaires, we can mention the attention to the previous analysis of users demand and market requirements; the importance to create a network of good relations among companies, public authorities and research centres and associations, allowing constant discussions and exchange of ideas among them, both at local and transnational level and, once again, the necessity to strictly consider the self-sustainability of the technologies developed, and the relevance of platforms for the dissemination of results.

2. INTRODUCTION

The intent of this deliverable is to present the conclusions of the discussion about the POSMETRANS survey, whose results have been validated through an expert panel session which took place on 11th May 2011 at the Transport & Logistic Fair in Munich (Germany).

Experts were asked to discuss the results from deliverable D4.1, which was focused on an analysis on *"How innovation could be stimulated in networks"*: On this purpose, it is the case to remind that, in the framework of the POSMETRANS project, talking about networks the consortium refers to the following grouping structures at local, national and/or international level:

- clusters
- platforms
- SMEs Associations
- technology parks

For the very specific purpose of the POSMETRANS survey, six examples of networks have been taken into account, which are considered significantly active in the field of innovation.

Several distinctions may be done referring to different kinds of networks. First of all, networks may be classified on the base of their foundation: on this purpose, we have remarked that in most cases a network, association or cluster has been typically founded on a voluntary basis, probably because of a need for gathering potential and complementary competences. However, 50% of the cases reflect also a mandatory approach, normally in the framework of funded projects aimed at promoting innovation and development.

As far as their nature is concerned, their members may belong to several categories, although mainly SMEs and public bodies are generally represented. However, many of them involve organisations of different nature.

In terms of investment, generally speaking it is observed that the financial support is mostly represented by the contribution of each one of their members, i.e. registration fees. More than 50% receive also public funds through national funding schemes. But apparently, on a proportional level low engagement of European funds is remarked.

Furthermore, different kinds of networks may be identified as far as their geographical dimension is concerned. In fact, they may operate at regional, national or continental level. Referring to the survey, those active at regional or European level seem to be more effective than those acting at national level only.

Another distinction has to be made according to which sectors networks deal with. In fact, they may promote innovation with a transversal interest in different sectors, or they may concentrate on a specific sector of interest. In this regard, the POSMETRANS survey made it obvious that, dealing with the transport sector; sectoral networks seem to have stronger effectiveness than general ones.

The POSMETRANS analysis intends to provide a specific focus on network policies aimed at offering support to SMEs in their innovation processes. On this purpose, it came up that many kinds of networks among the above mentioned ones (i.e. SMEs Associations) seem to be created, and used, for very precise purposes: in particular, most of them are mainly addressed to support SMEs in accessing public funds.

On the other hand, specific considerations have to be made about clusters. Clusters are defined as "geographically proximate groups of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities".

They are generally recognized as key actors for innovation, so that they became the focal point of many new policy initiatives in the last few years: clusters are important, because they allow companies to be more productive and innovative than they could be in isolation. For this reason the European Commission is investing many resources on cluster policies, as it will be further highlighted in the next paragraph.

3. General Overview

3.1 Analysis of policy measures for networks

In an increasingly global competitive market clusters, being the most significant current networking structures, seem to be more than mere user-producer linkages between industries. They are considered drivers in today's knowledge society comprising networks of interdependent firms, knowledge-producing institutions, intermediaries and related customers, all linked through complex value-added chains.

In recent years, European and national policy measures have increasingly targeted innovative industry clusters. While different instruments and mechanisms in support of clusters are being applied in different places, they are increasingly being used to foster structural change, to revitalise certain industrial sectors such as maritime industries, and to provide a framework for other policies such as research, innovation and regional policy. DG Enterprise and Industry supports this aim through the **CIP financial instruments** and through policy cooperation under the **PRO INNO Europe** initiative, which aims to become the focal point for innovation policy analysis and policy cooperation in Europe, with a view to contribute to the development of new and better innovation policies in Europe. To achieve this, PRO INNO Europe provides analysis, benchmarking and development tools and activities to enhance the performance of innovation policy and support measures and to further cooperation between innovation policy makers across Europe. Furthermore, DG Enterprise and Industry also promotes several partnership platforms between European innovation professionals, e.g. under **Europe INNOVA** initiative, which aspires to exploit Europe's innovation potential as effectively as possible, by becoming the main pan-European platform for innovation professionals. The goal is to enable them to discuss, develop, test and exchange 'better practices' in support of innovators, thus

contributing to a better understanding of the innovation patterns in different sectors and between different actors, too. In fact, it has to be noticed that, apart from companies, also public authorities gain great value from being part of networks in terms of policy driving, as networks themselves, if well structured, bring out needs, and draw the real scenario towards public authorities and policy makers.

As clusters offer a favourable business environment that stimulates innovation and growth, they are increasingly recognized and supported as drivers of economic and regional development. In this context, also the abovementioned initiatives are aware of the fact that stronger transnational cooperation between clusters has to be enhanced in order to raise the international profile and to complement strengths of the cluster. That is why cluster cooperation is enhanced at European level through several measures; most of them included under European initiatives such as PRO INNO Europe and Europe INNOVA.

These initiatives intent to work closely together with other EU initiatives active in this field, in particular the **Regions of Knowledge** initiative under the 7th Research Framework Programme and cluster projects implemented under the European Territorial Cooperation objective of Cohesion Policy such as under INTERREG IV / **Regions for Economic Change**.

On the other hand, **Member States** result to be constantly invited to continue integrating cluster policies into their national reform programs within the **Partnership for Growth and Jobs** and to report annually on their achievements. This helps policy makers to further shape successful cluster policies at national and regional level and to encourage the sharing of knowledge and good practices across the EU. In this context, it is worth stressing that the new generation of cohesion programs is closely aligned with the National Reform Programs and provides a significant contribution to their implementation.
Moreover, striving for excellence also requires national and regional support programs to better take into account the trans-national dimension of clusters, within the EU and beyond.
To support better upstream coordination between Member States at regional and national level in the planning of new cluster initiatives or the further development of existing ones, the Commission therefore encourages Member States and regions to work more closely together at policy level. In this context the activities of the **European Cluster Alliance** are being developed for supporting mutual policy learning, sharing best practices and experiences, and jointly developing common practical tools, which will contribute to the development of better and more efficient cluster policies within the EU, in order to create stronger linkages with other clusters offering complementary strengths. In fact, changes in the global economic environment are making cluster linkages more important: as firms internationalize their activities, it is essential that cluster initiatives and organizations, which support them, internationalize too.
Currently, half of the European cluster programmes include some sort of cross border activity, but only a minority is defined as primarily cross border programmes, while a large number of programmes include export projects or other activities with cross border elements. There is a scope for further strengthening cluster excellence through trans-national cluster cooperation at business level. This includes exchanging knowledge, market intelligence and qualified staff, sharing access to research and testing facilities, and developing new and better services to clustered firms, in order to contribute to the emergence and growth of world-class clusters, and to enhance cooperation among them.
On this purpose, the above-mentioned **“Regions of Knowledge”** is an example of an initiative having the goal to boost cluster cooperation in the EU, especially in areas with high innovation potential. Also the **European Cluster Alliance** is to be mentioned again as an initiative for supporting mutual policy learning, sharing best

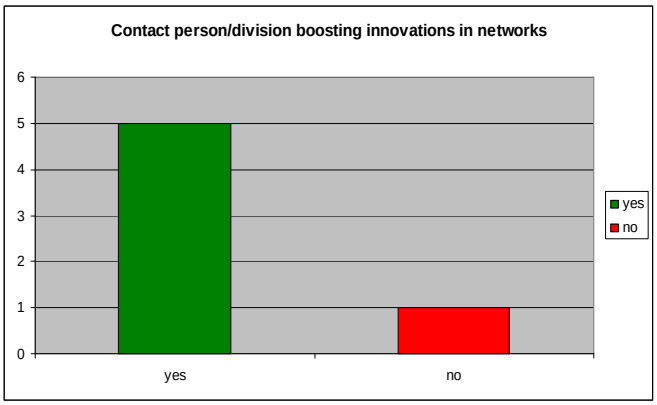
practices and experiences, and jointly developing common practical tools, in order to achieve better and more efficient cluster policies within the EU.

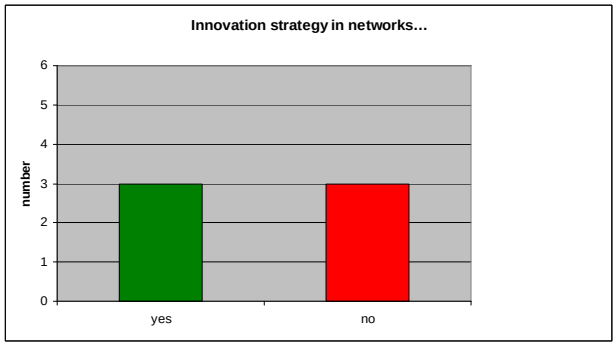
To conclude, in order to fully reap the benefits of networks, the EU should step up its assistance to Member States and regions to promote excellence at all levels, and encourage cooperation across the EU in order to strive for more world-class clusters. On the other hand, networks should be open, flexible and attractive to the best talent and expertise available worldwide. Efforts at regional, national and EU level should facilitate the establishment of closer and more efficient linkages between networks as well as with leading research institutes within Europe and abroad. At the same time, cluster organizations are invited to improve their support services and to better integrate innovative SMEs into clusters.

3.2 METHODOLOGIES FOR COOPERATION

Through the analysis of methodologies to stimulate cooperation among networks and network members, the POSMETRANS survey often highlighted, as it results from the graphs below, the lack of a precise innovation strategy in networks, which is surely a critical aspect, and an obstacle for rapidly get to effective results in terms of the innovation achieved.

FIGURE 1 - CONTACT PERSON AND INNOVATION STRATEGY





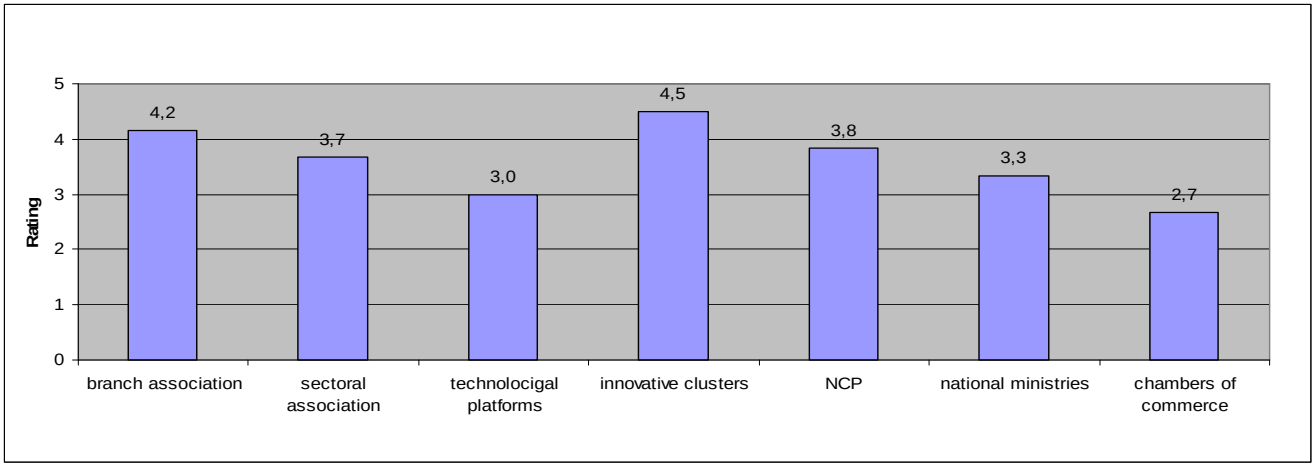
In any case, some good examples of networks that are successfully operating in this concern have been identified and will be reported in this paragraph.

