

# **SoCool@EU**

**Sustainable Organisation between Clusters Of  
Optimised Logistics @ Europe**



## **Deliverable n° D5.2: Mentoring Action Plan**

**Within the context of Work Package 5 - Support activities  
relating to mentoring**

Version	Date	Release	Approval
07	31-07-2013	Lund University (ULUND)	Consortium

## Document Log

Version	Date	Description	Name and Organisation
01	07-03-2013	First draft	Fikret Zorlu (MTSO) Patrik Ryden (LUND)
02	23-04-2013	Second draft Suggestions of the consortium partners adapted	Jan Boyesen (MDCE) Fikret Zorlu (MTSO) Patrik Ryden (LUND)
03	28-04-2013	Update the structure; Add contents of Sections Comments on version 2	Meng Lu (Dinalog)
04	24-06-2013	Update by taking the critics and contributions of regional stakeholders into account	Jan Boyesen (MDCE) Fikret Zorlu (MTSO) Patrik Ryden (LUND)
05	11-06-2013	Editing	Mats Johnsson (ULUND) Jan Boyesen (MDCE)
06	11-06-2013	Quality control; update (sub-)section tiles, English and writing style, format, layout, Figure 1; add reference; add appendix	Meng Lu (Dinalog)
07	31-07-2013	Add an appendix of the WP5 workshop on mentoring action plan (provided by MTSO); final editing	Meng Lu (Dinalog)

## List of Partners

Beneficiary no.	Partner	Country
1 (Coordinator)	Dutch Institute for Advanced Logistics (Dinalog)	The Netherlands
2	House of Logistics and Mobility (HOLM)	Germany
3	Asociación Logística Innovadora de Aragón (ALIA)	Spain
4	Lund University (ULUND)	Sweden
5	Mersin Chamber of Commerce and Industry (MTSO)	Turkey

## Table of Content

0	Executive Summary .....	6
1	Introduction .....	8
1.1	Vision.....	8
1.2	Mission .....	9
1.3	Objective.....	9
2	Mentoring Strategies and Approaches.....	10
2.1	Aims of the mentoring actions.....	10
2.2	Approach for establishing the mentoring actions.....	10
3	Review of the Strategies of Other Clusters .....	12
4	Establishing a Sustainable and Competitive Mersin Logistic Cluster .....	18
5	Roadmap and Actions for Creating the Mersin Logistics Cluster .....	20
5.1	Themes and actions .....	20
5.2	Mersin Logistics Cluster governance form .....	21
5.3	Knowledge backbone of the Mersin Logistics Cluster .....	23
5.4	Mersin Logistics Cluster and the regional economic policy .....	23
6	Models and organisation of the Mersin Logistics Cluster .....	25
6.1	Cluster models.....	25
6.2	State-of-the-art.....	28
6.3	Local actors .....	28
6.4	Funding.....	30
6.5	Adaptation to triple helix.....	31
6.6	Internal and international cooperation .....	32
6.7	Cluster development process.....	34
7	Impacts of SoCool@EU on the Mentoring Cluster .....	36
8	Conclusion .....	38
9	References.....	39
	Appendix 1: Questionnaire for SoCool@EU Partners, Input for the Mentoring Action Plan .....	40
	Appendix 2: Profiles and Experiences of Partner Regions .....	46
	Appendix 3: Mersin Regional Workshop .....	54

## List of Figures

Figure 1 - Process for Mentoring Action Plan .....	11
Figure 2 - The method used in SoCool@EU .....	13
Figure 3 - Cooperation intensity in the Mersin Logistics Cluster .....	14
Figure 4 - Drivers of innovation (upper) vs. barriers for innovation (bottom) for companies in the Mersin region .....	15
Figure 5 - Port Hinterland and location of the Mersin region in Turkey .....	15
Figure 6 - Entities of Mersin Logistics Cluster .....	16
Figure 7 - Cooperation intensity of the regional cluster core with Europe .....	17
Figure 8 - Correlation between the business activities, membership flexibility .....	26
Figure 9 - Expected level of intensification of ties at regional level .....	33
Figure 10 - Cluster development process.....	35

**List of Tables**

Table 1 - SoCool@EU clusters and participated partners .....	8
Table 2 - Key figures of the Mersin Region .....	12
Table 3 - Mersin Logistics Cluster themes and actions .....	21
Table 4 - Roadmap towards an Innovative Logistics Cluster in the Mersin Region.....	24

## 0 Executive Summary

Mentoring Action Plan is a strategic document both for mentoring region of the SoCool@EU (Sustainable Organisation between Clusters of Optimised Logistics @ Europe) project and regions which need to develop innovative and sustainable logistics clusters. SoCool@EU aims at creating an open European platform of excellence in the area of supply chain management and logistics in connection with hubs and gateways that will be open for participation by other regional clusters with a logistics and transportation profile after its establishment. Its purpose is to enable research-driven regional clusters throughout Europe to collaborate and exchange experiences for increasing sustainability and competitiveness of logistical services and intermodal transport operations.

The consortium consists of five clusters that represent essential areas of logistics (deep-sea hubs, airports, land-hubs and short-sea hubs) and its operational objectives are the following:

- Fostering trans-national cooperation between research-driven clusters as well as mutual learning between regional actors.
- Developing and implement joint action plans at a European level to increase the regional economic competitiveness.
- Supporting the internationalization of the regional research-driven clusters. Mentoring regions with a less developed research profile.

The objective of this Mentoring Action Plan is to develop a strategy on how to establish successful triple-helix cluster cooperation in the Mersin region. The Mentoring Action Plan is a working document that is reviewed based on new knowledge from companies, universities, and authorities in the Mersin region which is gathered through interviews and a stakeholder workshop in October 2013.

The Mentoring Action Plan is mainly based on the experiences from the mature clusters in the SoCool@EU project, which are:

- Dutch Institute for Advanced Logistics (DINALOG), Netherlands South West & Flanders Cluster - The Netherlands / Belgium
- House of Logistics and Mobility (HOLM), Rhein-Main Region - Germany
- Asociación Logística Innovadora de Aragón (ALIA), Region of Aragón - Spain
- Lund University, Øresund Region - Denmark / Sweden

The Mentoring Action Plan identifies and discusses the most important parameters, which need to be taken into account when establishing a cluster initiative. These are: Different models for structuring the cluster's initiative; Feasibility of the different organisation models; Funding; Involvement of stakeholders - adaptation of Triple Helix and Fields of Action of the Mersin Logistics Cluster. The following Fields of Action are identified: (1) policy strategy; (2) governance, management and finance; (3) infrastructure; and (4) supporting systems & services.

The overall conclusion is that it is not possible to point out one best practice within cluster development by looking at the mature clusters in the SoCool@EU project, since every cluster has

different structure, different sources of funding and services towards the participating actors. Furthermore, the strategy for establishing a cluster initiative in the Mersin region has to be further developed in cooperation with the companies, industry associations, universities, and authorities in the region and should take into consideration the specific characteristics of the cluster.

# 1 Introduction

The objective of this deliverable is to create a Mentoring Action Plan containing strategies that emphasise development of a cluster network in the Mersin region. The Action Plan focuses concretely on how to implement the suggested strategies, as well as how the Mersin region can gain from access to knowledge sharing and networking with the other four clusters defined in SoCool@EU (Sustainable Organisation between Clusters Of Optimised Logistics @ Europe):

**Table 1 - SoCool@EU clusters and participated partners**

No.	SoCool@EU clusters	participating partners
1	Netherlands South West & Flanders Cluster, The Netherlands / Belgium	Dutch Institute for Advanced Logistics (DINALOG), The Netherlands
2	Rhein-Main Region, Germany	House of Logistics and Mobility (HOLM), Germany
3	Region of Aragón, Spain	Asociación Logística Innovadora de Aragón (ALIA), Spain
4	Øresund Region, Denmark / Sweden	Lund University (ULUND), Sweden
5	Mersin Logistics Cluster, Turkey	Mersin Chamber of Commerce and Industry (MTSO), Turkey

The five cluster regions (see Table 1) represent essential areas of logistics and build networks of logistic gateways in Europe.

Mersin Region in Turkey is selected as a mentoring region in the SoCool@EU project. Excellence and knowledge transfer from the four European mature clusters to Mersin logistics cluster will be demonstrated within SoCool@EU.

The deliverable presents the mentoring strategies, which will be a guide for the Mersin Region with the aim of establishing a cluster to improve innovation through collaboration and knowledge sharing in networks. Furthermore, it analyses the status of the Mersin region, develops a roadmap, and determines the action plan for the Mersin Region.

## 1.1 Vision

The vision of the mentoring activities in the SoCool@EU project is described in the following.

- An innovative, interactive, sustainable logistics cluster platform is established in the Mersin Region.
- The platform will be founded on knowledge and *innovation*. Problem solving and benefits from technological advancement will contribute to the logistics cluster in the region.
- The platform will be *interactive* with the participation and cooperation of research institutes, policy makers and business entities. The platform is project and action based with interactions of all regional partners.

- *Sustainable*: The cluster platform will have a long term sustainable setup, until structural advances are achieved

## 1.2 Mission

The missions of the mentoring activities in the SoCool@EU project are:

- To enhance the strategic role of logistics industry in the region.

Companies face similar problems related to support, cooperation, business conditions, and so far individual attempts at improvement have not always been effective. The cluster platform can generate an incentive to initiate political and bureaucratic actors to overcome problems (legislation, bureaucratic procedures, education and investment costs) and promote further development.

- To raise awareness and promote innovation culture in the logistics industry.

Sustainable cooperation among policy makers, research institutes and business actors of the region is essential.

- To collaborate with regional projects and event organisations.

Thereby making it possible for each partner to benefit from projects, events, and business opportunities.

## 1.3 Objective

The objective of the mentoring activities in the SoCool@EU project is that the Region of Mersin will work as a case study on how to create an innovative logistics cluster platform in an emerging region.

## 2 Mentoring Strategies and Approaches

### 2.1 Aims of the mentoring actions

The Mentoring Action Plan is the roadmap towards establishing a logistics cluster in the Mersin region, which builds on triple-helix cooperation between companies, research and education institutions as well as authorities. The first version of the Mentoring Action Plan has been developed based on the experiences from the developed clusters in the SoCool@EU project, on the SWOT Analysis of the Mersin Region, on literature studies, interviews with experts in the Mersin Region as well as on a statistical analysis of the logistics cluster. The Mentoring Action Plan is however a dynamic document that is reviewed according to new developments and information in order to be improve the strategy towards establishing the Mersin Logistics Cluster. The objectives of the mentoring actions are:

- 1) To provide the mentored region with an exchange platform to help them enrich their knowledge base, and to create and reinforce transnational relationships.
- 2) To equip the Mersin Region with tools and methods which contribute to an efficient and sustainable transport-related economy.

This task is intended to implement mentoring actions in a developing region from a two-level approach:

- Mentoring of decision makers and public organisations
- Mentoring of SMEs (Small and Medium-sized Enterprises): Dissemination of opportunities for R&D project development using regional and EU (European Union) funding schemes, use of knowledge and technology transfer tools and participation in targeted events, promotional events for the creation of SMEs.

### 2.2 Approach for establishing the mentoring actions

The Mentoring Action Plan builds on the following five stages approach (see Figure 1):

Stage 1: Literature review: Innovative Clusters (M14)

Stage 2: Preparing the draft plan (M15)

Stage 3: Contribution of partners: experiences, suggestions, opinions (M16)

Stage 4: Contribution and suggestions of regional stakeholders (M18)

Stage 5: Mentoring Action Plan (M18)

These five stages are based on quantitative and qualitative information. Partly from interviews with regional businesses, authorities and universities, as well as partly from the SWOT analysis (see SoCool@EU deliverable D5.1) and the market analysis (see SoCool@EU deliverable D.2.1)

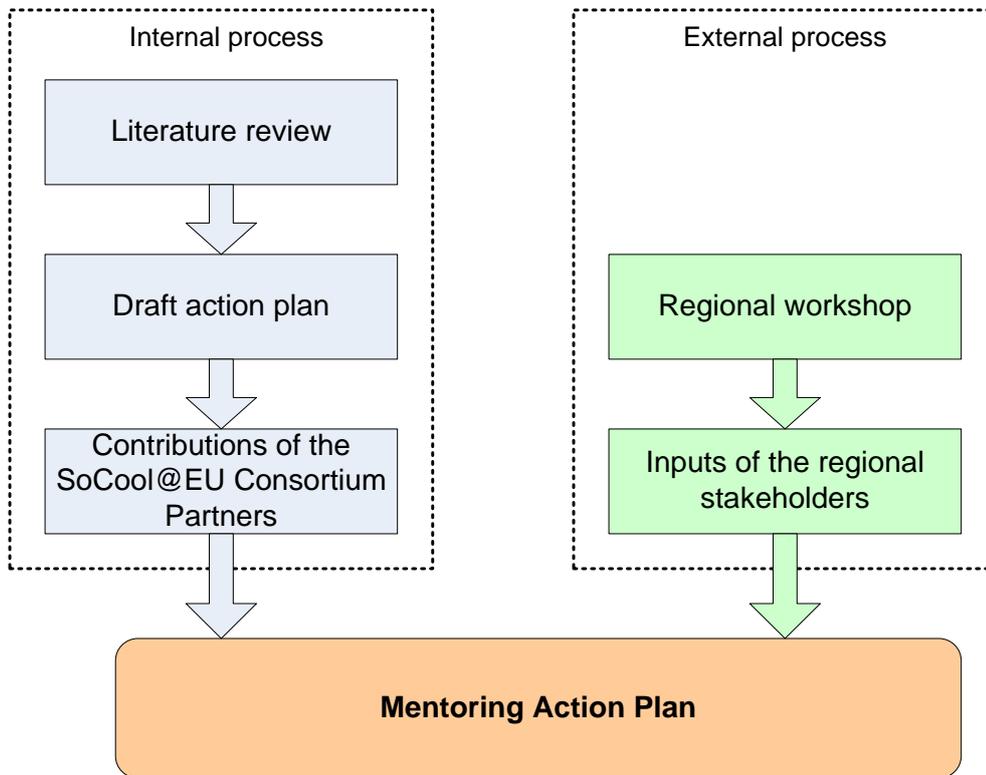


Figure 1 - Process for Mentoring Action Plan

### 3 Review of the Strategies of Other Clusters

When developing a strategy towards establishing a logistics cluster in the Mersin Region, it is of interest to know how the established clusters have been developed, as well as what business model they use in order to provide valuable services for the companies in their regions. Even though the partnering clusters are very similar in terms of their successful triple helix structures, there are quite some differences in how they are developed. One aspect is how the clusters are financed. This emphasises that there is no single strategy towards a successful cluster. The following contains a description of each of the five clusters, in order to give an impression of how each of them developed successfully as well as to give inspiration on how to establish a logistics cluster in Mersin.

