

SoCool@EU

Sustainable Organisation between Clusters Of Optimised Logistics @ Europe



Deliverable D 2.2: Cluster Workshops

Within the context of Work Package 2 - Analysis and integration of research agenda's of actors in regional clusters

| Version | Date | Release | Approval |
|---------|------------|--------------------------------------------------------------------------------------------------------------------------------------|------------|
| 02 | 25-10-2012 | House of Logistics and Mobility (HOLM) and Schumpeter Center for Clusters, Innovation and Public Policy (inhouse-consultant of HOLM) | Consortium |

Document Log

| Version | Date | Comments | Name and Organisation |
|---------|------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | 16-10-2012 | Formal corrections and page design | All consortium partners |
| 02 | 25-10-2012 | Final editing | Dr. Jack Thoms and Pascal Huther (HOLM); Dr. Falk Raschke, Laura Becker, Carsten Schindler (Schumpeter Center for Clusters, Innovation and Public Policy; inhouse-consultant of HOLM) |
| | | | |

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 |

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1 Project Background and Objectives

In the context of the 7th Framework Programme of the European Union, five regional logistics hubs are cooperating in the project “Sustainable Organization between Clusters of Optimised Logistics @ Europe (SoCool@EU)” to develop their clusters and collaborate in joint topics of interest:

- Dutch Institute for Advanced Logistics (DINALOG), Netherlands South West & Flanders Cluster - Belgium/Netherlands
- 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
- Mersin Chamber of Commerce and Industry, Mersin Logistics Cluster - Turkey

These five regions represent essential areas of logistics (deep-sea hubs, airports, land-hubs and short-sea hubs) and build the network of logistics gateways in Europe. SoCool@EU is based on the ambition to create an open European platform for EU excellence with specific joint projects in sustainable and competitive supply chains and logistics connected with hubs and gateways. This European platform will enable research-driven regional clusters throughout Europe to collaborate and mutually learn in order to achieve more sustainable and competitive freight gateways and hubs with associated logistical services and transport operations. After its establishment, the platform will be open for participation by other regional clusters with a logistics profile from Europe and beyond. The SoCool@EU consortium will actively promote this participation by other regional clusters.

In the context of the project, a detailed analysis of the participating clusters regarding their competitive profiles in logistics and transport was conducted. The methodological approach used to analyze the clusters is a multi-method design based on qualitative and quantitative elements (Figure 1).

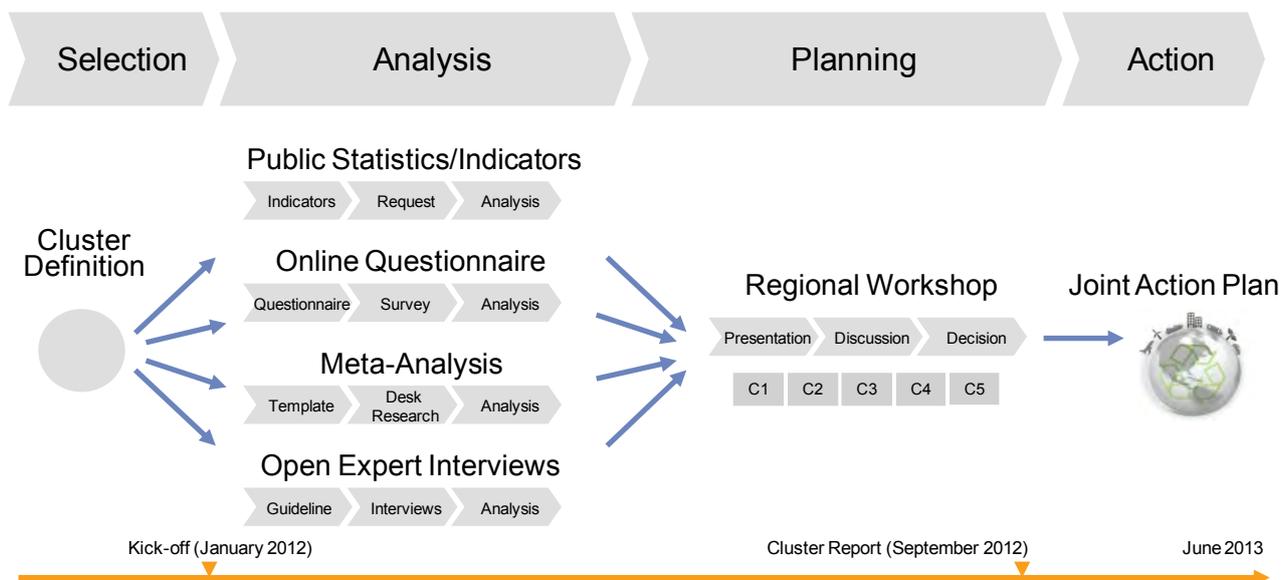


Figure 1 Methodological approach of the project SoCool@EU

Source: Own illustration, 2012.