Furthermore, the intent of this paragraph is to analyze the main strategies implemented by networks to foster and stimulate innovation. Through the research done, it emerged that networks principally offer the following services:

- Networking and partner search
- Business networking and technology transfer
- Information (on funding opportunities, laws/regulations, guidelines, etc.)
- Representation

The graph below recalls the most relevant subjects who can offer information services in order to stimulate innovation: the principal ones are innovative clusters, followed by branch associations and sectoral associations and NCP.

FIGURE 2 - RELEVANT CHANNELS CONCERNING INFORMATION



Again, due to their own nature some of them are specialized just in specific services, having a unique target, which can be either industry or academy/research centres, while some others can have as a goal to be an intermediary between all these different actors. This second approach results to be stressed by many policy makers as a successful and effective strategy. In fact, the need to involve and put each other in touch with different innovation actors, who can stimulate each other is always more recognised. On this purpose, it must be noticed that also public authorities seem to get a great value from being part of networks in terms of policy driving, as they get the possibility to bring out needs and strengths of the context in a more direct way.

A good model on this purpose is the **Enterprise Europe Network**. Such a structure successfully offers services like customer management, brokerage events and partner search on a transnational basis, with a specific focus on SMEs. Member organisations include chambers of commerce and industry, technology centres, research institutes and development agencies. Most of them have been supporting local businesses for a long time, so that they have the great advantage to be strongly aware of their clients' specific strengths and needs and, on the other side, to be closely linked with their partners all over Europe, and with the European Commission, too.

To pursue their goal to increase innovation, networks mainly use tools such as **technology missions**, **participations in fairs**, and, above all, **databases and platforms**. Many of them have been promoted in the framework of funding and pilot projects, and some examples have been further analyzed in the survey.

A good example is the **Knowledge Vine networking system**, which is operated by the **University of Manchester Intellectual Property Ltd** in the UK and has been developed in partnership with the **Nordic Technology Transfer Network,** and reserved for **TII (Technology Innovation International)** members**.** Previously known as the "The Knowledge Pool", the Knowledge Vine system was started in October 2006 to support the process of technology commercialisation in the University sector, and it is progressively expanding into other business sectors, in order to effectively glue together knowledge based business communities in potentially any sector.

The Knowledge Vine web platform groups together several communities, which operate with a geographical or technological focus. It functions as a "self-help" forum to allow members to consult each other on questions referring to their technology transfer and innovation support work.. It also is characterized by being lightweight, simple and entirely needs driven. In fact, as users are only allowed to communicate their information with a single sentence question, the only traffic is from someone needing something specific, who communicates it extremely clearly.

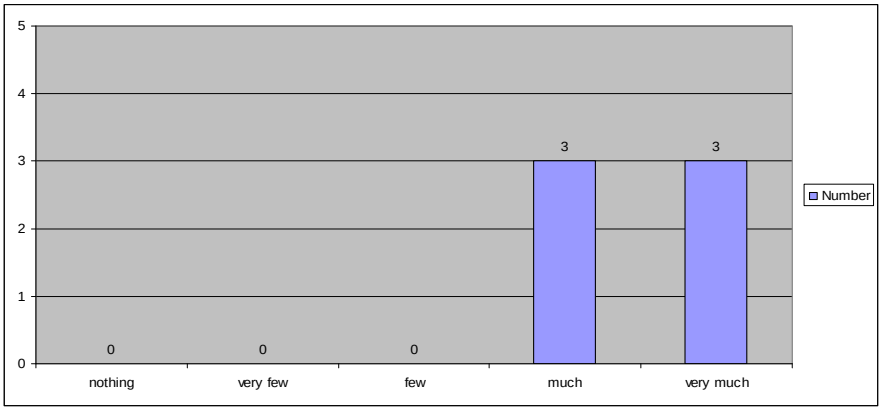
TII is also one of the three founders of **Proton Europe** in its initial phase, and operates in partnership with it. ProTon Europe is the pan-European Association of Knowledge Transfer Offices (KTOs) affiliated to universities and public research organizations. It first started its activities in 2002 as a thematic network, funded by the European Commission under its Gate2Growth initiative, and was constituted as a not-for-profit legal entity at the end of 2005. Its goal is to promote innovation in Europe by more effective knowledge transfer from universities and other research organisations funded primarily from public resources. On this purpose, the Association makes available for members, via website, good practices and tools, and offers training and professional development through seminars, expert workshops and on-line training tools. Furthermore, it organizes an annual conference on state-of-the-art themes for knowledge transfer professionals and covers a representative function, too, by purposing policy and position papers on subjects affecting the knowledge transfer profession.

As far as specifically concerns web portals and platforms focused on the transport and logistic sector, a couple of examples can be mentioned.

SMART, a web portal that offers to all the organizations operating in the Surface-Transport sector support in being involved in RTD research projects at European level. The web portal provides networking and partnering opportunities, as well as useful information and tools to enhance the active participation in research programs. Through navigation into the different sections of the SMART portal users may have access to specific services tailored to their profile and needs, thanks to the innovative approach of "metacluster" matching concept.

Finally, in the framework of the **bestLog Project**, the European Commission funded, as a key outcome, the creation of **ELAbestLog portal**, an emerging European platform for sharing best practices in logistics, and to engage its communities in an active dialogue with major stakeholders around Europe. A crucial matter is the long period sustainability of this platform, after the end of the funding period. That is why ELAbestLog will be operated as a subsidiary of the **European Logistic Association (ELA)**, and the services are not free. Anyway, the purpose is to keep them to a minimum, in order to make participation affordable.

FIGURE 3 - KNOWLEDGE ABOUT EUROPEAN AND NATIONAL FUNDING OPPORTUNITIES



To conclude, it must be also considered that networks result to be a good source of information on European funding opportunities, which seems to be, as above mentioned, one of the main reasons for the creation of networks, and for their members to use networks services. It is very important, as participation in R&D project is another relevant source of innovation, even if, as it emerged from the POSMETRANS survey, many problems are connected with administrative barriers in this context

Regarding research activities as a source of innovation, partnerships involving different kinds of actors have to be stressed as an essential way to create an integrated innovation system. In particular, it is the case to underline again the added value provided by the good examples of platforms above mentioned, as interactive as possible, and aimed at putting in touch different subjects involved in innovation processes. It is also interesting to notice how often portals and platforms having the goal to allow linkages between different networks and communities from different parts of the world, sharing skills and information worldwide and in any field of interest provide such good examples. Connected to these kinds of platforms, the problem of their sustainability must then be considered: that is why a compromise has to be found between membership fees and their affordability.

4. OVERALL CONCLUSIONS

Considerations and outcomes from the POSMETRANS survey concerning network-related measures and activities have been discussed during the Experts Panel Meeting that took place on 11th May 2011 at the Transport & Logistic Fair in Munich (Germany).

Through the aim of the present deliverable is to report the remarks and the considerations suggested by experts recognised worldwide, in order to provide a general framework for the improvement of network-related measures dealing with laws and regulations, action plans and guidelines, and funding programmes.

4.1 LAWS AND REGULATIONS

In the framework of the POSMETRANS survey laws and regulations appear to be the measures, which mostly influence the innovation processes. In fact, by complying with regulations, networks and their members can both get important advantages and face particular difficulties. The advantages are mainly in terms of new inputs for carrying out research activities, in line with the legislative requests; furthermore, in a lesser degree, by dealing with regulations networks seem also to achieve an increased and better image. However, difficulties are mainly related to increased costs for the networks and their partners in order to front new legislative requests and, above all, to the lack of knowledge about them. As a consequence, it is necessary to reflect on the important role played by networks on this concern, considering the fact that they are involved in lots of lobbying actions (writing position papers etc.).

Actually, half of the interviewed networks seem to be able to have some influence on the legislative process aimed at elaborating laws and regulations. Anyway, the major part of them seem to be involved only as external observer for giving inputs, while just a few of them are actively involved as writers themselves. Then, considering the importance of policies, laws and regulations for the innovation process, it would be essential to find a way to reach a more active participation of networks in the decisional process.

Experts have confirmed such a relevant need during the panel meeting. In fact, they all agreed on the added value of networks in the establishment of political initiatives, considering that they fill the gap of knowledge of ministries and public bodies regarding the field of experience. On this purpose, experts suggested to further enhance the capitalisation of European Technology Platforms, which have been created with the specific goal to take the role of an advisory council for the EU. They provide a framework for stakeholders, led by the industry, to define research priorities and action plans on a number of technological areas where achieving EU growth, competitiveness and sustainability requires major research and technological advances in the medium to long term. So, they develop agendas of research priorities for their particular sector, which constitute valuable input to define European research funding schemes.

The European Commission does not own or manage European Technology Platforms they are independent organisations. However, the European Commission did support their creation and remains engaged with them in structural dialogue on research issues. European Technology Platforms provide a framework for stakeholders, led by the industry; in order to define research priorities and action plans on a number of technological areas where achieving EU growth, competitiveness and sustainability requires major research and technological advances in the medium to long term. They work on developing and updating agendas of research priorities for their particular sector, which constitute valuable input to define European research funding schemes. Furthermore, such platforms foster effective public-private partnerships, providing a significant contribution to the development of a European Research Area of knowledge for growth. In the transport sector we can mention four main European Technology Platforms:

- The **European Road Transport Research Advisory Council (ERTRAC)**: it is the European Technology Platform (ETP) for Road Transport, and its mission is to provide a framework to focus coordination efforts of public and private resources on the necessary research activities.

- The **European Rail Research Advisory Council (ERRAC)**: it was set up in 2001 with the ambitious goal of creating a single European body with both the competence and capability to help revitalize the European rail sector and make it more competitive.