Even though the SoCool@EU clusters are successful in terms of supporting the logistics sector in their region and facilitation cooperation between industry, research, education and public bodies, it is clear that there are large differences in the business model of each cluster which is natural because each cluster has developed over time. This gives Mersin an opportunity to utilize the past experiences of other clusters when setting up the business model for the Mersin Region Logistics Cluster.

**Table 2 - Key figures of the Mersin Region**

GDP (EUR/per capita)	7076
passenger transport (pkm) (region)	21,323,125,000
passenger-km (province)	5,568,665,000
freight transport growth (ton-km) (region)	20,254,308,000
ton-km (province)	5,056,359,000
truck (km)	2,374,968,000
bus (km)	275,127,000
passenge car (km)	4,585,467,000
road (km)	1,312
congestion costs (EUR)*	8,219,070
transport infrastructure investment (EUR)**	4,386,724

Source: TUIK (Turkish Statistical Institute (2011), General Directorate of Turkish Highways (2011)

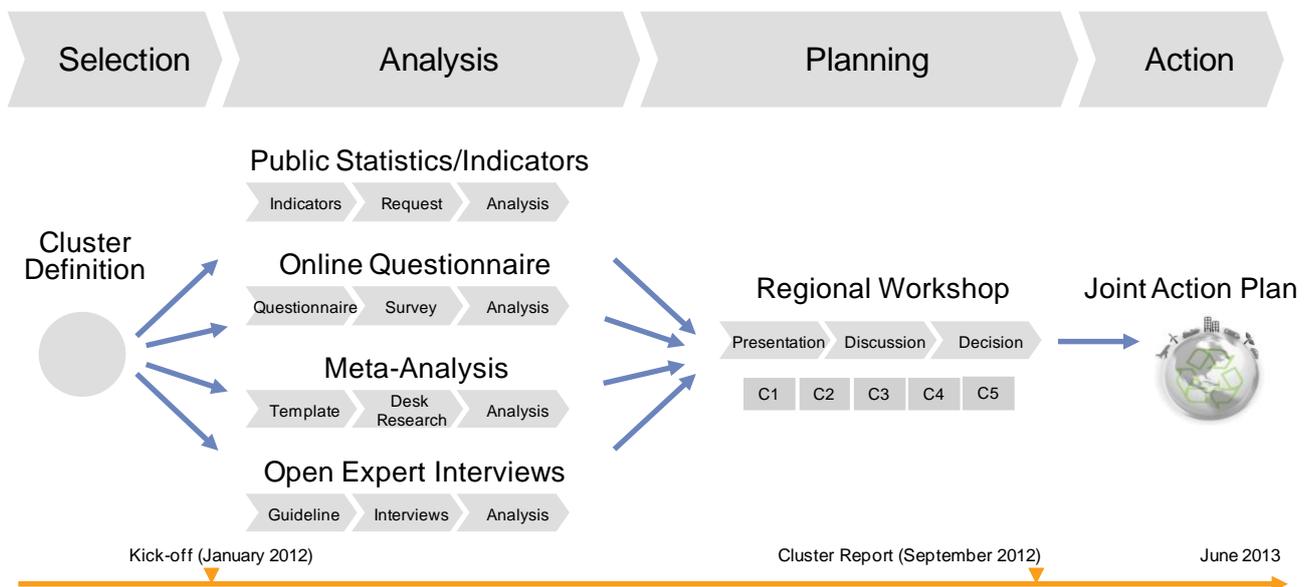
\* estimated by expert in the Mersin region

\*\* increased 39.32% compared with 2010

The Mersin region is a major logistics centre in Turkey. Its port, transport and logistics activities generate substantial freight movements in the region, and as a consequence considerable heavy vehicle traffic. The key figures are presented in Table 2. The way in which freight transports and logistics are currently organised is ineffective and not sustainable. In Mersin city, the growth in various transport modes is not in balanced. This creates negative economic and environmental externalities such as traffic congestion, inefficient use of urban space and pollution. There is a

need for considerable improvement of the situation, as well as the application of conventional management strategies for efficient handling and movement of goods. "Sustainable logistics" strategies provide more efficient use of land, increasing responsiveness and quality of service, adoption of environmentally friendly technologies and materials, reduction of energy use and emissions, reduction of waste, and reducing negative social impacts (e.g. on health, safety and employees).

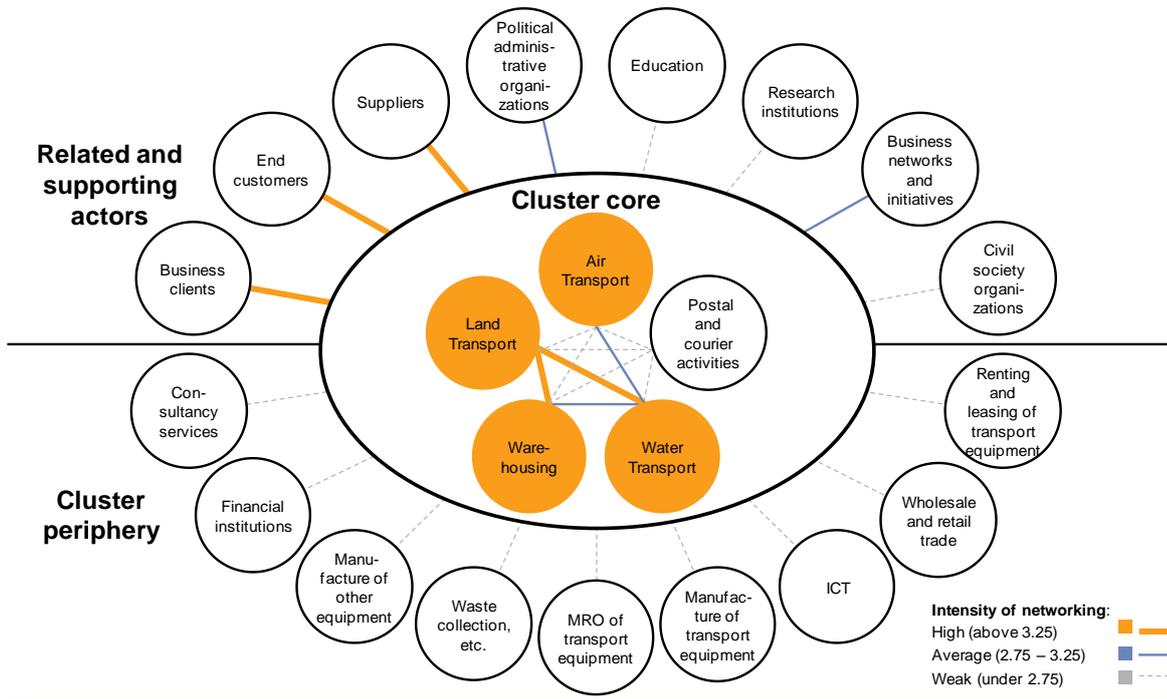
To understand more comprehensively the status of the Mersin logistics cluster, an analysis based on a multi-approach design based on qualitative and quantitative elements has been used (see Figure 2). Besides statistical analyses based on secondary/official data, online questionnaires, and, expert interviews covering triple-helix professionals, a regional workshop, and extensive literature study (meta-analysis) were carried out. For results see SoCool@EU deliverable D2.1. The method applied to analyse the present logistics cooperation in the Mersin Region is shown in Figure 2.



**Figure 2 - The method used in SoCool@EU**  
 Source: [SoCool@EU Consortium, 2011; 2012a]

Research findings show that inter-industry linkages in the core area of the cluster, especially the land transport sector shows strong relations with companies from the warehousing and water transport industry, reflecting the most important hub activities connected to the Mersin port (see Figure 3).

The regional cluster core in Mersin maintains strong network connections not only to local customers but also to business clients from European regions. Further, there appears to be some exchange with the core industries in other parts of Europe. Again, and similar to the network structure within the cluster region, companies in Mersin are so far hardly connected to the cluster periphery on European level (see Figure 4).

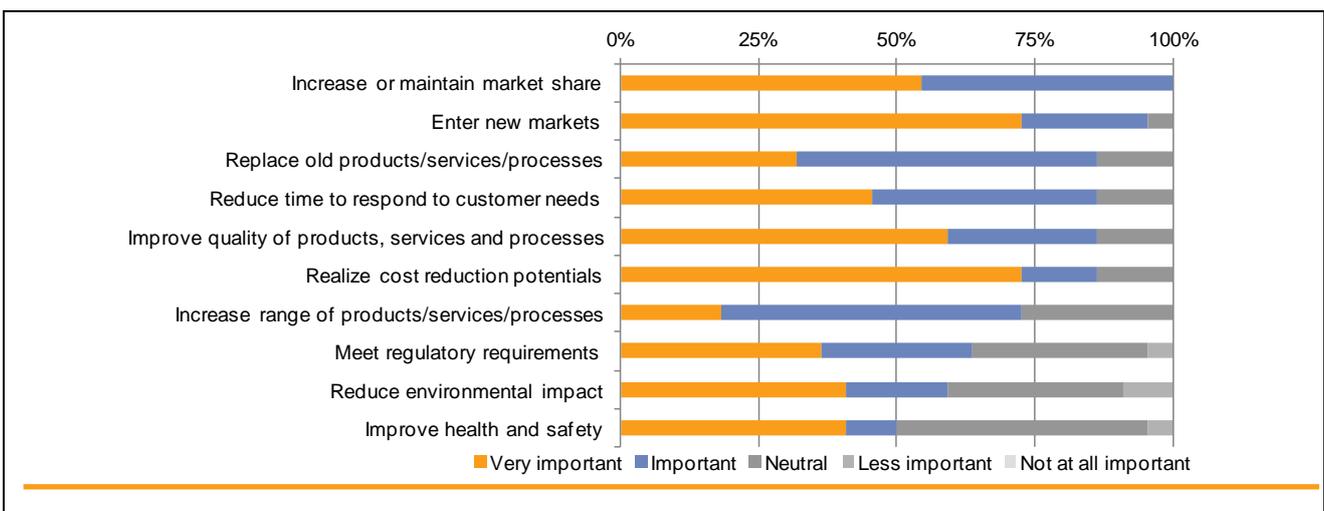


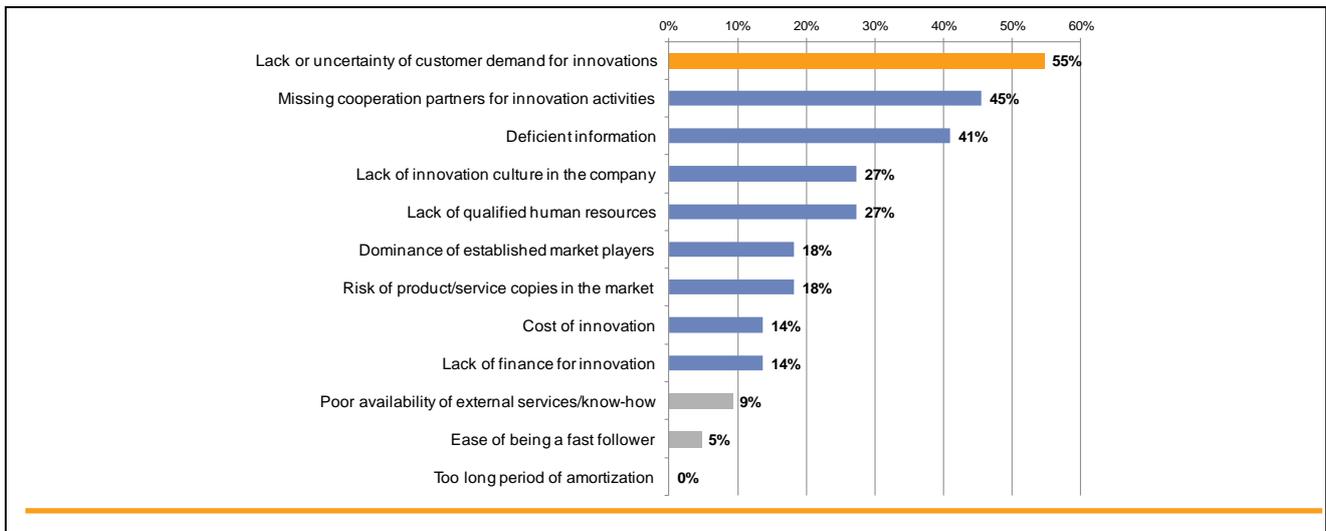
Note: Based on the average evaluation of the cooperation intensity with respective cooperation partners, scale 1 = no cooperation to 5 = very intensive cooperation, number of ties = 1073

Figure 3 - Cooperation intensity in the Mersin Logistics Cluster

Source: [SoCool@EU Consortium, 2011; 2012a]