Starting from the defined project clusters, the qualitative part of the analysis comprises firstly, open expert interviews to find out relevant project trends in logistics in the clusters and for international cooperation between the clusters and secondly, a meta-analysis as literature research complementing the primary analysis with secondary data. An online-questionnaire further analyses the general competitiveness of logistics in the cluster regions. Public statistics give an insight into the approximate economic and innovation performance of the clusters along selected quantitative indicators.

The regional workshops, which were organised following the analysis, serve to discuss and verify the results from the data analysis and help to identify projects and recommendations for action for the clusters on the regional and European level. They are also conducive to establishing and strengthening regional network cooperation that can facilitate the implementation of the joint actions.

Regional Workshops

All consortium partners organized regional workshops with experts from the triple-helix. As a standardized procedure, a representative of HOLM gave a presentation on the results of the analysis of the cluster at the beginning and asked the participants to share their impressions of the results and comment on the findings. After the discussion, the respective consortium partners chaired the debate about relevant projects as well as recommendations for action for the cluster.

The following workshops took place in September and October 2012:

- Netherlands South West & Flanders Cluster: 06-09-2012, at the Dutch Institute for Advanced Logistics, Princenhagelaan 13, 4813 DA Breda, The Netherlands and: 26-09-2012, at the Vlaams Instituut voor de Logistiek VZW - VIL, Flanders Institute for Logistics, Jordaenskaai 25, 2000 Antwerpen, Belgium
- Rhein-Main Region: 27-09-2012, at the HOLM Forum, Terminal 1, Frankfurt/Main Airport, Germany
- Region of Aragón: 02-10-2012, at the Chamber of Commerce of Zaragoza - - Paseo de Isabel La Católica, 2, Zaragoza, Spain
- Øresund Region: 12-09-2012, at the Maritime Development Center of Europe, Amaliegade 33B, 1256 Copenhagen, Denmark
- Mersin Logistics Cluster: 20-09-2012, at the Mersin Chamber of Commerce and Industry, Cankaya Mah. Ataturk Cad. Mtso Hizmet Binasi Kat 2, 33070 Mersin, Turkey

The workshops fulfilled two major purposes for which clear outcomes were specified upfront. This standardized procedure was used as to assure that the workshop results were comparable and that all clusters had a mutual basis to develop the analysis within the cluster report (Project Deliverable 2.1) and the Joint Action Plan subsequently:

- 1) Final conclusion on the evaluation of every cluster in the project, addressing its strengths, weaknesses, chances, future challenges etc. based on the workshop discussion of the analysis in Deliverable 2.1 and the reflections of the project partners.

This first step served to summarize in text form and conclude on the primary and secondary data that was collected and processed during the cluster analysis of Deliverable 2.1: Analysis results treated the competitiveness of the clusters in logistics and transport and the identified needs for action. The results were developed into individual but standardized preliminary reports on the clusters in the consortium. The media used was presentations in Microsoft PowerPoint format, which also served as input of the final cluster report. The final conclusion taken from the individual

workshops were included in the conclusion chapter of the cluster report in order to directly validate the interpretation of the analysis by regional stakeholders in the report document. This allows that the cluster report already involves realistic expert opinions and perspectives from the regional cluster workshops.

2) Precise documentation of the relevant projects and fields of action that were discussed in the workshop

During the workshops, regional stakeholders in the clusters were invited to share and interactively discuss their perspective on relevant needs and recommendations for action based on the analysis and their expert knowledge. The experts, who came from the triple-helix in the regional clusters, have a background in the logistics and logistics-related sector, such as IT, consultancy, infrastructure planning or engineering etc. The workshops also helped to establish and foster regional cooperation in preparation of the Joint Action Plan, as stakeholders networked with one another and discussed on the basis of common topics of interest. The relevant projects and fields of action were discussed based on the suggestion of a project matrix, which is shown in Figure 2.

| Area? Who? | Technology | Processes | Infrastructure | Sustainability | Human Resources | Others |
|---------------------------------------|---------------------------------|---------------------------------|----------------|---------------------------------|--------------------------------|--------|
| Policy making/ public institutions | What? e.g. interface project | | | What? e.g. interface project | | |
| Research/ Education | | What? e.g. interface project | | | What? e.g. definite project | |
| Business/ Networks | | | | | | |

Figure 2 Project Matrix as basis for cluster workshop discussion

Source: Own illustration, 2012

The matrix functioned as an inspiration for the audience where projects and recommendations for action may be developed. It helps the audience to identify where the project focus may lie on in the region and the Joint Action Plan. The main answers that should be given in the discussion on conceivable projects and fields of action were "Who should be doing what in which area?" Projects or fields of action could take the form of a definite topic with a clear demarcation of a unique topic area (e.g. infrastructure) or a clearly identified stakeholder in the cluster as project originator (e.g. research) or it could be an interface project spanning multiple topic areas and stakeholders involved. The results of the discussion should be documented as close to the matrix as possible as to guarantee the understandable documentation of the workshop outcomes.