- **Waterborne technology Platform:** created in 2005, it is a forum where all stakeholders from the waterborne sector (sea & inland) define and share a common Vision and a Strategic Research Agenda, driving the necessary innovation efforts forward.

- **Advisory Council for Aeronautics Research in Europe (ACARE)**: launched in June 2001, its main focus is to establish and carry forward a Strategic Research Agenda (SRA) that will influence all European stakeholders in the planning of research programs.

Then, a last reflection has been made about the collaboration between national and EU technical platforms, highlighting the advisability of an increased involvement of National platforms at European level, in order to get useful feedbacks from them for the elaboration of laws and regulation, as it already happens, for instance, with several Spanish platforms. A good example on this regard is the **Logistop Platform**, which has been partially funded by the Spanish Government (Minister of Science and Innovation) and by the European Regional Development Fund (ERDF). In fact, its main objectives are, from one side, to find out R&D needs and capacities of the logistic sector in order to detect its deficiencies and to define a common strategy gathering all members interests, and, from the other side, to act as the speaker with the public administration to promote policies adapted to the defined strategy (definition of National Plans for Scientific Research, Development and Technological Innovation and public calls for R&D). The final result is expected to be the creation and coordination of the critical mass of Science, Technology and Business System agents, so that the encouraged collaboration between the public and private sectors could generate innovation through knowledge development and transfer to the business sector.

4.2 ACTION PLANS AND GUIDELINES

Talking about networks in general, a relevant matter to think about is the real effectiveness of networks that should promote the integration of SMEs and technology introduction. In fact, many networks have been created on this purpose, with a large amount of public money, and it is the case to verify whether they really offer added value. POSMETRANS survey and the expert panel discussion on it stressed some main critical aspects on networks and network policies in Europe. They are mainly related to the frequent lack of continuity in network policies, and to the fact that the number of existing networks seems to be really too huge if compared with their effectiveness. For example, in the case of clusters, the European Cluster Observatory has identified around 2000 statistically significant clusters defined as regional agglomerations of co-located industries and services. So, the need for a rationalization of resources has been stressed.

In any case, networks relevance has been confirmed by experts, who highlighted their importance as intermediary, due to the fact that money sponsors often do not know what they actually want. It must be also considered that at EU level of funding programme, there is often a loss of innovation by lack of communication on the projects and on the real use of their results after the end of the projects.

Furthermore, experts draw the attention to the need for a major communication of what networks actually do, in order to make their work better known by SMEs, and by politics, too. In fact, it must be considered the problem related to the fact that, for any new network, there is a need for public support, which always leads to change networks framework and start again from scratch each time that politics change. It has been the case, for example, of what happened in Baden-Württemberg (Germany): here, before the election of the new green GUT, the sustainability transport network was founded. The principle was good, but GUT was changed and, therefore, the network had to be changed, too.

Experts suggested, on the contrary, that long term funding should be ensured, in order to get more effective results. Moreover, discussing about the statement that politics are for a large part responsible for the birth of networks, they remarked the need to reflect on the fact that clusters created by private initiative often result to be best practices, as they are applied to concrete requirements, which should be the core objective of all clusters.

Finally, it is the time now to consider the impact of the 30 priority projects in the field of transports, which have been identified and funded by the TEN-T programme, and by several other funding instruments, such as the Cohesion Fund, the European Regional Development Fund and the European Investment Bank's loans and credit guarantees.

The establishment of a trans-European transport network (TEN-T) has constituted a key element in the launched Lisbon Strategy for competitiveness and employment in Europe, with the aim to create a single, multimodal network that integrates land, sea and air transport networks throughout the Union, allowing goods and people to circulate quickly and easily between Member States and assuring international connections. Such a goal will also play an equally central role in the attainment of the objectives of the Europe 2020 Strategy, by taking into account the energy efficiency needs and the climate change challenges. In view of the growth in traffic between Member States, expected to double by 2020, the investment required to complete and modernise a well-performing trans-European network is substantial (it has been estimated at over € 1.5 trillion for 2010-2030): given the scale of the investment required, it is necessary to strengthen the coordination dimension of network planning and development at European level, in close collaboration with national governments.

On this purpose, experts draw the attention to the need for such big investment priorities to be linked with R&D, suggesting that e.g. at least 10% of the budget should be used to develop e.g. specific technology. In some cases, at a national level, there are some requirements in order to dedicate a part of the budget for innovation: such a requirement has been fixed, for example, in Spain.

Even if TEN-T projects, for their nature, are not technology driven, in order to implement high quality technology services in those corridors, a clear link between such projects and R&D must be created as soon as possible.

On the other hand, some experts noted the obstacle from the public procurement, as it is required to take the cheapest offer. On this concern, a good example of an efficient adoption of public procurement is public procurement for green cars, which takes place when contracting authorities also use environmental criteria to decide whom to buy goods or services from. An example includes the choice to acquire hydrogen buses for public transport. Greening public procurement rules at EU and national level is seen as a means of substantially, which could also provide a relevant contribution to the placement of new environmental technologies on the market.

4.3 FUNDING PROGRAMMES

Talking about funding programmes, it is significantly important that, in order to participate in European projects, networks develop relationships with other partners, which often are other networks. In particular, the collected data points out that most of them are members of a large one and/or are national branches of a European platform. On this purpose, the need to foster also transnational relationships between networks at the same level, offering complementary skills, or aiming at similar research interests is remarkable. Moreover, talking about research projects, networks should enhance their relationship with research institutes, too, so that the exploitation of research results is strongly assured. On the other hand, SMEs should not be forgotten, as they also may offer an essential help to achieve high levels of excellence and innovation. Networks are suggested to concentrate their efforts in playing their role of intermediaries, in order to get as much synergy as possible between all the actors involved in each R&D project.

Dealing with public funding, it is the case to point out that experts strongly stressed the need for a rationalisation of investments, which has to pay as much attention as possible to the sustainability of the networks to be funded. Such a statement is linked again to the influence of politic reasons on the creation of new networks/clusters: as a consequence, it often happens that some projects start / end exactly while new projects aiming the same start from scratch with other partners. On the contrary, it would be better to foster projects to exploit prior results as efficiently as possible, avoiding funding projects presenting exactly the same goal of previous ones again, which means a significant waste of resources.

That is why, for example, the initiative “Network of excellence” failed: in fact, at the base there was the idea that there should be a business body that should be able to finance themselves after a while. But, without a specific reflection on their sustainability, a long-term own financing was missing, with the result of only one network from FP6 still existing.

Such a problem shows a relevant influence also on the exploitation of good models and best practices. Experts drew out the attention, for instance, on the case of Piedmont Region. In fact, following the examples of French “Pôle de Compétitivité” in the transport sector, the Region created a few years ago 12 innovations poles following this model. On this purpose, it will be essential to deeply reflect on how to structure their next funding, in order to allow the continuation of their activities. Thus, some experts got to the conclusion that, actually, it should be necessary to foreseen a good balance between public funds and own investments of the innovation poles, in order to guarantee their sustainability.

To conclude, experts highlighted as the central point concerning public funding the need to always deeply reflect about what will happen if all the funding for innovation projects will be stopped. On this purpose, they stressed the necessity, for networks, to do not require long-term government subsidiaries and, on the other hand, to pay much more attention on networks and projects sustainability from the beginning of their foundation/start.

5. CONCLUSIONS FOCUSED ON SME RELATED ASPECTS

In the occasion of the Experts Panel Meeting which took place on 11th May 2011 at the Transport & Logistic Fair in Munich (Germany), part of the discussion with experts has been addressed in order to get their remarks on the outcomes on network-related measures with a specific focus on SMEs related aspects, dealing with laws and regulations, action plans and guidelines, and funding programmes.

5.1 LAWS AND REGULATIONS

As above analysed, the results from the POSMETRANS survey show that, laws and regulations result to be the measures, which mostly influence the innovation processes. In fact, from the need to comply with regulations, important advantages and particular difficulties come out for networks and their members, included SMEs.

From this, the importance for SMEs is to be consulted and involved in the legislative process. Thus, experts were asked on how the participation of SMEs can be improved. On this concern, they stated that the current state of the art reveals limited means for SMEs. However, they drew the attention to the fact that there are many national SMEs programmes that should be opened if necessary: such a fact shall be guided by many efforts particularly on a national basis. For this purpose, experts highlighted that networks have a larger influence than single actors and may bring key benefits.

On the other hand, most experts drew the attention to the larger influence that could be offered by networks than by single actors, which represent one of the key benefits that could be provided by their membership. Anyway, regarding this point a further question is: do networks really communicate SMEs needs? In fact, POSMETRANS data on this concern leads to the conclusion that most of networks do not really communicate SMEs needs while they take part to the decisional process.

It is to say that there is not the necessary coincidence between networks interest and their partners. Experts identified this as a critical aspect, and connected it with a lack of sense of belonging to most of networks in which SMEs are involved. In fact, most experts agreed on considering the fact that SMEs often take networks as “functional” and do not really feel committed with them, and on the need to front such a situation a problem. Indeed, they suggested, as it will be further discussed in the next paragraph, that SMEs are better to be involved in small projects rather than larger scale ones, due to their short-term thinking.

5.2 ACTION PLANS AND GUIDELINES

An essential aspect to consider is the importance of facilitating the integration in clusters of innovative SMEs, whose high potential should be considered by policy makers when designing network policies. In fact, clusters offer a fertile environment for SMEs to innovate and develop linkages with large companies and international partners, but at the same time, the integration of dynamic and innovative SMEs into clusters is particularly important for helping them achieve high levels of excellence and innovation.

Networks actually offer a broad range of customized business support services, in particular for SMEs. Such services include facilitating cooperation between SMEs and with larger companies and research institutes; promoting IPR and technology transfer, and supporting internationalization activities. However, the conclusions from the POSMETRANS survey made it emerge that a wide range of services is seemingly proposed by networks but are not much used. Especially, companies seem not to be interested in these services.

Therefore, experts were asked on possible reasons for this lack of interest, and on which are the most effective among the identified innovation boosting services (brokerage events, promotion of the network members, technology requests etc.), to be especially supported by public authorities. On this purpose, experts highlighted as a key problem the frequent lack of real feeling of commitment of networks partners, which sometimes tent to use them in a merely functional way. That is why they stressed as essential the need to provide to networks as much visibility as possible, in order to make their services and initiatives be well known and to make every potential user understand their effectiveness, and warmly suggested further branding efforts on this purpose.

Moreover, experts suggested as a second key problem the fact that networks usually offer broad services, while the focus should actually be on specific services, able to really respond to a specific need, which in fact depends on the targeted sector. So, they stressed the need for further implementation of specific measures for SMEs, well targeted and easy to deal with.

That is why several experts suggested considering that sectoral networks could have a stronger effectiveness on this concern, and, as a consequence, invited policy makers to wonder about the opportunity to support such kind of networks more than general ones.