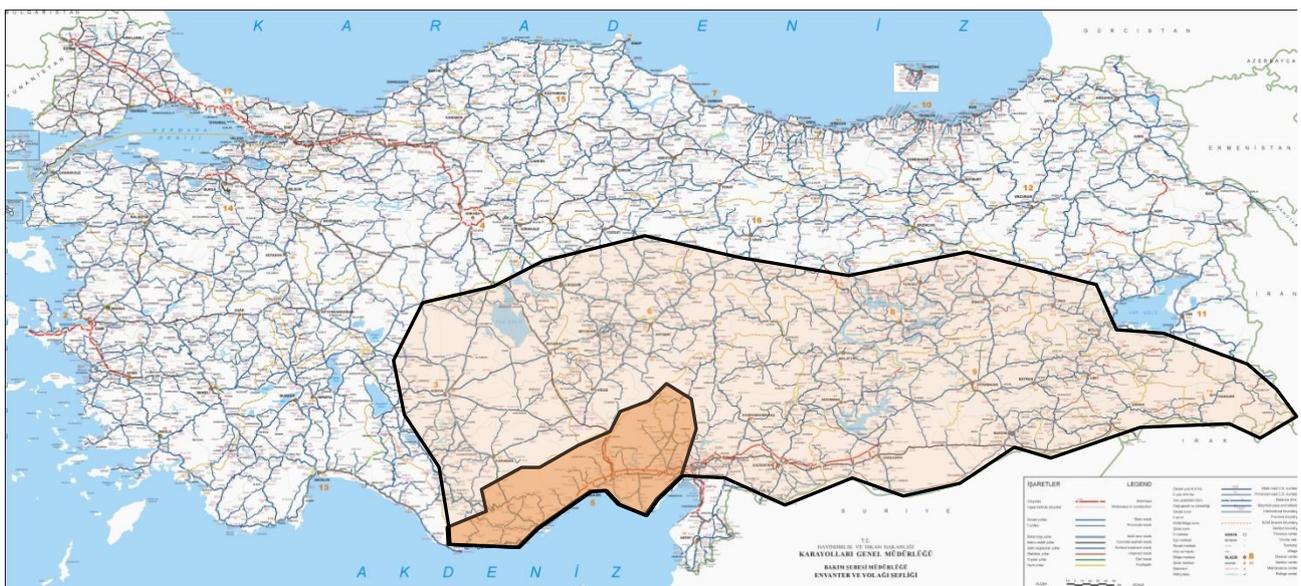
Research findings imply that more than half of the respondents agree that lack or uncertainty of customer demand is the greatest hurdle for innovation activities. Further significant barriers arise through missing cooperation partners and a deficient level of information. Funding does not seem to be a major obstacle. Only 14% perceive a lack of financing as a major issue (Source: SoCool@EU Consortium, 2011; 2012°).



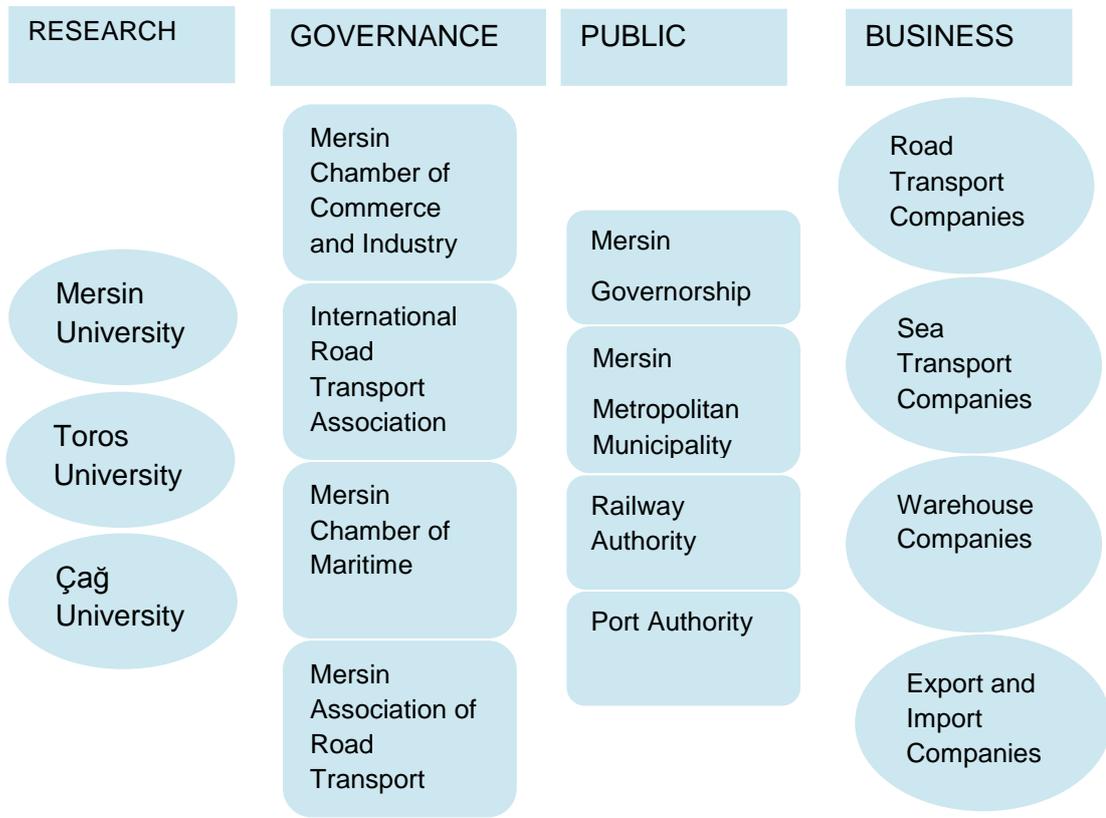


**Figure 4 - Drivers of innovation (upper) vs. barriers for innovation (bottom) for companies in the Mersin region**  
 Source: [SoCool@EU Consortium, 2011; 2012a]

Mersin has been a focal point of sea transportation both for Turkey and for the countries (EU Countries, Middle-East Countries, and CIS Countries) in the hinterland (see Figure 5). Further, Mersin has a relatively advanced transport infrastructure with good international accessibility and significant potentials for proper transit carriages. The port is closely situated to other major ports in the Middle East, such as to the Ports of Syria, Lebanon and Israel, and it serves as a transfer port with sufficient import and export loading capacity. The cluster features in its hinterland certain cities with foreign trade capacities, that are effectively linked both road and railway facilities. The region enjoys an exceptional climate enabling logistics activities in all seasons.

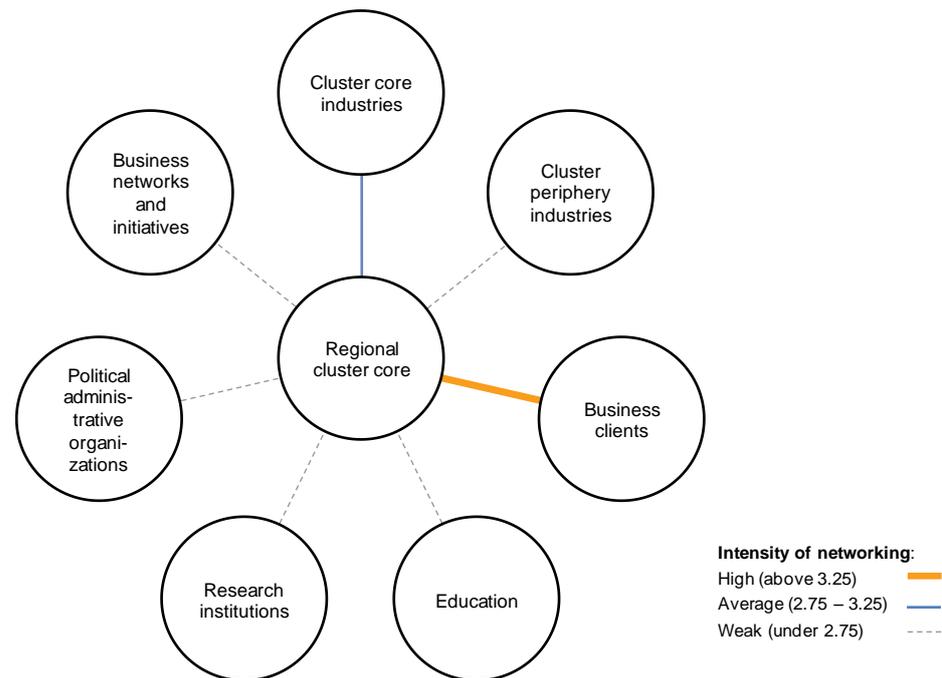


**Figure 5 - Port Hinterland and location of the Mersin region in Turkey**



**Figure 6** - Entities of Mersin Logistics Cluster

An overview of the Mersin Logistics Cluster is illustrated in Figure 6. Mersin's major competitive advantage is the international port enjoying the benefits of an active Free Trade Zone with its own pier, which supports and increases the importance of Mersin in terms of foreign trade and logistics. The Mersin Free Trade Zone allows shippers to directly load/unload from/to ships. With its special legislation providing advantages for foreign trade operations, its geographical location, excellent infrastructure and professional management, Mersin Free Zone provides employment more than 7,000 staff and is an attractive business environment for foreign trade for both Mersin and its hinterland. However, the Free Trade Zone needs functional and structural transformation in order to sustain its competitive advantages. Improvement of logistics infrastructure and technology will provide reduced factor prices and efficiency. Compared to international market standards, technological capacity of supply chain services in the region are less developed. Installation of IT infrastructure will increase the networking between companies and organisations within the regional logistics cluster. The IT network can also help the region develop value added services. Further, as Figure 7 reveals, the networking is less developed in this cluster.



Note: Based on the average evaluation of the cooperation intensity with respective cooperation partners, scale 1 = no cooperation to 5 = very intensive cooperation, number of ties = 845.

**Figure 7 - Cooperation intensity of the regional cluster core with Europe**

Source: [SoCool@EU Consortium, 2011; 2012a]

The Mersin region is by now a major logistics centre in Turkey and its port, transportation and logistics activities give rise to heavy truck traffic and freight movement. However, these movements are currently organised ineffectively and unsustainably, and in Mersin City, growth in all transport modes is inharmonious. This affects the economic and environmental position negatively; traffic congestion, inefficient use of urban space, pollution, etc. In addition to conventional management strategies for efficient handling and movement of goods, the concept of "green logistics" is applied for efficient use of land, adaptation of environmentally friendly technologies and materials, reduction of emissions, reduction of energy use, reverse logistics and similar efforts.

Further, Mersin accommodates a well-trained and well-equipped work force that is sufficiently oriented internationally and able to communicate at least in one foreign language. The area is host to its own university, Mersin University, with a Logistics Research Centre, which offers well-planned education and training programs adopted to provide the industry with qualified staff. The cluster capitalizes national and regional economic growth, increasing amount of export and import volumes, and high availability of cheap labour.

## 4 Establishing a Sustainable and Competitive Mersin Logistic Cluster

The Mentoring Action Plan has been prepared in triple helix manner and rely on knowledge developed in the European leading cluster networks. The SoCool@EU Joint Action Plan (see SoCool@EU deliverable D3.2) has been used as input for the development of the Mentoring Action Plan. Regional and EU partners have contributed to definition of issues, and strategy development to increase the competitiveness of the Mersin region.

The cluster platform will be created by highly developed regions that will offer mentoring to regions with a less developed research profile, share knowledge and provide access to a network of clusters beyond SoCool@EU to support their research capacity

Mentoring actions aim to establish an innovative, interactive, sustainable logistics cluster platform in the Mersin Region. The platform (cluster representative body) will be founded on knowledge and *innovation*. Problem solving and benefit from technological advances will contribute to the logistics cluster in the region. The cluster will be *interactive* and participation and cooperation of research institutes, policy makers and business entities. The platform is project and action based with interaction between all regional partners. The cluster platform will have a long term sustainable setup, until structural advances are achieved.

The essential *mission* of the mentoring action plan for the cluster is to enhance the strategic role of the logistics industry in the region. Companies are facing similar problems related to support, cooperation and business creation, and their individual attempts have not always been effective. The cluster platform can generate an incentive to initiate political and bureaucratic actors to overcome problems (legislation, bureaucratic procedures, and education and investment costs) and promote further development.

Raising awareness and promoting innovation culture in the logistics industry is another mission of the mentoring actions. Sustainable cooperation among policy makers, research institutes and business actors of the region is essential. The mission is to collaborate with regional projects and event organisations, thereby making it possible for each partner to benefit from project events, and business opportunities. Sustainable logistics is a new concept in the Mersin region. Previously, the concept was regarded as part of the transportation industry, and has therefore not been considered individually. Four missions have been defined for the Mersin logistics clusters:

- 1) Identification of logistics as a new industry;
- 2) Establishment of a sustainable cluster; since all companies are facing similar problems, and individual attempts for solving these are often less effective, a cluster set-up can generate more power to force government and regional actors to solve problems, e.g. legislation, bureaucratic procedures, education, and investment promotion;
- 3) raising awareness and fostering innovation culture in the region, especially in the logistics industry; and

- 4) collaboration for further partnerships among cluster partners; in this way each partner may benefit from projects, events, and business creation opportunities.

Mersin Logistics Cluster is established to achieve the following objectives:

- 1) Improving regional governance for innovative logistics
- 2) Developing skills and competencies of human resources
- 3) Creating financing mechanisms to support innovation in logistics industry and to facilitate companies invest in innovation.
- 4) Increasing cooperating among firms, between firms and research entities and promote and support sustainable partnerships.
- 5) Removing barriers caused by infrastructure, and barriers among stakeholders.

## 5 Roadmap and Actions for Creating the Mersin Logistics Cluster

### 5.1 Themes and actions

Mersin is a developing region, and given the current situation, it is unrealistic at this stage to work on highly sophisticated technology and infrastructure investments to improve the freight transport system. Based on the collected information and the analyses we propose the following themes for the establishment of a sustainable logistics cluster in the Mersin region to strengthen freight transport: (1) policy strategy; (2) governance, management and finance; (3) infrastructure; and (4) supporting systems & services. Within the four themes, sixteen actions are determined (see Table 3)

The fields of action carried out are the core of a cluster initiative and will create value for the stakeholders in the cluster. The Mersin region is facing some major challenges and changes that the cluster initiative should address or at least take into consideration for mutual benefit of all involved stakeholders.