A good model on this purpose is the Polish situation in the Aeronautic sector. In fact, South-Eastern Poland is famous for its aerospace industry and pilot training centres, which have been a solid base for the creation of the AERONET - Aviation Valley. It is one of Polish Centre of Advanced Technologies, which consists of scientific entities leading of research and development on top-level as well as from other entities involved in research and development works, and implementation of innovation. The main objectives of these centres are the commercialization of new (mostly national) technologies, products and services in the priority fields of Polish Economy.

The AERONET – Aviation Valley was founded in 2003, in a region with a structured background in the aerospace sector, in order to realize interdisciplinary, collective and long-term research and training programme, as well as effective implementation and commercialization of new technologies aimed at the aerospace industry. Thus, it is effectively operating with the main goals to improve the existing manufacturing base, to create a strong and reliable network of subcontractors and a low-cost supply chain, to attract foreign investment, to develop a relationship with other European centres of the aerospace industry, to promote joint cooperation of the industry with universities of technology, and research centres.

Furthermore, the low rate of usage of certain networks services is linked once again to the lack of sense of belonging for most of SMEs, which result out of the fact of not being much aware of what networks could do for them: in fact, several experts confirmed the low awareness of networks' members about why they are members in this grouping, and the need to encourage a more active participation by SMEs. On this purpose, they recognized the relevance of those customized support services for SMEs offered by or channeled through cluster organizations, which are currently being developed as pilot projects to be tested under the Europe

INNOVA, with the goal to broadly leverage them at EU level through the European Cluster Alliance and the Enterprise Europe Network.

The latter has been presented as a good model of network successfully offering services like customer management, brokerage events and partner search, with a specific focus on SMEs. In fact, bringing together close to 600 business support organisations from 49 countries, the Enterprise Europe Network helps small companies to seize the unparalleled business opportunities in the EU Single Market. Member organisations include the chambers of commerce and industry, technology centres, research institutes and development agencies. Most of them have been supporting local businesses for a long time, so that they have the great advantage to be strongly aware of their clients' specific strengths and needs and, on the other side, to be closely linked with their partners all over Europe, and with the European Commission, too.

Talking about effective tools, experts mentioned the use of technology platforms as a useful instrument in order to bring a feedback from industry to the EC. Such a statement leads the discussion to the promotion of technology requests, dealing with the introduction of new technologies into the market. Regarding this point, experts got to the conclusion that it is not easy to involve SMEs in such a process, and neither to find clear feedbacks on its results.

Some proves of such a trouble come, for example, from the field of cargo transport (maritime transport sector), in which there are any SMEs, but only big companies. Moreover, also in the ICT connected with food sector SMEs are often producers, and they follow the regulations, without being much aware of the possible tracer based on ICT available on the market.

Finally, the debate on action plans and guidelines has to consider the impact among SMEs of the above-mentioned 30 priority projects, which have been defined by the EC for European transport networks. Following the general discussion about their links to R&D projects, experts highlight again that such transport networks are not technology driven, while a programme able to link the global strategy with the industry should be developed, with particular attention to SMEs.

Anyway, thinking about SMEs, experts invited also to consider that it often results very difficult to involve SMEs in such global projects, as they do not have the adequate competence, which are required. A clear example on this concern is the Transitects project, whose main task is to go through priority corridors for containers for synchronisation: a big problem was found in subcontracting with SMEs to get them in the project, as they resulted to have a very indirect experience of those priorities.

On the other hand, such a situation can be seen as a further reason to enhance the synchronisation of those strategies with priorities in funding programmes, and to force the combination of an R&D approach with investment programs, in order to make SMEs participation easier, encouraging future projects based on the first ones.

Some experts provided an example of bad practice concerning this point: in fact, in the field of a call for rail terminals, industry was not interested in R&D, while synergies need to be within a common strategy for transport networks, and projects should be evaluated for innovative components.

5.3 FUNDING PROGRAMMES

As a result of the POSMETRANS survey addressed to companies and research organisations, it appears that the latter know more about funding opportunities than companies and, in general, it can be stated that

participation by companies is lower. On this regard, experts observed that most SMEs think that they don't have the capacity to participate in an EU project and think that innovation is for large companies only.

Moreover, SMEs frequently get a bad experience when starting with too large projects: thus, experts suggested to aim at a major involvement of SMEs in small projects, nearer to their specificities, and to their traditional way of thinking, which focuses on short-term, mainly dealing with operational issues. Such projects' intents could be better understood by SMEs, with the result to front another obstacle, linked to the perception of SMEs towards networks. In fact, as already remarked, they often feel misunderstood in their needs and think that networks dismissed them. On this concern, it seems worth building networks from needs, as from various analysis, set in the POSMETRANS survey, but also in the framework of the European initiatives above mentioned, it clearly results that real value networks involving SMEs are always set up from a real need.

To conclude, experts stated that, anyway, it is difficult to measure the success of a network as far as SMEs are concerned. One of the main indicators to consider measuring the success of a network is its sustainability. Policy makers should consider the importance of self-sustainability, either of networks or projects after start-up phases, as this often results to be another critical point. It is then the case to pay much attention to the development of a complete pathway from feasibility studies up to full implementation of projects, and to foresee, in some cases, a commitment by self-investment of companies, thus fostering SMEs, and networks, own capacities.

On this purpose, some experts noted that currently the European Commission is carrying out some work regarding demo/pilot projects. As a concept, there should be a seamless way from one funding opportunity to the next work all along the life of a project (i.e. from the 1st study to the full implementation). However, most companies think that they don't have the capacity to participate in EU projects and thus it is difficult that they spontaneously get committed with. That would imply much effort for creating further awareness on the benefits for them.

6. COMPARATIVE ANALYSIS OF QUESTIONNAIRES FOR BEST PRACTICES

Regarding the POSMETRANS project, the identification of best practices in the field of transport and logistics plays a decisive role in examining different exemplary measures concerning their affect and pervasion for Europe. Best practices examples concerning different technology fields in passenger and freight transport have been analysed in order to identify the key factors for the development of innovation and policy recommendations to achieve this.

Several questionnaires (reported in the appendix) have been addressed to representative experts of networks, companies and research institutes from different countries, in order to provide a comparison of those identified as key factors for networks to stimulate innovation.

First of all, from a significant number of interviews, it has been warmly recommended to previously study how innovation will impact the user demand, in order to foreseen, if needed, accompanying measures to make them more acceptable and, on the other hand, to address the research and the production of technology to the

market requirements. Such a need for a constant demand study has been stressed by representatives of research institutes: in particular, Marco Diana (Researcher at Politecnico di Torino – DITIC) explained how their Department is mainly involved in research aimed at studying possible applications of the new, innovative technology, with special attention always paid to the users demand, as a key factor for the adoption of the technology developed.

Also the General Manager of BEST Institut für berufsbezogene Weiterbildung und Personaltraining GmbH, talking about their investment in further development of existing mature mobile learning technology, agreed on the fact that R&D activities were extremely important in terms of knowledge about the market (state of the art, actual needs, prices etc.), and network support seems to be required on this purpose.

Actually, from other interviews concrete examples of such an issue emerged, both concerning the goods transport sector and the persons transport sector.

Regarding transport of persons, the Université de Franche-Comté (LIFC) developed a system of Flexible public services of transportation, based on transport on demand. The idea has been introduced by the LIFC within the scope of a financing programme of the University for innovative projects. After the first positive results, a new phase of financing started, which allowed to begin with the first test period with prototypes. After that, the services have been outsourced to independent companies. The companies have executed some audits in order to find the best outsourcers.

Talking about transport of goods, a good example comes from CIM spa – Interporto di Novara. In the last three years, CIM spa developed, through a software company specifically committed to the study of technological innovation for logistics, an innovative managing and controlling system for handling and warehousing activities. As emerged from the interview, one key factor for the success of the innovative system purposed actually consists in the fact that its devices result really easy to be used also by the workers in charge of driving cranes, which makes its spread into the market easier.

Furthermore, it has always been highlighted an important relation with public funds, which in the most of cases result to come from European programmes, but also from national ones. On this regard, the service of partner search offered by networks is quite appreciated, as confirmed by almost all the questionnaires collected.

Moreover, talking about public funds and calls for proposal, networks have been recognized to play a relevant role of intermediation between Public Authorities and companies, as they often result to provide support to the phase of elaboration and development of calls and public funding schemes, by inquiring needs and requirements of both parties, and taking over an important mediation among them.

In fact, one of the main relevant key factors to reach success in the innovation processes is generally recognized to be the creation of a network of good relations among companies, public authorities and research centres and associations, allowing constant discussions and exchange of ideas among them, both at local and transnational level.

A good example on this purpose is the Committee for Promoting Info-mobility: Confindustria Piemonte is part of such a Committee, managed by Finpiemonte, whose goal is to analyse all the most interesting initiatives in the sector of info-mobility, in order to identify their potentials and synergies, and to increase suggestions towards Public Authorities concerning successful projects to develop and effective calls and funding schemes to present. In fact, as stated by the General Secretary, and Responsible for Infrastructure, Transports and Logistic Area of Confindustria Piemonte, Piedmont seems to have already achieved such a

profitable condition of strict and good exchange of ideas among the different innovation stakeholders: they are actively in touch the one with the other, and several chances for them to meet each other are provided.

Another good model comes from Open ENLoCC (European Network of Logistics Competence Centres): it was established as a follow up of the "ENLoCC"- project and is an open network of regional logistics competence centres in the field of logistics, run by public authorities or similar bodies. The main task of the network is the international exchange of experience and knowledge between its participants and the promotion of a higher level of cooperation with European institutions, and one of the key goals to pursue is bringing together and networking political and logistics key players, in order to develop the regional economy by solving infrastructural, organisational and technological problems of logistics and transport.

Finally, we can mention 5T (Telematic Technologies for Transport and Traffic in Turin): it is a consortium aimed at implementing telematic technologies to help achieve better mobility in Turin, that emerged from the interviews as a good example of practical cooperation among research actors and public actors, which will be directly involved in the elaboration of public policies concerning urban transport and mobility management.

Talking about public funds, it is worth to stress once again the importance of self-sustainability of the technology developed, which is strictly related to the analysis of the demand, and to their access to the market. Funds are extremely useful for a first development step, but then it is essential to think about further steps, in order to find further funding opportunities, but to identify a concrete market destination, too, so that a self-sustainability could be guaranteed. This is for example the case for the system for transport on demand, presented by Université de Franche-Comté (LIFC), which firstly developed prototypes, and then outsourced the system to external enterprises.

The mobile learning technology developed by BEST Institute is another good model: in the initial development phase it required to be funded, but then a crucial step has been its launch by tailor-made packages for specific needs and requests.

However, a critical aspect must be noticed regarding the support provided by networks to the market adoption of innovation. On this regard, the questionnaires seem to confirm the problem, which emerged from the POSMETRANS survey, connected with the low rate concerning the adoption of SMEs innovation into the market. In fact, from the questionnaires some references to the support provided by networks on this purpose can be found, but almost no one of them presents any examples of good practices on this concern. So, it will be necessary to reflect on a better optimization of resources, and to improve the communication strategy on this purpose, as companies seem not to be sufficiently aware of the provision of such services by networks.

Finally, as far as the dissemination of results is concerned, technological platforms are generally considered to be a useful tool in order to enhance their diffusion on a wide scale. As an example focused on goods transport and logistics, we can mention the UIRNet project, funded by the Italian Ministry of Transport for the design, realization and management of a system, which allows the interconnection of modal interchanges (freight-village). The focus of the project is the realization of a well-based hardware and software platform which shall be open, modular and capable of integrating service providers and freight suppliers directed towards logistics process management and freight transport, with the aim of providing various services through the interaction of the various players involved.

Even though it is specifically referred to Research activities, it is the case to mention the COST programme. In fact, there are specific actions involving "Transport and Urban Development", which are quite important for researchers as, thanks to their bottom-up organization, they are a good chance for networking, in order to

discuss on guidelines to make European research activity as homogeneous as possible in order to have comparable data.

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APPENDIX

QUESTIONNAIRES FOR BEST PRACTICES

Questionnaire for Best practices

- Networks-

1. Project summary

POSMETRANS is a Coordination 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 six 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).

2. Our strategy

POSMETRANS partners are convinced that an improvement of the current situation in surface transport goes through the elaboration of a conceptual framework for European policy makers. After having identified technologies and policy measures, the partners performed a Strenghts, Weaknesses, Opportunities and Threats (SWOT) analysis after having interviewed innovative key players in the sectors of transport & logistics. In order to complete the analysis and elaborate recommendations to the European Commission, best practices should be identified and validated by experts.

3. Main objectives

The main objectives of the POSMETRANS survey are to get answers regarding the following questions:

1. How does innovation reach the market?
2. How is the influence of networks in stimulating the innovation process?
3. Which impact do European and national policy measures have on the innovation process?

Section 1: Network data

Name of the network:	Politecnico di Torino – DITIC
Street:	Corso Duca degli Abruzzi, 24
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Representative's name:	Marco Diana
Position:	Researcher
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Website:	www.polito.it
Date of interview:	12/7/2011
Interviewer's name:	Giulia Maccario

The questionnaire was administrated by:

☒ **Personal interview (face-to-face)**

☐ Telephone interview

☐ Mail

Section 2: Technology Profile

Which innovative technology mentioned below does your network deploy? In which technology field is your network most involved?

ICT	
- Driver-assistance Systems (ACC;ESP)	☐
- e-Learning	☐
- Monitoring (on board computer)	☐
- Transport optimising	☒
- Traffic flows management and monitoring systems	☒
GREENING	
- Electric-drive related technologies (e.g. hybrid; parallel hybrid; battery)	☐
- The usage of alternative fuels (e.g. natural gas; hydrogen; biofuels)	☐
-	☐
CO-MODALITY	
- Integrated ticketing	☐
- New generation of intermodal terminals	☐
- RFID, electronic seals, scanning techniques, automation of administrative compliance	☒
- Logistics-platforms (e.g. TIMOCOM, Box24, Logintrans)	☐
-	☐
SAFETY & SECURITY	
- Personal means of transport and cargo excess control (e.g. barcode systems)	☐
- Location tracking and monitoring systems (e.g. application with GPS; video systems; RFID; traffic security camera)	☐
- Safety systems (dangerous goods monitoring systems)	☐
-	☐
OTHER	
- Use of GPS to monitor passenger trips and characterize the travel demand	☒
-	☐
-	☐

Section 3: How does innovation reach the market?

*Besides existing methodologies and processes, **best practices** are standardized methods which are commonly used where no specific formal methodology is in place or the existing methodology does not sufficiently address the issue. Regarding the **POSMETRANS** project, the identification of best practices in the field of transport and logistics plays a decisive role in examining different exemplary measures concerning their affect and pervasion for Europe. Best practices examples concerning different technology fields in passenger and freight transport will be analysed in order to identify the key factors for the development of innovation and policy recommendations to achieve this.*

1. **Please identify one case of best practices in your activity area related to the development of innovation and describe it shortly in the following table:**

DITIC – The Department of hydraulics, transports and civil infrastructure of Politecnico of Turin, is mainly involved in research aimed at studying possible applications of the new, innovative technology which makes reference to transport optimising, traffic flow management and monitoring systems, and the use of GPS to monitor passenger trips and characterize the travel demand. In fact, special attention is always paid to the users demand, as a key factor for the adoption of the technology developed.

An interesting case to highlight as a best practice concerning the improvement of urban mobility of people in Turin (Italy) is the work performed by the consortium 5T.

5T (Telematic Technologies for Transport and Traffic in Turin) is a consortium aimed at implementing telematic technologies to help achieve better mobility in Turin. The 5T project was launched as a pilot project in 1992 in order to help citizens move round the city more quickly, encourage use of public transport and reduce pollution. The exceptional results of this pilot project, verified by International Organizations, have demonstrated the effective contribution of integrated telematic systems to improve mobility.
Therefore, in 2000 the 5T consortium was transformed into an S.c.r.l. (Limited Liability Consortium Company), controlled by Gruppo Torinese Trasporti (GTT), and with the participation of the Turin City Council. Now it is entitled to the management, integration and development of telematic technologies, in order to improve urban traffic and public transport.
Over the years, 5T has expanded from a simple project into a real operating system that provides citizens, GTT and the City with top class services and capabilities. The system integrates various functions:

- Mobility supervisor
- Traffic and access control
- Public transport
- Information for citizens
- VMS panels
- Information regarding car-parks
- Monitoring of pollution
- Road safety
- Videosurveillance of public transport

For a short description, see http://www.5t.torino.it/5t/en/docs/sistema5t.jspf

It can be seen as a best practice since, beyond standard sectoral implementations of ICT technologies in specific ambits (traffic lights management, priority to public transport, VMS, pollution monitoring…) that are nowadays diffused in most European cities, it has an integrated and holistic vision that allows for the coordination of a wide range of telematic devices to work together for a common goal.

Furthermore, it is a good example of practical cooperation among research actors and public actors, which will be directly involved in the elaboration of public policies concerning urban transport and mobility management.

2. **Please describe your support activities in networking area which help organisations to get a successful innovation. What does your work involve?**

As a research institution, our mission is to provide research and knowledge skills to different stakeholders (transport policy makers, enterprises, end users) in order to implement their plans.

3. **Which key factors do you consider relevant to reach success in innovation processes?**

The key factor that is often overlooked in the transport sector is the need to study how innovation will impact the travel demand, in terms of user reactions. Technological implementations often assume that "things will improve", underestimating for example the importance of envisaging accompanying measures to make technological or organisational innovations more acceptable and therefore adopted.

That is why DITIC Department always keeps as a key focus the users demand analysis, aiming at making public actors aware of it for an effective policy making process.

Section 4: The impact of policy measures on the innovation process

4. In which legal framework did your strategy has been developed or implemented?

☒ **European funding programmes (Please identify which policy measure(s)**

FP7 and COST: specific COST actions involve "Transport and Urban Development". They are quite important for researchers as, thanks to their bottom-up organization, they are a good chance to discuss on guidelines to make European research activity as homogeneous as possible in order to have comparable data. They often involve also actors at European level (i.e. EUROSTAT)..……..

☒ **National funding programmes:**

PRIN (DITIC is directly involved in a PRIN concerning how transport solutions are acknowledged by final users) …….

☐ European law/regulations

……..

☐ National law/regulations

……..

☐ Action plans/guidelines

……..

5. Please identify one case of best practices regarding the impact of policy measures related with legal framework that affects the development or implementation in your innovative initiatives?

According to question 3 above, in order to make technological or organisational innovations really effective it is essential to have the previous support of policy measures aimed at making them more acceptable and therefore adopted, considering their impact on the travel demand.

Thus, on this purpose we can mention as a best practice the Swedish example of the Stockholm congestion charging scheme. It is a congestion pricing system implemented as a tax levied on most vehicles entering and exiting central Stockholm (Sweden). The congestion tax was implemented on a permanent basis on August 1, 2007, after a seven-month trial period between January 3, 2006 and July 31, 2006.

It is a best practice not only because of the benefits that it brought to the road transport system (decreased congestion and emission of pollutants, better travel times at peak

hours…) but moreover for its "multimodal vision" (contemporarily having implemented a better public transport service offer) and its capacity to manage the consensus and the citizen participation to the process: as a consequence, a slight majority of Stockholm inhabitants was in favour of keeping the tax in the 2006 referendum, quite a remarkable result given the kind of question to which they were asked to agree.

Questionnaire for Best practices

- Networks-

2. Project summary

POSMETRANS is a Coordination 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 six 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).

3. Our strategy

POSMETRANS partners are convinced that an improvement of the current situation in surface transport goes through the elaboration of a conceptual framework for European policy makers. After having identified technologies and policy measures, the partners performed a Strenghts, Weaknesses, Opportunities and Threats (SWOT) analysis after having interviewed innovative key players in the sectors of transport & logistics. In order to complete the analysis and elaborate recommendations to the European Commission, best practices should be identified and validated by experts.

4. Main objectives

The main objectives of the POSMETRANS survey are to get answers regarding the following questions:

4. How does innovation reach the market?
5. How is the influence of networks in stimulating the innovation process?
6. Which impact do European and national policy measures have on the innovation process?

Section 1: Network data

Name of the network:	Kooperationszentrum Logistik e.V.
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Website:	www.klok-ev.de
Date of interview:	13.07.2011
Interviewer's name:	Robert Gohla

The questionnaire was administrated by:

X Personal interview (face-to-face)

☐ Telephone interview

☐ Mail

Section 2: Technology Profile

Which innovative technology mentioned below does your network deploy? In which technology field is your network most involved?

ICT	
- Driver-assistance Systems (ACC;ESP)	☐
- e-Learning	☐
- Monitoring (on board computer)	☐
- Transport optimising	☐
-	☐
GREENING	
- Electric-drive related technologies (e.g. hybrid; parallel hybrid; battery)	☐
- The usage of alternative fuels (e.g. natural gas; hydrogen; biofuels)	☐
-	☐
CO-MODALITY	
- Integrated ticketing	☐
- New generation of intermodal terminals	☐
- RFID, electronic seals, scanning techniques, automation of administrative compliance	☐
- Logistics-platforms (e.g. TIMOCOM, Box24, Logintrans)	X
-	☐
SAFETY & SECURITY	
- Personal means of transport and cargo excess control (e.g. barcode systems)	☐
- Location tracking and monitoring systems (e.g. application with GPS; video systems; RFID; traffic security camera)	☐
- Safety systems (dangerous goods monitoring systems)	☐
-	☐
OTHER	
- Networking between different European institutions in the transport and logistics sector	X
-	☐
-	☐

Section 3: How does innovation reach the market?