A central task is to map the expected growth in the movements of goods along with the developments of the logistics sector in the region. This creates the overall framework for the development activities and pinpoints the need for initiatives within areas such as green freight corridors and smart hubs, improved management skills within ICT (Information and Communication Technology) and supply chain management, as well as the need for investments in e.g. infrastructure and warehousing.

Regarding infrastructure, there are several challenges both in terms of hard and soft infrastructure. For instance, in the current structure, the productivity of the Mersin Port is low due to old equipment, lack of connecting infrastructure, low automation level, untidy port traffic and insufficient port storage fields. There is an overall need in the cluster for improved traffic management systems for goods and passengers, including a standardisation of information infrastructure and better IT-infrastructure, as well as better competence levels among professionals. The hard infrastructure needs to be improved for the individual transport modes but also for co-modal solutions, including a better use and increasing flexibility of physical and information infrastructure.

There is a low demand for logistics research leading to low levels of research-driven logistics innovation. The analysis carried out in WP2 revealed that in many areas there was a lack of skilled labour force with an especially increasing difficulty in finding experienced personnel for middle management in the logistics sector. Focus should therefore be given on increasing the amount of research that addresses the needs of the industry as well as increasing the competence level by improving the human capital, education as well as training of professionals. Some of the important research areas are integrating co-modal information and management services, improving the levels of supply chain engineering, planning and control as well as knowledge on new services and business models.

The absence of a culture of working together among different stakeholders, along with insufficient collaboration among institutions is a further weakness that should be addressed. Activities that focus on promoting collaboration between companies and researchers as well as to create mutual trust are central. This is also an issue when it comes to creating financing instruments that align international, national, regional, and private funding in order to create synergies and maximise the effect of the available funding resources.

**Table 3 - Mersin Logistics Cluster themes and actions**

Theme	Action
Policy strategy	<ul style="list-style-type: none"> <li>▪ Mapping development and flows of goods for the next 20 years</li> <li>▪ Prioritised &amp; development of green corridors / smart hubs / transit points</li> <li>▪ Trade off framework for new investments in multi-model transport and infrastructure</li> <li>▪ Adjusting legislation for fast decision making and to increase network capacity</li> </ul>
Governance, management and finance	<ul style="list-style-type: none"> <li>▪ Instruments to align (national, regional) government, companies, internationalisation</li> <li>▪ Development of new business models, trade off frameworks and regulation</li> <li>▪ Generating opportunities for new financing models</li> <li>▪ Standardisation of information flows, e.g. e-freight documentation</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>▪ Development robust physical infrastructure (road, rail, waterborne, air)</li> <li>▪ Development of efficient traffic management systems for goods and passengers</li> <li>▪ Development and standardisation of information infrastructure</li> <li>▪ Better use and increasing flexibility of physical and information infrastructure</li> </ul>
Supporting systems & services	<ul style="list-style-type: none"> <li>▪ Integrated co-modal information and management services</li> <li>▪ Supply chain engineering, planning and control</li> <li>▪ New services &amp; business models</li> <li>▪ Human capital, education and training</li> </ul>

## 5.2 Mersin Logistics Cluster governance form

Mersin Logistics Cluster management body, called "Mersin Logistics Platform", is a voluntary organisation established with a mission to overcome and reduce problems of the sector, one of the triggering industries for Mersin and long term road-map of the logistics industry. The platform and its basic cooperation and coordination principles, was established on 26 June, 2007 and is comprised of members from state owned organizations, nongovernmental organizations, and private industry. The main objective of the platform is to transform the city into a logistics hub

centre appealing to not only in a national scope but also to Middle Eastern countries and Commonwealth of Independent States.

Some of the activities and projects of Mersin Logistics Platform are as follows:

- A short-and medium term logistics action plan for Mersin has been prepared and put into effect (practice)
- Mersin Logistics Master Plan has been outsourced to and established by a professional organisation
- In order to establish an international logistic centre in Mersin, certain coordinated studies with the Ministry of Industry and Trade have been initiated/started
- A number of reports revealing the present situation of Mersin in logistics have been issued/prepared
- Establishment of cooperation with the educational institutions offering education and training in the field of logistics.
- Business trips have been arranged in order to analyze certain well-known and established clusters for some European logistics cities
- Promotion of logistic investments in Mersin

Mersin Chamber of Commerce and Industry (MTSO) has 18,637 members and disposes of Profession Committees of 36 Groups, Council of 82 persons, Administrative Committee of 11 persons, and 8 Services managed with total of 55 staffs. MTSO is working with the following organisations:

<p><b>Research Entity</b></p> <ul style="list-style-type: none"> <li>- Mersin University Centre for International Trade and Logistics</li> <li>- Mersin University Graduate School of Logistics and Supply Chain Management.</li> <li>- Mersin University Vocational School of Logistics.</li> <li>- Mersin University Vocational School of Maritime.</li> <li>- Çağ University Vocational School of Logistics.</li> </ul> <p>Note: These research and education institutions are established in recent years. Their relation to industry was limited to organisation of conferences. Graduates are often employed in the industry.</p>	<p><b>Regional Authority</b></p> <ul style="list-style-type: none"> <li>- Mersin Governorship</li> <li>- Metropolitan Municipality of Mersin</li> <li>- MTSO</li> <li>- Mersin Chamber of Shipping</li> <li>- State railways</li> </ul>
<p><b>Business Entity</b></p> <ul style="list-style-type: none"> <li>- MIP Mersin International Port</li> <li>- Atako Logistics Co.</li> <li>- Intercombi Logistics Co.</li> <li>- Tria Logistics Co.</li> <li>- ÖnderGümrük Co.</li> </ul>	<p><b>Other Actors</b></p> <ul style="list-style-type: none"> <li>- UND - International Transporters' Association</li> <li>- LODER - Logistics Association</li> <li>- UTIKAD - Freight Forwarders &amp; Logistics Service Providers Associations</li> </ul>

### **5.3 Knowledge backbone of the Mersin Logistics Cluster**

Mersin has three universities with undergraduate and graduate programs as well as scientific research to support regional industrial and commercial development. In recent years, stakeholders responsible for life-long education have devoted much of their effort on trade and logistics by providing learning and training facilities. Trade and logistics programs are maintained at high schools and two-year vocational higher schools in addition to the undergraduate and graduate levels in order to provide skilled employment. In addition, Mersin Chamber of Commerce and Industry, and Mersin Chamber of Shipping carried out some certificate programs and short term training programs. Mersin University, Toros University and Çağ University aim to establish graduate programs on logistics and supply chain management. Students have opportunities to participate to training programs organized by International Transporter's Association (IATA) and Ro-Ro Vessel Operators & Combined Transporters' Association (RODER). Once such long-term teaching and training curricula have been prepared and activated, the number of those specialized in international trade and logistics will increase, accelerating the regional progress in these fields.

### **5.4 Mersin Logistics Cluster and the regional economic policy**

Regional Development Agencies in Turkey are the regional bodies responsible for designing policy papers regarding economic development. Cukurova Development Agency is the body which covers both the Adana and Mersin regions. The Mersin logistics sector is noted among the strong sectors in the Cukurova Regional Development Plan. Therefore, the Agency is also represented in the Mersin Logistics Cluster's Management Board. The Mersin Governorship and the Agency are the two major public bodies that view the clustering activities in Mersin as a tool which can realise the regional economic development plans. The regional economic development plan in Mersin takes its path from the 2006-2016 Mersin Innovation Plans which were carried out as an FP6 Project "RIS-Mersin" completed in 2008. The Mersin Logistics Cluster was also formed in the project and represents the Strategic Goal 3: Exploiting regional potential in key sectors. The strategy puts a specific emphasis on the following sectors which are vital for the economy of Mersin and which have the potential to become more competitive in a short period of time through innovation intervention: Tourism, Agro-food and Logistics. To enable these sectors to gain and sustain competitive advantage, the following operational objectives will be reached:

- 1) Developing long term innovation strategies for each sector;
- 2) Establishing regional, national and global networks, synergies and partnerships;
- 3) Mobilising financial resources for innovation activities of companies; and
- 4) Investing in the development of human capital.

The roadmap of the mentoring region is presented in Table 4.

**Table 4 - Roadmap towards an Innovative Logistics Cluster in the Mersin Region**

Focus	Theme	Action	rank	Timeline										Feature				Target 2023
				2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	F	R	
Sustainable Transport and Logistics	Policy strategy	Mapping development and flows of goods for the next 20 years	2	[Green bar from 2012 to 2021]										X	X			develop multi-modal strategy; prioritise connections
		Prioritising & development of green corridors / smart hubs / transit points	4	[Green bar from 2014 to 2018]										X	X	X	X	
		Trade off framework for new investments in multi-modal transport and infrastructure	1	[Green bar from 2014 to 2016]											X	X	X	
		Adjusting legislation for fast decision making and to increase network capacity	3	[Green bar from 2014 to 2016]												X	X	
	Governance, management and finance	Instruments to align (national, regional) government, companies, internationalisation	1	[Green bar from 2013 to 2018]										X	X		X	create control possibilities
		Development of new business models, trade off frameworks and regulation	2	[Green bar from 2013 to 2018]										X	X	X	X	
		Generating opportunities for new financing models	3	[Green bar from 2014 to 2019]											X	X		
		Standardisation of information flows, e.g. e-freight documentation	4	[Green bar from 2014 to 2019]										X	X			
	Infrastructure	Development robust physical infrastructure (road, rail, waterborne, air)	1	[Green bar from 2013 to 2021]										X	X	X	X	develop sustainable infrastructure
		Development of efficient traffic management systems for goods and passengers	3	[Green bar from 2014 to 2019]											X	X		
		Development and standardisation of information infrastructure	4	[Green bar from 2015 to 2020]										X				
		Better use and increasing flexibility of physical and information infrastructure	2	[Green bar from 2016 to 2021]										X				
	Supporting systems & services	Integrated synchromodal information and management services	3	[Green bar from 2016 to 2021]										X				create seamless logistics
		Supply chain engineering, planning and control	4	[Green bar from 2015 to 2020]										X	X	X	X	
		New services & business models	2	[Green bar from 2014 to 2019]										X	X	X	X	
		Human capital, education and training	1	[Green bar from 2013 to 2021]												X	X	

Note: F - Fundamental; R - R&D; D- Deployment; M - Market pilot

## 6 Models and organisation of the Mersin Logistics Cluster

### 6.1 Cluster models

Establishing a cluster initiative is a complex task, which requires a variety of activities ranging from involving the relevant stakeholders in the region in order to establish true triple-helix cooperation, setting up a legal framework for the organisation, achieving funding for the initiative as well as developing a business model in order to secure long term financing. Finally it is essential to develop a range of services, in addition to being part of the network, which can create value for the companies in the cluster. In this chapter these central aspects which are necessary in order to establish cluster cooperation are analyzed and described.

The organisational structure of a cluster is of significant importance and strongly influences all other aspects of a cluster initiative. If the organisational structure does not guarantee transparency and accountability, the cluster loses its basis for mutual trust among its members which is essential to ensure successful cooperation. Furthermore, the organisational structure defines the cluster's functions and benefits for its members and in most occasions promotes the feeling of a common corporate identity among its members. It is also important to have the problem discussion on a level that not will create competitive problems. Otherwise it is very hard to achieve transparency.

With regard to the *legal forms* of clusters, some possible examples are<sup>1</sup>:

- Association (non-profit or for-profit)
- Private limited company (Ltd)
- Foundation
- Joint stock company
- Hybrid forms (mix of association and private limited company)

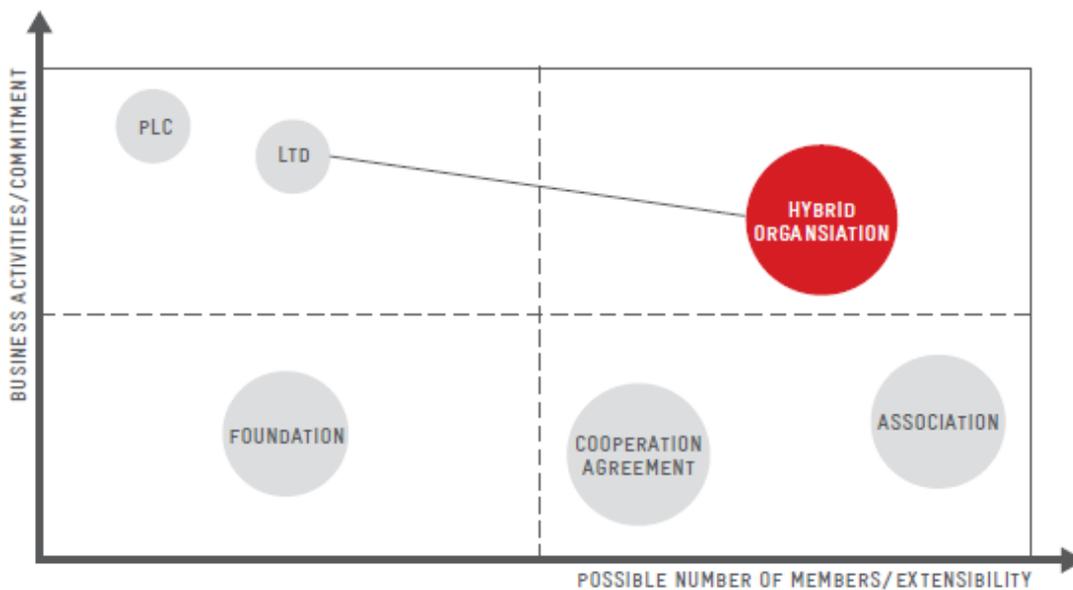
Furthermore, it is possible to have a more informal network cooperation through project-based partnerships and discussion groups that meet on a regular basis.

The legal form, structure (hierarchy), and working procedures are the central features of a cluster's organisational structure and should represent the interests of the major stakeholders in the region in order to secure neutrality and broad acceptance. The legal form of the cluster initiative highly influences the characteristics of the initiative, including how many members the initiative has, how strongly the business is committed, and what type of activities the initiative undertakes, and how the initiative is financed.