Besides existing methodologies and processes, ***best practices*** *are standardized methods which are commonly used where no specific formal methodology is in place or the existing methodology does not sufficiently address the issue. Regarding the* ***POSMETRANS*** *project, the identification of best practices in the field of transport and logistics plays a decisive role in examining different exemplary measures concerning their affect and pervasion for Europe. Best practices examples concerning different technology fields in passenger and freight transport will be analysed in order to identify the key factors for the development of innovation and policy recommendations to achieve this.*

1. **Please identify one case of best practices in your activity area related to the development of innovation and describe it shortly in the following table:**

One of best practice in the activity of KLOK is Open ENLoCC (European Network of Logistics Competence Centres). Open ENLoCC was established as a follow up of the "ENLoCC"-project and is an open network of regional logistics competence centres in the field of logistics, run by public authorities or similar bodies. The main task of the network is the international exchange of experience and knowledge between its participants and the promotion of a higher level of cooperation with European institutions. The members of Open ENLoCC work together on common projects with the aim to develop the regional economy by solving infrastructural, organisational and technological problems of logistics and transport. The dissemination of the results of the network activities and the best practices take place on a wide scale, involving all the key bodies at EU level.

2. **Please describe your support activities in networking area which help organisations to get a successful innovation. What does your work involve?**

The support activities of KLOK are mainly the organisation of partner meetings. The main task of the meetings is knowledge and information transfer between the partners. Each of the partners is a specialist in one or more topics. Therefore, the network as a whole is one of the most in-depth sources of logistics knowledge across Europe. Another task of KLOK is to communicate the activities via Internet and email. The output of KLOK activity is getting a wide overview in different actions in the logistics and transport sector concerning Europe.

3. Which key factors do you consider relevant to reach success in innovation processes?

There are different key factors relevant to reach success in innovation process:

1. Commitment of the different partners
2. Business confidence
3. Openess of experience
4. Attendance by cooperating with new partners
5. Interest in testing new ideas
6. Willingness to exchange best practices between the partners and other institutions
7. Implementation factor of activities

Section 4: The impact of policy measures on the innovation process

4. In which legal framework did your strategy has been developed or implemented?

X European funding programmes (Please identify which policy measure(s))

Interreg IIIc programme……..

☐ National funding programmes

…….

☐ European law/regulations

……..

☐ National law/regulations

……..

☐ Action plans/guidelines

……..

5. Please identify one case of best practices regarding the impact of policy measures related with legal framework that affects the development or implementation in your innovative initiatives?

The basis tasks of ENLoCC project were:

- analysis of the logistics situation in the participating regions,#
- establishment of regional logistics competence centres and forming an open European network of such centres
- setting up pilot projects for interregional cooperation.

A best practice result concerning the ENLoCC-project is the establishment of the Open ENLoCC initiative. Open ENLoCC persue the following goals:

- bringing together and networking political and logistics key players
- developing the regional economy by solving infrastructural, organisational and technological problems of logistics and transport
- acting as a service provider for the network´s partners

Questionnaire for Best practices

- Networks-

3. Project summary

POSMETRANS is a Coordination 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 six 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).

4. Our strategy

POSMETRANS partners are convinced that an improvement of the current situation in surface transport goes through the elaboration of a conceptual framework for European policy makers. After having identified technologies and policy measures, the partners performed a Strenghts, Weaknesses, Opportunities and Threats (SWOT) analysis after having interviewed innovative key players in the sectors of transport & logistics. In order to complete the analysis and elaborate recommendations to the European Commission, best practices should be identified and validated by experts.

5. Main objectives

The main objectives of the POSMETRANS survey are to get answers regarding the following questions:

7. How does innovation reach the market?
8. How is the influence of networks in stimulating the innovation process?
9. Which impact do European and national policy measures have on the innovation process?

Section 1: Network data

Name of the network:	Confindustria Piemonte – Infrastructure, Transports and Logistics Area
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Town:	Turin
Representative's name:	Paolo Balistreri
Position:	General Secretary, and Responsible for Infrastructure, Transports and Logistic Area
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Fax:	
Website:	http://www.confindustria.piemonte.it/infrastrutture-trasporti-logistica
Date of interview:	19.07.2011
Interviewer's name:	Giulia Maccario

The questionnaire was administrated by:

☒ Personal interview (face-to-face)

☐ Telephone interview

☐ Mail

Section 2: Technology Profile

Which innovative technology mentioned below does your network deploy? In which technology field is your network most involved?

ICT	
- Driver-assistance Systems (ACC;ESP)	☒
- e-Learning	☐
- Monitoring (on board computer)	☒
- Transport optimising	☒
-	☐
GREENING	
- Electric-drive related technologies (e.g. hybrid; parallel hybrid; battery)	☐
- The usage of alternative fuels (e.g. natural gas; hydrogen; biofuels)	☐
-	☐
CO-MODALITY	
- Integrated ticketing	☒
- New generation of intermodal terminals	☐
- RFID, electronic seals, scanning techniques, automation of administrative compliance	☐
- Logistics-platforms (e.g. TIMOCOM, Box24, Logintrans)	☒
-	☐
SAFETY & SECURITY	
- Personal means of transport and cargo excess control (e.g. barcode systems)	☐
- Location tracking and monitoring systems (e.g. application with GPS; video systems; RFID; traffic security camera)	☒
- Safety systems (dangerous goods monitoring systems)	☐
-	☐
OTHER	
-	☐
-	☐
-	☐

Section 3: How does innovation reach the market?

Besides existing methodologies and processes, ***best practices*** *are standardized methods which are commonly used where no specific formal methodology is in place or the existing methodology does not sufficiently address the issue. Regarding the* ***POSMETRANS*** *project, the identification of best practices in the field of transport and logistics plays a decisive role in examining different exemplary measures concerning their affect and pervasion for Europe. Best practices examples concerning different technology fields in passenger and freight transport will be analysed in order to identify the key factors for the development of innovation and policy recommendations to achieve this.*

1. **Please identify one case of best practices in your activity area related to the development of innovation and describe it shortly in the following table:**

Confindustria Piemonte takes over its activities in the area of infrastructures, transports and logistics mainly dealing with institutional and political aspects. In this regard, it plays a very important role of intermediation between companies and the local Government, concerning the planning and programming activity of this Public Authority.

In this context, a good example for a best practice aimed at supporting the innovation process is the **Committee for Promoting Info-mobility**. Confindustria Piemonte is part of such a Committee, managed by Finpiemonte. Its goal is to analyse all the most interesting initiatives in the sector of info-mobility, in order to identify their potentials and synergies. In this framework, a guideline document has recently been prepared, with the aim of identifying possible investments for innovation. The **Smart Urban Mobility** document (**SMUM**) presents, among its purposes, a call for proposal for the development of a demonstrator of services for urban mobility. In fact, the goal is to evaluate the technical characteristics of the projects received and to obtain a list of all the actors involved. On the other hand, it is also aimed at offering to the companies involved the opportunity to acquire important know-how which will result very useful in case of future calls for tenders or public funding measures. The main objective of the SMUM call for proposals is then to increase security, efficiency and sustainability of urban info- mobility.

As far as urban mobility of persons is concerned, an interesting case to highlight is the consortium **5T (Telematic Technologies for Transport and Traffic in Turin),** aimed at implementing telematic technologies to help achieve better mobility in Turin, which has been the first example of integrated coordination of a wide range of telematic devices. It is the case to remark that the Regional government recently entered this consortium, with the intent to extend its mobility management system to the whole region in the future. Such a consortium is already in network with other similar bodies throughout Europe, such as the ones in Birmingham and in Stuttgart, wich has lead to some interesting knowledge exchange.

Talking about **goods transport** and info-mobility, a best practice example can be related to the **UIRNet project**. On the 28th of December 2006 UIRNet SpA signed a agreement with the Ministry of Transport for the design, realization and management of a system which allows the interconnection of modal interchanges (freight-village).

The focus of the project is the realization of a well-based hardware and software platform which shall be open and modular and capable of integrating service providers and freight suppliers directed towards logistics process management and freight transport, with the aim of providing various services through the interaction of the various players involved.

2. Please describe your support activities in networking area which help organisations to get a successful innovation. What does your work involve?

Confindustria Piemonte is directly involved in the steering committee of the above mentioned **Committee for Promoting Info-mobility**.

In general, it is mainly involved in institutional and political activities, playing a very important role of intermediation between companies and the local Government with regards to activity of planning and programming. Thanks to its good relations both with Public Authorities and with companies (operating both in persons and goods transport sector), this network provides an essential support to the phase of the elaboration and development of calls and public funding schemes, by inquiring needs and requirements of both parties, and taking over an important mediation among them.

A good example on this purpose is the support offered by Confindustria Piemonte to the creation of the **ICT Committee for Small Industries**. It is now operating in the tourism and safety sectors, but in a few months it is going to extend its activity also to the transport sector. Its goal is to inquire the demand for ICT services from other sectors, in order to increase suggestions towards Public Authorities concerning successful projects to develop and effective calls and funding schemes to present.

Furthermore, Confindustria Piemonte is in partnership with similar network associations of Catalonia, Rhône Alpes, Baden-Württemberg and Swiss Romance: their cooperation has been taken over in order to encourage their coordinated activity at European level.

3. Which key factors do you consider relevant to reach success in innovation processes?

The main relevant key factor to reach success in innovation processes is the creation of a network of good relations among companies, public authorities and research centres and associations, allowing constant discussions and exchange of ideas among them.

We can say that such a condition has already been achieved here in Piedmont, where all these kinds of entities are actively in touch one with the other, and several chances for them to meet each other are provided.

In particular, Confindustria Piemonte operates in network with companies, public authorities, and with the Politecnico of Torino, having frequent contacts also with this important research organisation.

Section 4: The impact of policy measures on the innovation process

4. In which legal framework did your strategy has been developed or implemented?

☒ European funding programmes (Please identify which policy measure(s))

Confindustria Piemonte is a member of the EEN (Enterprise Europe Network): in this framework, it operates in order to offer support to the participation of Piemontese SMEs in European projects;

Furthermore, it is also directly involved in two European projects: the first one is financed by ALCOTRA programme (Transport), while the second one is financed by the Alpine Space Programme, and is specifically aimed at achieving the approval of the population for the development of infrastructural projects in the Alpine Space area.

☐ National funding programmes

…….

☐ European law/regulations

……..

☐ National law/regulations

……..

☒ Action plans/guidelines

The **Plan for Competitiveness 2011-2015** is very relevant. It has been presented by the local Government. It is highly significant in comparison with the resources invested by the town of Turin for the purpose of innovation.

5. Please identify one case of best practices regarding the impact of policy measures related with legal framework that affects the development or implementation in your innovative initiatives?

A definitely relevant policy measure, which is going to enhance the innovation process dramatically, is the **Regional Plan for Competitiveness 2011-2015**. It presents a specific focus on Research, University and Innovation, with a financial provision of 200 millions of euros. Among its measures, it has been planned to create a new platform for the automotive district, focused on vehicle innovation. This platform will put together big enterprises, Confindustria Piemonte and SMEs, and the Politecnico of Turin, in a very relevant experimentation framework.

Furthermore, Turin has applied for the European initiative of Smart Cities. This application has been followed by several calls and projects aimed at improving the "SMART" characterization of the city: thus, it is quite possible that further projects on this purpose will involve also 5T consortium and the info-mobility sector.

A last concrete example of successful policy for traffic management was represented by the past Olympic experience.

In fact, in the occasion of Turin 2006, the devices provided by 5T consortium have been extended to the whole Province of Turin. The Traffic Operation Centre, set up on behalf of the Toroc and the City of Turin, made it possible to observe and monitor traffic during winter Olympic Games in the city and in the Olympic valleys using dedicated sensors and TV cameras. Citizens received the information managed by the TOC via VMS panels, radio broadcasts and text messaging (SMS) and benefited from integrated management of Olympic parking lots, public transport shuttle services and road control. All this was made possible by the cooperation of the Traffic Police, the Municipal Police, the systems of the Motorway and ring-road concessionary companies, the Province of Turin and the Anas (the public body responsible for managing the national road network).

Questionnaire for Best practices

- Companies-

4. Project summary

POSMETRANS is a Coordination 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 six 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).

5. Our strategy

POSMETRANS partners are convinced that an improvement of the current situation in surface transport goes through the elaboration of a conceptual framework for European policy makers. After having identified technologies and policy measures, the partners performed a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis after having interviewed innovative key players in the sectors of transport & logistics. In order to complete the analysis and elaborate recommendations to the European Commission, best practices should be identified and validated by experts.

6. Main objectives

The main objectives of the POSMETRANS survey are to get answers regarding the following questions:

10. How does innovation reach the market?
11. How is the influence of networks in stimulating the innovation process?
12. Which impact do European and national policy measures have on the innovation process?

Section 1: Organisation data

Name of the organisation:	BEST Institut für berufsbezogene Weiterbildung und Personaltraining GmbH
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Website:	www.best.at
Date of interview:	20.7.2011
Interviewer's name:	Jens Jochen Roth

The questionnaire was administrated by:

☐ Personal interview (face-to-face)

☐ Telephone interview

x Mail

Section 2: Technology Profile

Which innovative technology mentioned below does your organisation boost? In which technology field is your organisation most involved?

ICT	
- Driver-assistance Systems (ACC;ESP)	☐
- e-Learning	x
- Monitoring (on board computer)	☐
- Transport optimising	☐
-	☐
GREENING	
- Electric-drive related technologies (e.g. hybrid; parallel hybrid; battery)	☐
- The usage of alternative fuels (e.g. natural gas; hydrogen; biofuels)	☐
-	☐
CO-MODALITY	
- Integrated ticketing	☐
- New generation of intermodal terminals	☐
- RFID, electronic seals, scanning techniques, automation of administrative compliance	☐
- Logistics-platforms (e.g. TIMOCOM, Box24, Logintrans)	☐
-	☐
SAFETY & SECURITY	
- Personal means of transport and cargo excess control (e.g. barcode systems)	☐
- Location tracking and monitoring systems (e.g. application with GPS; video systems; RFID; traffic security camera)	☐
- Safety systems (dangerous goods monitoring systems)	☐
-	☐
OTHER	
-Mobile Learning (e.g. for transport and logistics sector)	x
-	☐
-	☐

Section 3: How does innovation reach the market?

*Besides existing methodologies and processes, **best practices** are standardized methods which are commonly used where no specific formal methodology is in place or the existing methodology does not sufficiently address the issue. Regarding the **POSMETRANS** project, the identification of best practices in the field of transport and logistics plays a decisive role in examining different exemplary measures concerning their affect and pervasion for Europe. Best practices examples concerning different technology fields in passenger and freight transport will be analysed in order to identify the key factors for the development of innovation and policy recommendations to achieve this.*

1. **Please identify one case of best practices in your business area related to the development of innovation and describe it shortly in the following table:**

In order to bridge the digital divide within the passenger transport and logistics sector, one of the striking challenges we clearly noticed in our long-term work with respective staff/employees and job searchers for this particular area, we have invested in further development of existing mature mobile learning technology that specifically delivers key skills in lifelong learning. This technology, comprising hard/technical and soft/social skills to improve employability has been market validated by us, in the first place within the passenger transport and logistics sector. In this approach, we have encouraged excluded groups to up skill and enhance their employment prospects through a programme of blended technologies, in which mobile learning plays a critical role. Concretely, we have contextualized learning areas and materials to meet specific requirements of the sector and workplaces within the passenger transport and logistics sector. Especially taking into account common patterns of shift working with irregular and unsociable hours, which make traditional programmes of learning unsuitable for employees, our model has proved to be relevant.

BLOOM has demonstrated that workplace learning via mobile devices is a viable option that can add value to learning, and that such a strategy can be sustained by a commercial rollout of the service through a comprehensive business plan for the future.

2. **Which key factors were relevant for this innovation success? Please describe shortly different issues faced: financial, collaboration, networking, R&D activities, problems...**

Financial investment was most relevant and considerable, but partly covered by EU-funds (programme eTEN);

Collaboration was based upon the original owners of the product, who have shared market interest with specific geographic focus;

Networking proved to be most crucial for the actual implementation of project ideas; this included stakeholders such as public authorities, funding organisations, private companies and already existing customers;

R&D activities were important in terms of knowledge about the market (state of the art, actual needs, prices etc.).

3. **How did you introduce this innovation into your business or into the market? Please describe shortly the steps followed for market launching.**

Product information to relevant stakeholders/potential funders and clients;

Market testing and validation including these parties;

Conferences and symposions for product preseantion and test reports;

Launch by tailor-made packages for specific needs and requests;

Section 4: The role of networks in developing and implementing innovation

4. **Does your organisation belong to a network?**

x Yes ☐ No

If yes, how far the network played a role in developing or promoting your strategy for innovation?

Especially in terms of existing cooperation partners (partly funding organisations), networking played an essential role in the development process: these partners were actively involved in the validation process (continuous feedback on development stages and specific requirements).

Did the network play a role regarding the introduction of your product/service into the Market? If yes, how far?

Especially in terms of existing cooperation partners (partly funding organisations), networking played an essential role in the introduction process: these partners needed to be convinced of the product quality, in order to assist further launch (and funding) for future steps.

Section 5: The impact of policy measures on the innovation process

5. In which legal framework did your innovation has been developed or implemented?

x European funding programmes (Please identify which policy measure(s))

……..

☐ National funding programmes

…….

☐ European law/regulations

……..

☐ National law/regulations

……..

☐ Action plans/guidelines

……..

6. Please identify one case of best practices regarding the impact of policy measures related with legal framework that affects the development or implementation in your innovative initiatives?

It is both European and national policy measures/legal frameworks, which are often relfelcted in tender specifications and/ort he definition of call priorities for programmes and projects that we apply for which (more or less) allows for innvoation in our business. The eTen programme, which as one of ist overall missions served to bridge the digital divide within European societies and work sectors, is one example of a (funded) measure postiively affecting innvoative development and implementation – which otherwise would not have been possible.

Questionnaire for Best practices

- Networks-

5. Project summary

POSMETRANS is a Coordination 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 six 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).

6. Our strategy

POSMETRANS partners are convinced that an improvement of the current situation in surface transport goes through the elaboration of a conceptual framework for European policy makers. After having identified technologies and policy measures, the partners performed a Strenghts, Weaknesses, Opportunities and Threats (SWOT) analysis after having interviewed innovative key players in the sectors of transport & logistics. In order to complete the analysis and elaborate recommendations to the European Commission, best practices should be identified and validated by experts.

7. Main objectives

The main objectives of the POSMETRANS survey are to get answers regarding the following questions:

13. How does innovation reach the market?
14. How is the influence of networks in stimulating the innovation process?
15. Which impact do European and national policy measures have on the innovation process?

Section 1: Network data

Name of the network:	CIM spa – Interporto di Novara
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Town:	Novara
Representative's name:	Massimo Arnese
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Fax:	
Website:	http://www.cimspa.it/;
Date of interview:	21/07/2011
Interviewer's name:	Giulia Maccario

The questionnaire was administrated by:

☒ Personal interview (face-to-face)

☐ Telephone interview

☐ Mail

Section 2: Technology Profile

Which innovative technology mentioned below does your network deploy? In which technology field is your network most involved?

ICT	
- Driver-assistance Systems (ACC;ESP)	☐
- e-Learning	☐
- Monitoring (on board computer)	☐
- Transport optimising	☐
-	☐
GREENING	
- Electric-drive related technologies (e.g. hybrid; parallel hybrid; battery)	☐
- The usage of alternative fuels (e.g. natural gas; hydrogen; biofuels)	☐
-	☐
CO-MODALITY	
- Integrated ticketing	☐
- New generation of intermodal terminals	☒
- RFID, electronic seals, scanning techniques, automation of administrative compliance	☒
- Logistics-platforms (e.g. TIMOCOM, Box24, Logintrans)	☒
-	☐
SAFETY & SECURITY	
- Personal means of transport and cargo excess control (e.g. barcode systems)	☐
- Location tracking and monitoring systems (e.g. application with GPS; video systems; RFID; traffic security camera)	☐
- Safety systems (dangerous goods monitoring systems)	☐
-	☐
OTHER	
-	☐
-	☐
-	☐

Section 3: How does innovation reach the market?

*Besides existing methodologies and processes, **best practices** are standardized methods which are commonly used where no specific formal methodology is in place or the existing methodology does not sufficiently address the issue. Regarding the **POSMETRANS** project, the identification of best practices in the field of transport and logistics plays a decisive role in examining different exemplary measures concerning their affect and pervasion for Europe. Best practices examples concerning different technology fields in passenger and freight transport will be analysed in order to identify the key factors for the development of innovation and policy recommendations to achieve this.*

1. **Please identify one case of best practices in your activity area related to the development of innovation and describe it shortly in the following table:**

In the last three years, CIM spa developed, through a software company specifically committed to the study of technological innovation for logistics, an innovative managing and controlling system for handling and warehousing activities within rail and intermodal terminals, as well as for warehouses and multimodal transport operators. For this project, a software platform has been developed, integrating the typical procedures of an intermodal terminal, including all the steps of the production cycle (transport, receipt and warehousing).