Figure 8 shows how the relationship is between the legal form of a cluster initiative and how many members that will join the initiative as well as to what degree the companies are committed.

The choice of a specific legal form depends on the one hand on the objective(s) of the specific cluster including the planned activities and services and should therefore be considered once the strategy of the cluster has been defined. The implementation of certain commercial activities requires a more official legal establishment compared to clusters that aim at boosting cooperation in research and development projects. Also, in the case of clusters that aim at having a very dynamic member list need to take into consideration if the organisational structure allows them too easily and quickly integrate and/or exclude members (member fees vs. shareholders). In this aspect also the number of members is considered an important factor. Last but not least, it is

important to take into consideration the willingness of the cluster members to set up one type of organisational structure than another considering short-term vs. long-term commitment, risks, complexity in management, etc. In many occasions this decision will also depend on the prior collaborations that might have taken place already among the cluster members (first time collaboration vs. continuation of former successful collaborations).



**Figure 8** - Correlation between the business activities, membership flexibility

Source: "Cluster Management – A Practical Guide. Part A: Overview", Günter Scheer and Lucas von Zallinger, Economic Development and Employment Promotion Program implemented by the Ministry of Economy, Labor and Entrepreneurship of the Republic of Croatia and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH.

Relating to a cluster's *structure*, the different hierarchal organs will depend on the type of legal form that the cluster chooses (the ownership) as well as the desired distribution of competences (responsibilities) and communication flows (between members and/or departments). Membership cluster organisations are owned and controlled by their own members and these tend to elect a steering board to which the cluster manager reports. In the partnership model (PLC or Ltd for example), the cluster organisation is owned by one or several individual organisations that are usually key local or regional stakeholders. The owner or owners contribute not only funding but also provides resources, manpower and other types of support.<sup>ii</sup> Additionally, in the procedure of selection a cluster structure it is important to take also into consideration transparency and functionality. It is recommended to leave it as flat as possible (include as few hierarchical levels as possible) to ensure an operational functionality (fast decision making in situation that need urgent answers) and transparency. One classic example of a cluster structure includes the elements: President (one representative from a cluster member elected for a certain period), Steering Committee (a selected group of cluster members), General Assembly (all cluster members), Working Groups, Secretariat (can either be independent of the cluster members to avoid conflicts

of interests or be located and managed by a cluster member), and a Cluster Manager (elected by the Steering Committee and General Assembly). The cluster's structure should be formally established and described in the official founding documents of the cluster, describing the functions, competences and responsibilities of each element, the election process and period of each element and the rights and duties. It is considered important this founding document to be signed by all cluster members to ensure a binding cooperation commitment through the rules and management structure established.

Finally, the *working procedures* of a cluster are concerned with how the service processes are organised within the cluster. These should ensure a fair treatment of all cluster members and guarantee equal rights and opportunities for all members to collaborate in the cluster activities, such as training, projects (external and internal), consultancy, etc. For example, in the case of project collaborations it is important to consider not only how to manage its planning and implementation but also how to select the partners that would enter the project collaboration. The procedures would here depend on the type of project:

- Internal project among the cluster members and funded through private R&D investments by the cluster members involved in the project;
- External projects that would involve also non-member institutions with public funding that would indicate official partner requirements; and
- External projects where the cluster itself would figure as partner in representation of all the cluster members.

All clusters, therefore, need to establish numerous working and decision making procedures are handled by cluster members jointly and in a goal-oriented manner.

Cluster management model is a vital issue for cluster performance. In the literature various models had been elaborated, and adaptive strategies are identified. Mersin Logistics Cluster aims to discuss effective strategies for cluster organization: among them foundation, association, a non-profit company, and a round table group meeting will be elaborated. Each partner of SoCool@EU Project has unique conditions, needs and experiences. The following models have been discussed with partners and a feasible model can be established: (1) Association; (2) Round Table Discussion Group; (3) Foundation; (4) Non-Profit Company (5) Project Based Partnership; and other model(s).

The knowledge and experience gained from the SoCool@EU project is the major contribution to the mentored region. In addition, each work package has specific outputs and mentoring action plan will take into account the strategies, and adapt to the mentored region.

A SWOT analysis was conducted by the SoCool@EU Consortium. The project team of MTSO have visited 25 companies in Mersin Region in June 2012. Those companies will have leading roles in regional cluster formation and planned activities. In September 2012 a Cluster Workshop was held in order to identify both the SWOT perspectives in the region and collaboration possibilities. Workshop participants were optimistic about the future of the industry, and they

mentioned the necessity of a competitive, balanced, and effective transport infrastructure. Also included in the recommendations were: development of e-transportation, development of a data base for all transportation chains, standardisation of service quality, development of freight villages (zones), adaptation of best practices, and sharing of experiences between logistics companies. The opinions of the government agencies and the chambers were focusing of long-term nationwide strategies, while companies are interested in solutions which will improve the status of the logistics sector in the short term. Mersin logistics cluster is not represented by any institution or body. Each body is responsible for its sub-category, and a holistic approach has not been adopted. Many events, training programs are conducted by nationwide bodies, and vertical organization of triple helix (business-research institution-association) may weaken the regional cluster organisation. SoCool@EU partners may provide a solution for regional-national and international cooperation strategies. Definition of the topics of thematic collaboration at three levels may be an input for mentoring action plan.

## 6.2 State-of-the-art

In Mersin Region the cluster formation (establishment, management and representation) in current state is problematic. According to Turkish legislation public institutions cannot be members of any association or similar structure. Public institutions (universities, chambers, governmental bodies) can be partners of projects. This method, to some extent, is sustainable since for the last years regional cooperation has taken place based on project based agreements.

Mersin Logistics Cluster cannot be either an association or a governmental body, because its representative capacity may be limited. Associations are criticized for their "awkward-ineffective" structure. The cluster may be represented by MTSO or MDTO, but other alternatives shall be discussed.

This issue will guide us to further identify/develop a funding strategy. In the upcoming WP5 cluster event, this issue will be one of major topics for discussion. The SoCool@EU partners will present their experiences and approaches, and the results will be used for updating the mentoring action plan.

## 6.3 Local actors

In the cluster analysis, conducted in Mersin Region some major problems have been identified. In addition, when cluster formation and projects are considered, local actors have an optimistic view on the future.

### UND (International Road Transport Association)

“UND is a leading professional association in Turkey, established in 1974 by representatives from Turkish road freight transport sector, and has a branch in Mersin. Collaboration and partnership must be improved between the smallest companies to get power for the biggest companies in the

logistics sector (also for Mersin). According to the UND, government should provide some supports to the logistics sector such as tax discount and sectorial incentive. UND's expectation from the cluster is to implement the innovative project which will contribute to regional development in logistics sector such as education for human resource or investment projects. Other important expectation of UND is getting know-how from the cluster to share with their members around of Turkey"

#### MDTO (Mersin Chamber of Shipping)

"MDTO was established in 1989, in order to facilitate occupational activities, to develop the maritime sector in accordance with the general interests, and to support professional ethics. The Chamber has 343 members which are active in the Mersin Region. Currently, the collaboration between research institutes, public authorities and companies is insufficient because of subjective assessment. Relations with research institutions should increase, on the other hand; regional and national policies should have realistic, concrete, and sustainable development plans. European policies should not create unfair competition and should be productive. Mersin Chamber of Shipping can be a founder and operator of a project. A development project should be large-scale and competitive and respond to all types of logistics. The project could be financed for instance from the regions and public participation"

#### Cağ University

"Mersin region has an important potential for logistics. However, the headquarters of the leading companies are in Istanbul which is a disadvantage of Mersin. The rest of the companies does not have enough capacity to support the research. Cağ University is open to contribute to projects with European partners. Cag University has an International Logistic Education department and Human Research training and many research projects which can contribute to the cluster. Status analysis, future prediction and forecasting can dominate the sector and optimization can be achieved for the benefit of logistics cluster."

#### Nokta Logistics

"The company provides all types of transport and logistics services. The main goal of the company is to institutionalize and improve the current conditions. In the Mersin region Infrastructure, Technology, Research, and Networking must be supported and improved. The development of the cluster will provide some facilities to all sectors (logistics industry) in the Mersin region. Especially, it will support benefits from new developments."

## 6.4 Funding

Mentoring Action Plan will elaborate the following funding sources:

### 1) Cluster organisation's own budget.

Cluster organisation's own budget could come from a stakeholder structure, i.e. the stakeholders of an institutionalized cluster (e.g. registered company). For example, in the case of HOLM, the Federal State of Hessen holds a 86.5%, the City of Frankfurt/Main a 12.5%, and the HOLM association network a 1% of the HOLM Ltd. company, House of Logistics & Mobility (HOLM) GmbH.

### 2) Co-funding

Projects and activities in the cluster institution could be co-funded by: (1) funding programs of regional, national, and international funding programs; and (2) further co-funding could come from funding partners from industry and public authorities.

### 3) Project funding

Project funding either comes from a co-funding scheme involving programs (see the previous funding source) or directly by partners on the cluster platform. We wish to explore whether regional partners will commit themselves financially on project basis by providing expert employees or immaterial support.

### 4) External sources

External sources could be tapped in the form of sponsorships for e.g. events, the development of cluster documents etc. These external sources are less regular than subsidies from funding partners but do occur on an occasional basis.

### 5) Membership fees

There could be founded a networking structure, such as a registered association, in which the regional cluster actors are members in, e.g. members from industry, research, and public authorities. These members, via their association, are connected to the cluster institution. Membership for the association is for example collected on a yearly basis, e.g. the yearly membership fee for the HOLM e. V. is € 30.00 for personal members and € 250.00 for institutional members.

### 6) Consultancy fees

Once the cluster and its cluster institution is more mature, it can sell its expertise to other (mentoring) locations which try to develop their cluster strategy and management. Consultancy fees could be charged for selling the service of advising other regions how to raise a cluster.

## 6.5 Adaptation to triple helix

The following activities have been taken into account:

### Mapping the cluster

Cluster mapping can help to identify the major players within the cluster. This exercise serves to develop a cluster map which shows the major actors and their relations in the cluster. Such cluster mapping can also be underpinned with statistics data such as productivity, innovation, employment development of related and supporting industries of logistics, and wealth indication. A toolset for mapping has been developed by HOLM and can be transferred to mentored regions.

### EU partners.

The Mersin Cluster should attract the major EU players in developing their cluster. These are especially tailored funding programs for mentored regions, such as internationalization and matchmaking programs, SME programs, infrastructure funding, or innovation funding.

### Companies

Mersin will further relate with EU-wide industry companies to draw investment and knowledge into the cluster. These should be major players in logistics and transport such as infrastructure developers, logistics service providers, technology solution developers etc. These firms could come from the networks of the more developed clusters in the project consortium. Today approximately 1400 transport and logistics companies are active in the region. However, almost 90% of them are small scale truck operators. Logistics is regarded as the pioneering industry of the region and government pays attention to the development of this industry and provides funding for projects aiming at thematic clustering.

### Universities

One of the important tasks for the cluster initiative in the Mersin region is get companies to cooperate with research institutions and associations and to facilitate participation in innovation processes and development activities. Building up trust and relationships to industry is an on-going task that requires that the cluster initiative continually shows value from the cluster activities. Otherwise companies will not commit to the initiative and spend the necessary resources. Universities develop the basic knowledge of cluster research and management. In the case of the Frankfurt cluster, research in measuring cluster success, developing recommendations for action regarding the cluster strategy is on- going. Mersin is developing its own research capacities based on the knowledge from the universities of the other regional clusters in the project. Universities and other educational institutions are central for cluster cooperation and often work with both education and training of professionals as well as research and development activities. However, it is important that the agendas of the universities are coordinated with the needs of the industry as there otherwise is great risk that researchers will focus on themes that are of interest for the research community but not the companies.

In order to get further input from the central stakeholders it is important to carry out a range of additional activities including from interviews, desk research as well as a workshop.

### Chambers of commerce, associations, and local/regional government agencies

Associations are a central stakeholder to involve in the Mersin cluster initiative. Associations have strong contacts in industry and can therefore endorse the cluster initiative, if this contributes to the interests of the association and gives value to the companies. If the associations are not involved, there is risk that the cluster initiative is perceived as a competitor in which case they often will have good possibilities for hindering the work of the cluster initiative. It is therefore important to involve the association, but on the other hand also to stay neutral, in order not to reject other stakeholder groups such as research institutions and schools. Public and semi-public authorities and institutions in Mersin engage in the dialogue with industry and research to develop an overarching cluster strategy with a roadmap. They are the network enabler from the public side. This could be done in a reciprocal process with feedback loops between the triple-helix. This way, public authorities become engaged in policies, which are relevant for the cluster.

## **6.6 Internal and international cooperation**

### Purpose

The aim is to leverage efficiency externalities (price, cost, joint marketing, economies of scale, specialised skills) and innovation externalities (e.g. supply chain knowledge flows, joint R&D, customer role in product development, and diversity of skills).

### Interaction level

The regional cluster will be responsible for intensifying interaction among regional partners, bodies and actors. Interaction refers to both object oriented meetings and one to one agreements. The SoCool@EU project will provide opportunities and promote interaction for each entity. Cluster conference, workshop, company visits, logistics days and meetings aim to match beneficiaries. For the event list, see WP5 workplan.

### Bridges

Currently, research findings show that regional cluster core and business clients have strong ties. However, the ties among regional actors are relatively weak. The SoCool@EU project aims to enhance bridges among cluster core industries, periphery industries, business clients, business initiatives, research entities, education and administrative organisations. Figure 9 shows intensification of relations among regional actors. A set of strategies and events and will be identified for each pair. The regional cluster will be responsible for corporate projects, business days, training programs, knowledge transfer and regular meetings.

### Actions that span the gaps and tie the cluster together

Implementation of mentoring actions refer to new project ideas, new agreements, new institutional formations. During the mentoring process corporate projects will be formulated.