The system is operated through a geographical map of the terminal, divided into transit zones and specialized stopping zones where swap bodies and other objects in transit are placed. The virtual map is combined with nonstop localizing of the means of transport and their load, thanks to the employment of satellite technology, which gives further information about fuel consumption, speed and km covered.
Control panels display the commands which need to be given and allow to confirm the correct execution and to signal possible behavioral variations occurred during the activities. Terminal operators, through the central control system, are able to govern the operating process and to intervene by rectifying possible anomalies and unsettled situations which the control system has not solved directly.

The main advantage is the flowingness of the production process of the terminal and the consequent control of times and costs. In fact, the possibility of transmitting information in real time to the operative means and to control all the operations in progress from one single point allows a better organization of work groups, the avoidance of concentration of various means on the same task, and a significant time reduction between arrival and disposal of wagons and containers.
The study of statistical data allows to rationalize duration and usage, in order to optimize working hours and operators' shifts, while the optimization of load lists is reached by making loading phases on trains faster (thus clearing rails in advance).
Furthermore, such a system also guarantees fewer consumptions and maintenance as, through the interactive map, which allows to know the exact position of means and containers, it is possible to optimize routes, thus giving definite advantages in tyre wear and fuel consumption.

2. Please describe your support activities in networking area which help organisations to get a successful innovation. What does your work involve?

Novara is one of the most important European goods yards, as it is located exactly at the crossroads between the main European East-West and North-South axis. Thus, many important companies make their goods transit through this intermodal terminal, and use the services offered by CIM spa, which are the following:

- support to assemble and disassemble trains;
- ordinary maintenance of wagons;
- storage (several warehouses are located by CIM's clients)

Moreover, two years ago a specific IT department has been created, in order to allow an effective informatization process of the terminal: thus, a various set of forms is now on-line, at clients' disposal, while terminal's users may also have an external on-line check, for example, of the material stocked in their warehouses, and of the number of containers currently parked within the terminal, etc. Referring to IT services and informatization projects, the logistic platform above described offers lots of advantages to the companies which works within the terminal, both in terms of effectiveness and of innovation of operations management.

Considering the strategic location of Novara, several projects of development of the goods yard have been planned. First of all, the terminal implementation is in program, in order to increase its reception capacity: in particular, the project regards the construction of two more rail terminals. Additionally, a project has been done in order to improve the links with the other terminal of Novara Boschetto, through a more direct connection. Such actions are planned to be realized by 2012.

Furthermore, there is the intent to create a controlled parking area and an additional washing service, which presents lots of requests, especially as far as tanks are concerned.

3. Which key factors do you consider relevant to reach success in innovation processes?

As far as the development of the ICT department and, in particular, of the innovative system for handling and warehousing, an extremely important key factor has been related to the decision to make the software house in charge of its development work directly within the terminal. Thus, all the specificities of the terminal have been better considered and understood, with the result of a final product perfectly tailored on its needs. In fact, such a solution made possible an effective integration between the informatics knowledge of the software house and the awareness on logistic matter provided by persons with a long experience in this sector.

Moreover, a second key factor for the success of the innovative system purposed consists in the fact that its devices result really easy to be used also by the workers in charge of driving cranes.

Section 4: The impact of policy measures on the innovation process

4. In which legal framework did your strategy has been developed or implemented?

☐ European funding programmes (Please identify which policy measure(s))

……..

☐ National funding programmes

…….

☐ European law/regulations

……..

☒ National law/regulations

……..

☒ Action plans/guidelines

……..

5. Please identify one case of best practices regarding the impact of policy measures related with legal framework that affects the development or implementation in your innovative initiatives?

For the implementation of the intermodal terminal it is essential to get the approval and the financial support of local authorities, which is often guaranteed as such goods yards are considered to have a public interest.

Calls for tenders are normally open. In particular as far as the IT aspect is concerned, it is interesting to notice that such calls, in some cases, can also stimulate the development of innovative ideas adaptable to be applied also to other sectors (e.g. safety, security and food storage).

Furthermore, it is the case to notice that CIM spa is part of important networks at national level, such as UIR (Unione Interporti Riuniti), which involves almost all Italian intermodal terminals, Assologistica, an important association of terminals and logistic companies, and the Freight Leaders Council, which is a network joining together the main Italian representatives of transport sectors.

At national level, it would be really interesting to put the **UIRNet project** to an end. It is a project promoted by the Ministry of Transport, aimed at allowing the interconnection of modal interchanges (freight-village). The focus of the project is the realization of a localized hardware and software platform capable of integrating service providers and freight suppliers directed towards logistics process management and freight transport, with the aim of providing various services through the interaction of the different players involved.

Questionnaire for Best practices

- R&D institutes-

1. Project summary

POSMETRANS is a Coordination 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 six 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).

2. Our strategy

POSMETRANS partners are convinced that an improvement of the current situation in surface transport goes through the elaboration of a conceptual framework for European policy makers. After having identified technologies and policy measures, the partners performed a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis after having interviewed innovative key players in the sectors of transport & logistics. In order to complete the analysis and elaborate recommendations to the European Commission, best practices should be identified and validated by experts.

3. Main objectives

The main objectives of the POSMETRANS survey are to get answers regarding the following questions:

1. How does innovation reach the market?
2. How is the influence of networks in stimulating the innovation process?
3. Which impact do European and national policy measures have on the innovation process?

Section 1: Organisation data

Name of the organisation:	Université de Franche-Comté (LIFC)
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Date of interview:	06.09.2011
Interviewer's name:	Samantha Michaux

The questionnaire was administrated by:

☐ Personal interview (face-to-face)

☒ Telephone interview

☐ Mail

Section 2: Technology Profile

Which innovative technology mentioned below does your institute boost? In which technology field is your institute most involved?

ICT	
- Driver-assistance Systems (ACC;ESP)	☒
- e-Learning	☒
- Monitoring (on board computer)	☒
- Transport optimising	☒
- Wireless communication between vehicles	☒
GREENING	
- Electric-drive related technologies (e.g. hybrid; parallel hybrid; battery)	☐
- The usage of alternative fuels (e.g. natural gas; hydrogen; biofuels)	☐
- Batteries for vehicles and bicycle / contactless reload stations	☒
- optimised management / group consciousness / real-time information	☒
CO-MODALITY	
- Integrated ticketing	☐
- New generation of intermodal terminals	☒
- RFID, electronic seals, scanning techniques, automation of administrative compliance	☒
- Logistics-platforms (e.g. TIMOCOM, Box24, Logintrans)	☒
- Solutions for real-time information and secured diffusion of information (real-time management of transport) / new generation of intermodal terminals (i phone...)	☒
SAFETY & SECURITY	
- Personal means of transport and cargo excess control (e.g. barcode systems)	☐
- Location tracking and monitoring systems (e.g. application with GPS; video systems; RFID; traffic security camera)	☒
- Safety systems (dangerous goods monitoring systems)	☐
- hybrid tracking systems for vehicles and people (Cellular + Wireless + GPS)	☒
OTHER	
- Nanotechnology/ Micro technology for technological systems	☒
- Certification of mobility -> software devices/ embedded systems which prove that the mobility processes were successful	☒
- Normalisation of multimodal and real-time information for co-modal transport	☒

Section 3: How does innovation reach the market?

Besides existing methodologies and processes, ***best practices*** *are standardized methods which are commonly used where no specific formal methodology is in place or the existing methodology does not sufficiently address the issue. Regarding the* ***POSMETRANS*** *project, the identification of best practices in the field of transport and logistics plays a decisive role in examining different exemplary measures concerning their affect and pervasion for Europe. Best practices examples concerning different technology fields in passenger and freight transport will be analysed in order to identify the key factors for the development of innovation and policy recommendations to achieve this.*

1. **Please identify one case of best practices in your research area related to the development of innovation and describe it shortly in the following table:**

- Flexible public services of transportation: transport on demand (punctual reservation -> reservation 15 minutes before or real-time reservation) - Optimisation of the trajectory of a vehicle which are limited on the defined area (real-time transport) -> optimisation of transport management - Transportation of people (door-to-door) - Bus systems (reservation per phone or on the internet) - Better communication -> reduction of number of vehicles on the road - This system has been commercialised in France and is very cheap (1,15 € for 15km; can be more expensive in keeping of the region: e.g. 2,30 € for a journey in a region where there are few transportation offer and the trajectory is longer -> 30% of the costs are covered) - Similar systems with taxi transportation (e.g. by night)

2. **Which key factors do you consider relevant for this innovation success? Please describe shortly different issues faced: financial, collaboration, networking, R&D activities, problems...**

The idea has been introduced by the LIFC within the scope of a financing programme of the university for innovative projects (regional financing~5000€ < regional collectivities). After the first positive results, a new phase of financing (local financing~150 000€) started which allowed to begin with the first test period with prototypes. After that, the services have been outsourced to independent companies. Some audits have been executed by the companies in order to find the best outsourcers.

3. **How did you introduce your innovative product/service into the market? Please describe shortly the steps followed for market launching.**

- First, prototypes have been developed.

- After, outsourcing to external enterprises.

Section 4: The role of networks in developing and implementing innovation

4. **Does your institute belong to a network?**

☒ Yes ☐ No

If yes, how far the network played a role in developing or promoting your strategy for innovation?

- Agence Régionale de Développement (ARD) played a very important role to implement the project, particularly because they dispose of a significant international network and could promote the project on an international basis.

- Help for partner search, dissemination of project results into the industry

- Provide good information about funding programmes and financing opportunities

Did the network play a role regarding the introduction of your product/service into the Market? If yes, how far?

- They helped us to find new partners to implement the project into the market. They supported us by the conduction of the audits.

Section 5: The impact of policy measures on the innovation process

5. **In which legal framework did your innovation has been developed or implemented?**

☐ European funding programmes (Please identify which policy measure(s))

.....

☐ National funding programmes

.....

☐ European law/regulations

.....

☐ National law/regulations

.....

☐ Action plans/guidelines

.....

☒ Others

Regional funding programmes for innovation

6. **Please identify one case of best practices regarding the impact of policy measures related with legal framework that affects the development or implementation in your innovative initiatives?**

- Regarding multimodal transportation (e.g. public transport for schools, suburban and interregional area), the General Councils and public departments are playing a very important role.

- Funding programme emerging from foundations who finance innovative projects

- Funding programmes give a good pre-defined structure which helps to develop new opportunities

- "Conseils de mobilité" play a significant role as well regarding questions related to mobility.

- Ministries (e.g. L'Agence Française de l'Information Multimodale et de la Billettique /AFIMB) organise the calls and give the possibility to affect new opportunist means in keeping of the enterprises, research centres that collaborate within the work groups.