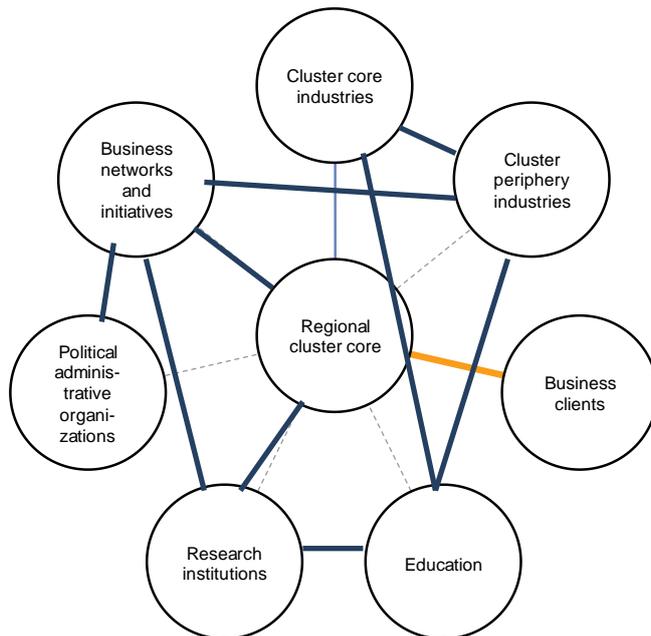


Figure 9 - Expected level of intensification of ties at regional level

### The collaboration opportunities, collaboration activities

Collaboration may be either internal or external. Internal collaboration refers to matching business to business interests. In addition a firm may contact a researcher. The mentoring process aims to create internal collaboration opportunities. To do this cluster will have members from business entities and research institutions. Local actors may also participate in projects which are identified in WP3 action plan. If those projects are adopted international collaboration can be achieved.

### Business models

The current state of the cluster has its own innovation drivers and barriers. It will be the role of researchers in liaison with regional clusters actors who will propose emerging business models (e.g. logistics performance based fees, shareholding with independent operation of logistics facilities, guaranteed savings, horizontal collaboration, resource sharing/reduction, DBFO (Design, Build, Finance, and Operate), and pay per service) that fit the drivers and overcome the barriers to innovate specifically in a internal and/or international cooperation project..

### Actual contacts between actors

Actual contacts will be measured by specific indicators: number of new projects, new agreements between companies, or business entities, number of research thesis, research papers, and patents.

#### 1) Interaction level

Interaction takes place on a project basis, rather than a political level. A project could be the formulation of a mutually accepted cluster strategy and implementation method. Each

interaction should involve the triple helix, as otherwise developments might take opposite directions. There needs to be a platform for interaction (or an Institution for Collaboration) which brings together the relevant regional actors from the cluster.

#### 2) Actions that span the gaps and tie the cluster together

A variety of instruments are part of overarching cluster management. These are thorough analysis tools, networking events, workshops and think-tanks, internationalization fairs, etc. The bridge to successful cluster management has been developed by the more advanced clusters in the project. Mersin will seek to utilize this knowledge. The cluster management approach of the Frankfurt cluster can be seen below. It proved to be a successful sequence of steps necessary to bring together a cluster, achieving one vision and mission.

#### 3) The collaboration opportunities, collaboration activities

The collaboration takes place on a cluster platform which yet needs to be founded and put into operation. Cooperation activities span cluster projects in infrastructure and technology, joint events for marketing Mersin as a Free Trade Zone, policy initiatives, regional expert roundtables, and activities to promote logistics/transport as the core competency of the region

#### 4) Actual contacts between actors

Actual contacts between actors happens both on a formal and informal level. Formally, cluster actors become members in one network, association, or cluster institution and are listed in a cluster database developed and run by the cluster institution. Informally, the cluster actors remain in contact through mutual networking activities, such as personal appointments, expert reference and recommendation, board membership, societal events, and building up of social capital.

## 6.7 Cluster development process

The development process of the Mersin Logistics Cluster is presented in Figure 10.

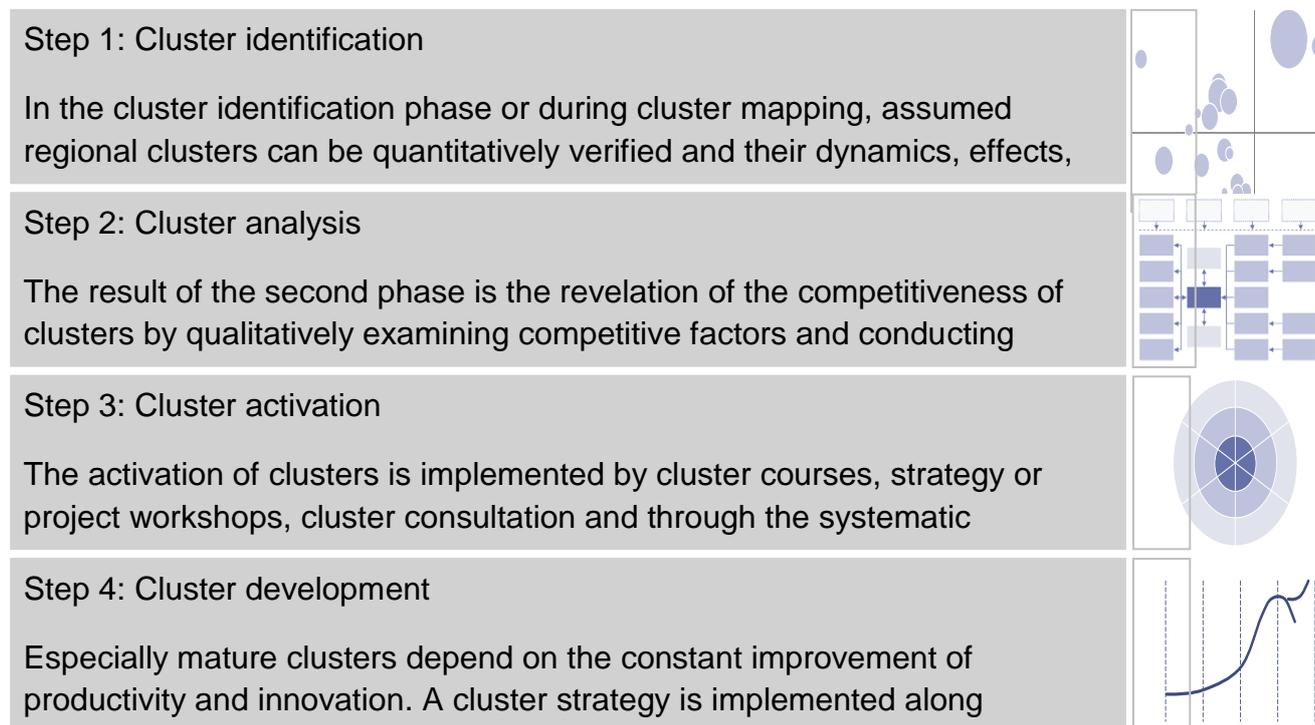


Figure 10 - Cluster development process

## 7 Impacts of SoCool@EU on the Mentoring Cluster

SoCool@EU will guide and facilitate achieving measures of the innovative logistics concept and sustainable clustering in Mersin. Sharing experiences and collaboration is the main motivation of the project. In that sense, Mersin Region is eager to adopt know-how and experience that partners have developed and collected. In addition, policies used in existing logistic clusters and aiming at green logistics, implemented in cities can also be adapted to partner regions and the innovation oriented logistics cluster that is under construction.

The mentoring strategies will be a guide for the Mersin Region with the aim of establishing a cluster to improve innovation through collaboration and knowledge sharing in networks. The objectives of mentoring actions are specified in the Description of Work for the SoCool@EU project as follows:

- Provide the mentoring region with an exchange platform to help them enrich their knowledge basis, and create and reinforce transnational relationships.
- Equip the Mersin with tools and methods to contribute to an efficient and sustainable transport-related economy. This task is intended for the implementation of mentoring actions towards a developing region from a two-level approach:
  - o Mentoring decision makers and public organizations
  - o Mentoring SMEs: Dissemination of opportunities for R&D project development using regional and EU funding schemes, use of knowledge and technology transfer tools and participation in targeted events, promotional events for the creation of SME.

The mentoring action plan is expected to have impacts on Mersin Region at the following dimensions:

### 1) Experience, lessons learnt

Participation in the SoCool@EU project process is one of the main reference activities of the mentored region. During the process, lessons from analysis, planning and implementation will be documented and a guide reference report will be presented to regional cluster members and regional actors. This document can also be a main reference document for national authorities which are responsible for cluster promotion.

### 2) Strategies

In order to intensify the impacts of the project, active involvement of regional actors is crucial. Mentoring strategies primarily focus on active participation and contribution of business entities, companies, public authorities and research institutions. At the first stage experiences and expectations of each party will be shared. This promotes sharing experiences, thereby maximising the contribution of each partner.

### 3) Sustainable partnership

The institutional structure of the cluster is crucial for sustainability of the partnerships. The cluster core can be main interface (or medium) of partnerships. B2B partnerships are mostly activated in a business environment. However, business and research entities do not survive project based short termed partnerships. The cluster management authority will be responsible for observing and identifying knowledge transfer opportunities. For example, case specific research projects can be initiated by the cluster management unit.

### 4) Inputs-outputs

The inputs of the project are knowledge and contributions of international and regional partners. The outcomes are concrete results of the mentoring actions. Business, research, and political entities will benefit from the knowledge and experience of the project. Increased intensity of cooperation, corporate activities, agreements, case specific projects, employment figures, new courses, training programs, reduction of problems in business creation are specific impacts. A final SWOT and meta-analysis can be conducted to measure impacts. Before-and-after study will show both countable and non-countable impacts of the project on the region. Additionally, inputs of each local partner, entity, and member will be measured via an observatory system. The cluster will have an observatory unit. This unit will operate in Mersin University and investigate contribution of partners, members, and institutions. Specific, concrete outputs of each event, action, and project will be measured by the cluster observatory. Finally a table of facts and figures (numerical) and interview report will be presented to understand impacts.

## 8 Conclusion

The overall aim of the mentoring actions in the SoCool@EU project is to help the Mersin Region in Turkey to develop their cluster cooperation. The Mentoring Action Plan is a roadmap that specifies the strategy towards establishing such cluster cooperation. This report represents the first version of this Mentoring Action Plan and has been developed based on the experiences from the clusters in the SoCool@EU project, a SWOT analysis of the Mersin Region, literature studies, interviews with experts in the Mersin Region, as well as on a statistical analysis of the Mersin logistics cluster.

Each of the existing clusters of SoCool@EU has different characteristics revealing that there exist no single way towards certain success. Furthermore, the specific characteristics of the Mersin region is different from the existing other clusters, for which reason transferring experiences and knowledge from the mature clusters in some cases is difficult and must be considered from the environment where it is used.

The organisational structure is of significant importance and strongly influences all other aspects of a cluster initiative. If the organisational structure does not guarantee transparency and accountability, the cluster loses its basis for mutual trust among its members which is essential to ensure successful cooperation. Further, achieving funding in order to establish and run a permanent cluster initiative is likewise central issues. Problems must be approached at a level which will not force partners to share sensitive competitive data. If this is the case sub groups with partners from different branches can jointly work with the specific problem without having to share data with competitors. The experience from the existing cluster organisations in the SoCool@EU project is that the founding resources in general are a mix of member fees, governmental support and projects finances. Finally, it is essential that a logistics cluster organisation in the Mersin Region is based on a triple helix collaboration, and all three parts are regarded as equals. The experiences from other SoCool@EU partners and other cluster organisations in Europe point to the success of the triple helix concept as a base for the organisation.

However, as Mersin is a developing region, and given the current situation, it is unrealistic at this stage to work on highly sophisticated technology and infrastructure investments to improve the freight transport system. We propose the following themes for the establishment of a sustainable logistics cluster in the Mersin region to strengthen freight transport: (1) policy strategy; (2) governance, management and finance; (3) infrastructure; and (4) supporting systems & services.

The overall conclusion is that it is not possible to point out one best practice within cluster development by looking at the mature clusters in the SoCool@EU projects since every cluster has a different structure, different sources of funding and services towards the participating clusters. The strategy for establishing a cluster initiative in the Mersin region has to be further developed in cooperation with the companies, industry associations, universities and authorities in the region and should take into consideration the specific characteristics of the cluster.

## 9 References

1. American Association of Port Authorities. (2010). Port Industry Statistics. Retrieved September 20, 2012.
2. Dutch Institute for Advanced Logistics (Dinalog) (2013). Dinalog Year Book, Dinalog, Breda.
3. Ener, T. (2010). Global Logistics Performance Index: Analysis of Performances of Logistics Firms in Mersin. Mersin University, Ed.
4. Lu, M., Zorlu, F., Filik, F. (2013). Establishment of Intelligent and Sustainable Freight Transport in Mersin. In Proceedings: 9th European Congress on Intelligent Transport Systems, Paper Number: TP0084, Dublin.
5. Maestro Consultancy, & Yıldıztekin, A. (Eds.). (2008). Mersin Logistics Master Plan.
6. Metin, H. (2010). Social and Institutional Impacts of Mersin Regional Innovation Strategy: Stakeholders Perspective. (Middle East Technical University, Ed.).
7. Morse, J. M. (2003). Principles of Mixed Methods and Multimethod Research Design. Handbook of Mixed Methods in Social & Behavioral Research, pp. 189-208.
8. Oğuztimur, Ş. (2008). The Evaluation of Global Port Competitiveness in the Context of Maritime Cargo Shipment. Yıldız Technical University.
9. Sezer, U. (2007). Pan Avrupa Ulaşım Ağında Mersin Limanı'nın Lojistik İşlevi. (Dokuz Eylül University, Ed.).
10. SoCool@EU Consortium (2011). Description of Work, SoCool@EU (Sustainable Organisation between Clusters Of Optimised Logistics @ Europe), Brussels.
11. SoCool@EU Consortium (2012a). Deliverable D2.1: Cluster analysis report, SoCool@EU, Brussels.
12. SoCool@EU Consortium (2012b). Deliverable D5.1: Needs analysis / SWOT report, SoCool@EU, Brussels.

## Appendix 1: Questionnaire for SoCool@EU Partners, Input for the Mentoring Action Plan

	<b>EMUC, TINV</b> (Öresund - Dk)	<b>CeLIT</b> (ÖresundSwe)	<b>ALIA</b>	<b>Dinalog</b>	<b>HOLM</b>
1. Year of establishment of the cluster organisation	1999		2010	The Dutch Institute for Advanced Logistics (Dinalog) was launched in November 2009.	2009
2. What group of companies/organizations initiated the cluster organization in the beginning?	The Danish Ship Owners and the ministry of economy and growth were the initial drivers.		ALIA cluster was promoted in the beginning by technological centers (ZLC, ITA), public companies (Aragón Exterior) and the Chamber of Commerce. Shortly after, companies related to logistics sector participated in the foundation of our cluster. ALIA was composed at the first time by 8 founder members, which were transport companies, mining companies, technological institutes, distribution companies, and public companies. When the first year was finishing, ALIA reached 19 members.	Triple helix: logistics industry, authorities, and research and education organisations.	Federal State of Hessen, City of Frankfurt, regional logistics companies and infrastructure providers, regional universities

3. Indicate on how the cluster organization was financed during the first year?	It received funding from the Danish state.		Before the cluster foundation, ALIA was co-financed by public allowance (INAEM-employment subsidies and Regional Government (support for cluster dissemination)) and ZLC (technological institute) to support the personnel structure.	100% funded by the Dutch government, and local authorities.	Mainly Public funding and founding contributions by HOLM initiators, some membership fees
4. Estimated financing structure of cluster organisation today For instance: % member fees % public funding % project funding	Financing comes from member fees, arrangement of conferences as well as projects.  30% member fees 5% conferences 65% projects 0% public funding		Once the cluster was founded, ALIA has been financed by regional government, European social funds (support for human resources and projects), national government (support for structure and projects) and member fees (support for structure).	Dinalog is still 100% funded by the government and authorities; no membership fee is charged.	50% membership (including funding partners) 35% project funding 15% public funding

5. Is the cluster organization subsidized by the government? If yes; Is the subsidy continuously or on a project basis?	We do not receive public funding.		Yes, project basis. Creation and development of the structure of the cluster is financed by National and Regional governments.  Innovation projects are in part supported by National Government, and it is also financed by European funds and Regional government.	The Dutch logistics cluster is subsidised by the government and authorities. The subsidy continuously for financing projects in for Dutch industry (especially SMEs), as well as research institutes and universities.	Yes, subsidy on a project basis
6. What was the turn-over of the cluster organization last year?	Approx 1 mio. EUR.		150.000 € (year 2012)	Around EUR 10 mil. <to be checked again>	Approx. € 0.9 million (2011); 2012 not available yet

<p>7. How does your cluster organization measure success?</p>	<p>The amount of paying members is the No. 1 indicator. We have 146 and they pay between 1000 -2.000 EUR per year.</p>		<p>KPI's of activity.</p> <p>Examples of KPI's:</p> <p>Number of web visitors.</p> <p>Number of subscribed people to newsletter.</p> <p>Number of meetings with companies.</p> <p>Number of subscribed members after meetings.</p> <p>Number of new members.</p> <p>Number of new interested companies.</p> <p>Proposed projects by companies/ supported projects by companies.</p> <p>Public funding/total funding.</p> <p>Private funding/total funding.</p>	<p>For instance, GDP growth through logistics sector, number and quality of national R&amp;D and demo projects; number and quality of EU-funded projects; number and quality of other Dialog funding schemes, number and quality of Dialog activities, and number of visitors per year.</p>	<p>Number and quality of...</p> <ul style="list-style-type: none"> <li>- regional (innovation) projects initiated</li> <li>- Networking events Workshops, expert groups, and think tanks etc.</li> </ul>
---	--	--	--	---	--

<p>8. How do the activities of your cluster organization contribute to the competitiveness of the region in which it operates?</p>	<ul style="list-style-type: none"> <li>- Network meetings where representatives from companies discuss and share knowledge regarding topics which are on the agenda.</li> <li>- Dissemination of knowledge from research and international projects to Danish companies.</li> <li>- Study tours and matchmaking tours to other countries.</li> </ul> <p>Arrangement of large amount of conferences.</p>		<p>ALIA was founded as an innovative entrepreneurial group, with the aim of matching the action of companies, technological institutes and knowledge centers, and public institutions, to improve the competitiveness in the region of Aragon.</p>	<p>Dinalog is a national cluster. It contributes to the competitiveness of The Netherlands through extensive activities that stimulate the growth of logistics industry, especially SMEs, and strengthen the (leading) position of industry and research and education institutes in the area of logistics and supply chain.</p>	<p>HOLM is a neutral platform which brings together regional partners from companies, research and public authorities to meet and jointly works on solutions for common problems. HOLM in that way is an enabler of the dialogue and innovation in logistics and mobility topics.</p>
--	---	--	--	--	---

<p>9. Is there a national or regional cluster strategy in your area? If yes; have the strategy had a positive impact on your cluster organization?</p>	<p>New strategies emerge all the time. Some of them have effect. One of the main effects is that universities get an increasing amount of funding for research. However, results are often not spread to industry.</p>		<p>Clusters are actually supported by National government. In the future, a new strategy based on research and innovation is expected to be developed in a regional level (RIS3).</p>	<p>Yes, there is a strong national strategy in The Netherlands. Logistics is one of the Dutch Topteams. It is very common that national strategy has positive impact on the logistics cluster.</p>	<p>Yes, the cluster strategy consists in the "Houses-of..." strategy of the State of Hessen, meaning the institutionalization of knowledge infrastructures for cluster-wide cooperation. To that end, the cluster strategy is embodied in the HOLM concept.</p>
--	--	--	---	--	---

## Appendix 2: Profiles and Experiences of Partner Regions

### Rhine-Scheldt Delta: Dinalog

The Dutch Institute for Advanced Logistics (Dinalog) was established in 2009. In spite of the fact that the cluster organization is fairly young, Dinalog has the absolute largest turnover among the SoCool@EU partners.

In The Netherlands there is a strong national strategy for cluster initiatives. Logistics is one of the top prioritized themes for the government, and the national focus is seen as having a positive impact on the cluster. During the first year the cluster organization was founded fully by the Dutch government and local authorities, which is likewise the case for today. This is also the reason why Dinalog does not charge any member fees.

Dinalog was created to unite and coordinate regional efforts to improve the competitiveness of the logistics sector. It was established to unroll the national research and development program for logistics and supply chain management. Through its cooperation with VIL, Dinalog covers the complete Belgian – Dutch region Rijn-Scheldt Delta. Dinalog represents the triple-helix cluster in the region of Rijn-Scheldt Delta as it involves all actors in the region that operate in the sectors of logistics and supply chain management. The institute is firmly based in science but explicitly operates in the cooperation between the triple helix parties: private enterprises (shippers and logistic service providers), international, national, regional and local public authorities and knowledge institutes. Dinalog has four main tasks: developing knowledge, applying knowledge, stimulating and organizing education in logistics and supply chain management and last but not least dissemination of knowledge, especially to SMEs, to increase the competitiveness of the logistics companies. The main themes of interest are: Cross Chain Control Centers (4C), Main Ports Control Function, and Service Logistics. Dinalog strives for open innovation. Dinalog is also responsible for development and exploitation of the open innovation campus on logistics and supply chain management, located in the heart of the Rhine-Scheldt Delta (Breda).

Dinalog is the physical and virtual place where public and private sector cooperates with all centers of excellence (the universities and polytechnics) in the region and where post-experience education will be organized. Dinalog builds a strategic cooperation with VIL (Flemish Institute for Logistics). VIL was founded in 2003 as an independent knowledge centre and innovation platform for the logistics sector. In order to do so, VIL is supported by the Flemish government, and more specifically by the Minister of Innovation. The VIL offers the logistics service providers and shippers company-specific research into innovative topics and valorisation of the research results in practice. Flemish companies are encouraged to invest in innovative and sustainable logistics concepts and technological developments. Hereto, VIL delivers financial support, project management and implementation, advice and networking. VIL has three main tasks: developing knowledge, applying knowledge and dissemination knowledge, to increase the competitiveness of the logistics companies. VIL wants to achieve this ambition in three areas: Supply chain organisation, supply chain intelligence and supply chain security. Substance is added to those three areas in a bottom-up process: on the basis of input from brainstorming sessions involving VIL members and others, in combination with company visits, the advisory board (academics and professionals), the board of directors and enhanced VIL expertise.

Dinalog is working with the following organisations:

<b>Research Entity</b> <ul style="list-style-type: none"> <li>- Erasmus University Rotterdam</li> <li>- Technical University of Eindhoven</li> <li>- Technical University of Delft</li> <li>- Vlaams Instituut voor de Logistiek</li> <li>- University of Antwerp</li> <li>- University of Ghent</li> <li>- Avans Polytechnic University</li> <li>- Fontys Hogeschool</li> <li>- InHolland</li> <li>- Military Academy (incl. Logistics)</li> <li>- And 4 others</li> </ul>	<b>Regional Authority</b> <ul style="list-style-type: none"> <li>- Province of Noord-Brabant</li> <li>- Municipality of Breda</li> <li>- Province of Zeeland</li> <li>- Province of Zuid-Holland</li> <li>- Province of Antwerp</li> </ul>
<b>Business Entity</b> <ul style="list-style-type: none"> <li>- Unilever</li> <li>- TLN/KNV</li> <li>- Port of Rotterdam</li> <li>- Coca Cola</li> <li>- Jan de Rijk Logistics</li> <li>- Philip Morris</li> <li>- ING</li> <li>- HERO</li> <li>- Dinalog Friends (association of SMEs)</li> <li>- VIL members (252)</li> <li>- And 8 others</li> </ul>	<b>Other Actors</b> <ul style="list-style-type: none"> <li>- European Supply Chain Forum</li> <li>- Service Logistics Forum</li> <li>- Regional Development Agencies (BOM, EIZ, REWIN)</li> <li>- Bestuurlijk overleg Zuid-West Nederland / Vlaams Nederlandse Delta</li> <li>- Platform Vital Logistics South-West</li> <li>- Flemish Regional Development Agencies (POM Antwerpen, Oost-Vlaanderen, West-Vlaanderen, Vlaams-Brabant and Limburg)</li> </ul>

#### Frankfurt/Rhine-Main: HOLM - House of Logistics and Mobility

The legal entity that “institutionalizes” the logistics and mobility cluster Rhine-Main is the House of Logistics and Mobility (HOLM) at the Frankfurt Airport / Gateway Gardens, founded in 2009 by the Federal State of Hessen, the City of Frankfurt, regional universities, and several business partners. During the first year the cluster organization was founded mainly by the public funding. Today the main funding is membership fees, counting for approximately 50% of the financing. Second is project funding and third is public funding, which today only accounts for 15% of the total financing. The turnover per year is approximated to 0.9 million euros.

HOLM is a neutral, interdisciplinary cooperation platform bringing together international and national research, business, and public entities under one roof/brand “HOLM” that develops and communicates innovative and future-driven knowledge at the interface of interdisciplinary logistics and mobility subjects. Its guiding topics are “integration”, “sustainability” and “security” of e.g. supply chains. HOLM will set up a physical Logistics and Mobility Campus Building directly at

Frankfurt Airport with about 20,000 sqm until 2013. Currently, the HOLM is embodied in the Gründungsinitiative Frankfurt HOLM e.V. as the founding association with members from research, business, and public institutions and a HOLM Ltd. to set up the knowledge infrastructure (financed by the State of Hessen and the City of Frankfurt) and to organize the content development, marketing, events, and networking.

The total number of professorships within the institutions which are involved from the beginning, Frankfurt University of Applied Sciences, the Goethe University, the European Business School, TU Darmstadt and Fraunhofer IML, is already in excess of 50 – a multi-faceted plurality of competence that's almost beyond international compare – and of the “critical mass” required to become a focus of gravitation within the international knowledge network and to assume a leading role within it. The knowledge institutes foster the research and education capabilities within the region, by offering and conducting student graduate and undergraduate as well as MBA and executive programs in cluster and competitiveness topics, logistics, purchasing & supply chain management, technology and IT research, network & innovation system research, and cluster research. The “door to door” collaboration in HOLM seeks to combine the existing competencies and accelerate the transfer of knowledge into practice and back to science. In the process, the HOLM sees itself as an inter-university cooperation platform for research and education, closely interlinked with practice. The association already counts 180 members. As an Institution for Collaboration, it is indispensable in uniting business, science, and policy in the regional logistics cluster of Rhine-Main.

HOLM is working with the following organizations:

Research Entities	Regional Authorities
- EBS Universität i. Gr. /Supply Chain Management Institute (SMI)	- Hess. Ministerium f. Wirtschaft, Verkehr u. Landesentwicklung
- Fachhochschule Frankfurt	- Hessisches Ministerium der Finanzen
- Fachhochschule Worms	- Hessisches Ministerium des Inneren und für Sport
- Fraunhofer Institut für Materialfluss und Logistik	- Hessisches Ministerium für Wissenschaft und Kunst Landeshauptstadt Wiesbaden
- Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	- Landeshauptstadt Wiesbaden
- Goethe Universität Frankfurt am Main	- Land Rheinland-Pfalz (Ministerium für Wirtschaft, Verkehr, Landwirtschaft und Weinbau)
- Hochschule Aschaffenburg	- Planungsverband Ballungsraum Frankfurt-/Rhein-Main
- Hochschule Fresenius	- Stadt Aschaffenburg
- Hochschule für Gestaltung, Offenbach	- Stadt Frankfurt am Main
- Hochschule RheinMain	
- International School of Management	
- Technische Universität Darmstadt	
- Universität Kassel	

Business Entities	Other Actors
<ul style="list-style-type: none"> <li>- Bombardier Transportation</li> <li>- Deutsche Bahn AG</li> <li>- DPD Deutsche GeoPost (DE) GmbH &amp; Co. KG</li> <li>- Gateway Gardens Projektentwicklungs-GmbH</li> <li>- Logistics Council Germany</li> <li>- Rhein-Main-Verkehrsverbund Service-GmbH</li> <li>- Schenker Deutschland AG</li> <li>- ZIV Zentrum f. integrierte Verkehrssysteme GmbH</li> <li>- And 91 others</li> </ul>	<ul style="list-style-type: none"> <li>- ADAC Hessen-Thüringen e.V.</li> <li>- Arbeitsgemeinschaft hessischer Industrie- und Handelskammern</li> <li>- Bundesvereinigung Logistik (BVL)</li> <li>- Fachverband Fördertechnik und Logistiksysteme</li> <li>- FrankfurtRheinMain GmbH International Marketing of the Region</li> <li>- Verband Deutscher Verkehrsunternehmen</li> <li>- Wirtschaftsförderung Region Frankfurt Rhein-Main</li> <li>- And 20 others</li> </ul>

#### Aragón: ALIA - Agrupación Logística Innovadora de Aragón

The Association of Innovative Logistics of Aragón, ALIA, was established in 2010. ALIA was composed at the first time by 8 founder members, which were transport companies, mining companies, technological institutes, distribution companies, and public companies. After the first year ALIA reached 19 members. Today (2012) the turnover of the organization is approximately EUR 150,000.

Cluster initiatives are supported by the national government. During the first year the cluster organization was co-founded the regional government, public allowance, and the technological institute ZLC. Today it is financed through mixed funding options. Around 65% of the budget comes from public funding. The Department of Economy of the Regional authorities has provided the initial budget and the Department of Science and Technology has ensured a specific line for the funding of clusters for the upcoming years. Also, ALIA functions as a cooperation enabler to develop innovative knowledge and disseminate research results and it provides information about funding opportunities for research or project programs; especially the programs offered by the European Union, such as Marco Polo. Associated members therefore have the opportunity to become involved in publicly financed projects. The research results that will be generated through these projects will belong to the individual project partners who generated them. Finally regarding private funding the association generates income from membership fees and will offer training courses for which they will require a payment for tuition.

ALIA was founded as an innovative entrepreneurial group, with the aim of matching the action of companies, technological institutes and knowledge centers, and public institutions, to improve the competitiveness in the region of Aragon. ALIA has been created to unite and coordinate regional efforts to improve the competitiveness of member companies through collaboration and logistics innovation. It represents the triple-helix cluster in the region of Aragón as it involves all actors in the region that operate in the sectors of logistics and transportation, primarily business entities, with

the aim of promoting Aragón as an international centre of excellence in the sector and contributing to the economic, social and technological development within the sector and the associated companies. The involvement of the business entities in ALIA offers the private sector the possibility of having a direct involvement in co-defining the regional policy within the area of logistics. The Regional Department of Science and Technology is the executor of the regional R&D policies and the Department of Economy decides upon in which strategic initiatives the region should invest. The connection between ALIA and the Regional Government is guaranteed by Aragón Exterior. Attached to the Department of Economy, Inland Revenue and Employment of the Government of Aragón, Aragón Exterior is the instrument of the Regional Government to support the internationalization of the Aragonese economy. Using this method, Aragón Exterior contributes to put into effect the regional goals in matter of economic development. In addition, regional authorities also have a direct involvement, policy-wise and funding-wise, in all research entities represented in this research-driven cluster, through the Dept. of Science, Technology and University. The Association is promoted by the Technology Transfer Offices at Zaragoza Logistics Centre and ITA and the Council for the Chambers of Commerce and Industry of Aragón. The involved entities have been collaborating for several years and therefore the cluster has demonstrated to be a mature research-driven cluster. All of these members of ALIA have given the authority to ALIA to formally represent all partners for the purpose of this project. This balance of interests ensures a close collaboration among all partners of the cluster and for this reason ALIA wishes to establish a common valorisation and R&D exploitation strategy.

Aragón has a prestigious reserve of researchers and students working in the field of Logistics and Supply Chain Management at the University of Zaragoza and especially in Zaragoza Logistics Centre (ZLC). ZLC is an international centre for education and research in Logistics and Supply Chain Management established by the Government of Aragón in Spain in partnership with the Massachusetts Institute of Technology (MIT) and the University of Zaragoza. The ZLC has developed, in collaboration with the Centre of Transportation and Logistics of MIT, the MIT-Zaragoza International Logistics Program that offers the Master of Engineering in Logistics & Supply Chain Management program, a doctorate degree, and executive education courses. ZLC has also been designated by the Ministry of Education and Sciences in Spain to be the National Centre of Excellence for research in the area of logistics and supply chain management, and it is the coordinator of Logistop, the Spanish Technology Platform in Logistics. The Aragón Institute of Technology (ITA) is a public technological research centre whose mission is to contribute to the promotion and execution of the research and the development orientating its activity to stimulate the technological innovation of the companies. ITA participates in R&D projects which are in the state of the art at international and national level, and then, ITA works closely with regional SMEs and other big companies in order to transform that knowledge in very innovative products and processes. ITA eLogistica is the name of the National Centre of Knowledge in the application of ICT technologies to the resolution of problems in the field of integral logistics (the centre is funded by the Ministry of Industry, Tourism and Commerce, Government of Spain). ITA eLogistica mission is based on the generation, adaptation, transfer and dissemination of knowledge in the application of ICT for the integral logistics, focusing on process optimization and agent's integration along the supply chain in order to develop green and a collaborative logistics. Finally, the research interests

of the Research Institute of Engineering of Aragón (I3A) of the University of Zaragoza searches technological solutions for the future by promoting innovation and excellence. The activities of the I3A concerned four areas: research, technology transfer, training and scientific diffusion. With regard to the knowledge valorisation the Technology Transfer Office at Zaragoza Logistics Centre offers the perfect channels for applying the knowledge created in the project in companies, government bodies and individuals. Also, the Technology Transfer Office at ITA assists in technology transfer processes to more than 1.000 national and international companies every year. It also aims to promote technology cooperation processes among companies as a way of achieving a critical mass allowing them to access elite markets with strict requirements difficult for an individual company to meet owing to its modest size.

ALIA is working with the following organisations:

<b>Research Entity</b> <ul style="list-style-type: none"> <li>- Zaragoza Logistics Centre (ZLC)</li> <li>- Aragón Technology Institute (ITA)</li> </ul>	<b>Regional Authority</b> <ul style="list-style-type: none"> <li>- Department of Economy, Inland Revenue and Employment of the Government of Aragón</li> <li>- Department of Science, Technology and University of the Government of Aragón.</li> <li>- Aragón Exterior</li> </ul>
<b>Business Entity</b> <ul style="list-style-type: none"> <li>- Bosal España, S.A</li> <li>- BSH Electrodomésticos España, S.A</li> <li>- Grupo Samca</li> <li>- Grupo Jorge</li> <li>- Pronimetal Corporación Metalúrgica</li> <li>- Imaginarium, S.A.</li> <li>- Carreras, S.A. (Carreras Grupo Logístico)</li> <li>- Taim Weser, S.A.</li> <li>- ARC Distribución</li> <li>- Bebinter, S.A.</li> <li>- And 20 others</li> </ul>	<b>Other Actors</b> <ul style="list-style-type: none"> <li>- Technology Transfer Office at the University of Zaragoza</li> <li>- Technology Transfer Office at Zaragoza Logistics Centre</li> <li>- Council for the Chambers of Commerce and Industry of Aragón</li> </ul>

### Øresund region

When the SoCool@EU project was founded, the Øresund region was represented by Øresund Logistics in collaboration with Next Generation Innovative Logistics - NGIL (same legal entity) in a close cooperation. However this construction does not exist anymore. Today there is both Danish and Swedish initiatives representing the Øresund as a business cluster. The cluster region is interconnected by the Øresund Bridge and is the main gateway between Scandinavia and continental Europe for all modes of transportation, as well as a hub for distribution to Scandinavia and the Baltic rim.

The Øresund Region is highly knowledge intensive. Actors in the cluster include 5 science parks, 2 approved Technological Service companies as well as 9 major universities which account for a total of 150.000 students, 6,500 PhD students and 12.000 researchers. These knowledge institutions offer an extensive portfolio of educations within logistics and conduct research that cover a broad range of thematic areas, such as ICT; mechanics and transport carrier technologies; modelling systems; packaging; Supply Chain Management; city logistics; sustainability and energy carriers. Within Logistics research NGIL plays a central role. Furthermore, the three regional authorities in the Øresund region together with the two main industry organisations and the 9 largest universities have established Øresund Science Region in order to promote knowledge based economic growth in the cluster. Øresund Science Region is a cross border triple-helix cooperation

The Øresund business cluster is working with the following organizations:

<b>Research Entity</b> <ul style="list-style-type: none"> <li>- Lund University / Lund Institute of Technology</li> <li>- Copenhagen Business School</li> <li>- Technical University of Denmark</li> <li>- University of Copenhagen</li> <li>- Roskilde University</li> <li>- Malmö University</li> <li>- Øresund University</li> </ul>	<b>Regional Authority</b> <ul style="list-style-type: none"> <li>- Region Skåne</li> <li>- The Capital Region of Denmark</li> <li>- Region of Zealand</li> <li>- City of Copenhagen</li> <li>- City of Malmö</li> <li>- City of Helsingborg</li> </ul>
<b>Business Entity</b> <ul style="list-style-type: none"> <li>- Alfa Laval</li> <li>- Bring Frigoscandia</li> <li>- DSV Transport</li> <li>- Ericsson</li> <li>- Volvo</li> <li>- Sony Ericsson</li> <li>- Confederation of Danish Industry</li> <li>- 500 companies in the network of Øresund Logistics</li> </ul>	<b>Other Actors</b> <ul style="list-style-type: none"> <li>- Øresund Committee</li> <li>- Danish Technological Institute</li> <li>- Maritime Development Centre of Europe</li> <li>- Femern Belt Logistics Platform</li> <li>- PieP Innovation p</li> <li>- (Danish) Transport Innovation Network</li> <li>- CeLIT, Centre for Logistics and IT network</li> </ul>

Maritime Development Centre of Europe (EMUC) and Transportation Innovation Network (TINV) is part of the Øresund region.

EMUC and TINV represent the Danish part of the Øresund business cluster. The cluster was established in 1999, which makes it the absolute oldest cluster organization in among the SoCool@EU partners. It was established by the Danish Ship Owners in collaboration with the ministry of economy and growth, with national funding. However, the cluster organization only received governmental funding during the period of establishment. Today it receives no public funding, but is financed mainly through project funding accounting 65%. Second are member fees, which accounts for approximately 30%. The last 5% is funded by conferences. The turnover is approximately EUR 1 million per year.

The cluster contributes with network meetings where representatives from companies discuss and share knowledge regarding relevant topics and dissemination of knowledge from national and international research projects to Danish companies. Further the clusters arrange a large amount of conferences as well as study- and matchmaking tours to other countries, likewise in the aim of knowledge sharing to increase innovation.

### Appendix 3: Mersin Regional Workshop

A regional workshop was organised on 19 June 2013 in Mersin to discuss the mentoring action plan.

#### Date

19 June 2013

#### Location

Mersin

#### Agenda

13.30-13.50 Welcome speech and introduction of the status and the progress of the SoCool@EU project.

13.50-14.00 Opening speech on objectives of the Workshop, expected contribution from the participants, by Mersin Logistics Platform President.

Discussion issues:

- 1) Cluster action plan, expected outcomes of the Cluster Action Plan and implications for Mersin Region and logistics industry;
- 2) Mentoring Action Plan, expected outcomes, related issues and potential topics of the Mentoring Action Plan;
- 3) Objectives, pending issues, and agenda of the International Conference, which will be held in October 2013 in Mersin.

#### List of invited participants from industry

#	Company	Name	#	Company	Name
1	Arkas Logistics Co.	Mr.İbrahim KİTAPÇI	7	C.Steinweg Levant	Mr. Bora GÜNER
2	Atako Logistics.Co.	Mr.Jozef ATAT	8	MIP Port	Mr.Nuri PEKER
3	Ceha Logistics	Mr.Tolga ÖZDEŞ	9	Nokta Logistics Co.	Mr Huseyin GÖKTEN
4	TEMA	Mr.Özmen KIZILKOCA	10	Önder Gumrukleme	Mr.Kaan ÖZDEMİR
5	Ufuk Logistics Co.	Mr.Ufuk MAYA	11		
6	Tria Logistics	Mr.Cem ALTINIŞ	12		

**List of invited participants from non-governmental organisation (NGO)**

1	Mersin Chamber of Shipping	Mr.Halil DELİBAŞ	3	International Road Transport Union	Mr. Şemsettin KURTAY
2	Mersin Chamber of Commerce and Industry	Mr.Kadir DÖLEK			

**Minutes**

The cluster workshop of Mersin was organised by the Mersin Project Team. Regional logistics companies, authorities, academic institutes, Mersin logistics platform, Mersin Chamber of Commerce and Mersin Chamber of Shipping have been involved.

The participants discussed the draft report of the Cluster Action Plan and Mentoring Action Plan. In general, the participants are very positive and agreed on contents (mission, objective, roadmap and the actions for creating Mersin logistics cluster) of the Cluster Action Plan and Mentoring Action Plan.

They requested more active role for project implementation, planning and event organisations. Therefore, cluster members are highly interested in regional projects. They believe that cluster initiative could lead to an increase in cooperation between different associations and between companies and research institutions not only through projects in Turkey, but also through EU-funded projects.

Project tasks are expected to be focused on practical issues inter-regional business opportunities, competitiveness and public. Participants expected that the B2B events at the international level will have highly significant impacts.

They suggested that the B2B events should be highlighted both at planning level and at strategic level. Furthermore, they confirmed to actively participant in such event. In addition, they proposed that the international conference should have a flexible program to provide B2B (Business to Business) matchmaking for international partners, businessmen and government representatives.