The documentation according to the matrix format, however, was dependent on the course of the discussion; a unique and unequivocal allocation of the topics discussed was not always possible. For this reason, a project matrix is not available for every cluster.

The identified projects and fields for action will be translated and developed into a Joint Action Plan in the subsequent work package of this analysis. The following chapter documents the results from each regional cluster workshop. The content was provided by every project partner in strict accordance with the two above-mentioned requirements for the regional cluster workshop discussion.

2 Cluster Workshop Netherlands South West & Flanders Cluster

Date: 06-09-2012
 Location: Dinalog Dutch Institute for Advanced Logistics, Princenhagelaan 13, 4813 DA
 Breda, the Netherlands
 Time: 01:00 to 05:00 pm

Participants

Participant list of the workshop of Cluster Netherlands South West & Flanders on 06-09-2012 at Dinalog in Breda:

| No | NAME | ORGANISATION | COUNTRY |
|----|----------------------|---------------------------------------|-----------------|
| 1 | Meng Lu | Dinalog | The Netherlands |
| 2 | Pascal Huther | HOLM | Germany |
| 3 | Harry van den Hoff | Dinalog | The Netherlands |
| 4 | Stefan van Seters | Rewin | The Netherlands |
| 5 | Leon Gommans | Deal Services | The Netherlands |
| 6 | Anita Gerrits | Gray | The Netherlands |
| 7 | Remco Been | Isitia | The Netherlands |
| 8 | Francis Rome | Vlaams Instituut voor Logistiek (VIL) | Belgium |
| 9 | Frank van den Heuvel | TU Eindhoven | The Netherlands |
| 10 | Bart Cremers | NHTV | The Netherlands |

A second sub-workshop took place in Antwerp in order to discuss the analysis results with a focus on the Belgium part of the cluster:

Date: 26-09-2012
 Location: Vlaams Instituut voor de Logistiek (VIL), Flanders Institute for Logistics,
 Koninklijkelaan 76, B-2600 Berchem – Belgium
 Time: 08:30 to 11:30 am

Participants

| No | NAME | ORGANISATION | COUNTRY |
|----|---------------|----------------------------|---------|
| 1 | Danny | Innovatiecentrum Antwerpen | Belgium |
| 2 | Gerd Brems | Kuehne + Nagel NV Geel | Belgium |
| 3 | Luc Broos | POM Antwerpen | Belgium |
| 4 | Louis De Wael | Van Dievel Transport NV | Belgium |

| | | | |
|----|---------------------|------------------------------------|-----------------|
| 5 | Sultan Demir | MOW Afdeling Haven- en Waterbeleid | Belgium |
| 6 | Roel Gevaers | Universiteit Antwerpen | Belgium |
| 7 | Liesbeth Geysels | VIL | Belgium |
| 8 | Jan Goderis | SHIPIT | Belgium |
| 9 | David Huybrechts | Haven Genk | Belgium |
| 10 | Thomas Kauffmann | Multimodal Transports & Logistics | Belgium |
| 11 | Bjorn Kiekens | Innovatiecentrum Antwerpen | Belgium |
| 12 | Alex Le Clef | Leghorn-Perfra bvba | Belgium |
| 13 | Meng Lu | Dinalog | The Netherlands |
| 14 | Marc Pirenne | Euroports Belgium | Belgium |
| 15 | Francis Rome | VIL | Belgium |
| 16 | Peter Van de Vijver | Ambos NBGO | Belgium |
| 17 | Miguel Van Opbroeck | Volvo Group / Volvo Logistics | Belgium |

2.1 Final conclusion on the evaluation of the cluster

In terms of the strengths and weaknesses of the cluster region, the following important elements should be mentioned.

By far, the most important strength is the key position of the cluster as a gateway to Central Europe. From a global perspective, a major stream of the movement of goods from the Far East, South America or the US is directed via maritime or air gateways located in the cluster. This obviously leads to a variety of activities of transportation, warehousing, value added services and logistics support. The importance of information technology to enable these services should not be underestimated.

Given the unique location attributes, the attractiveness as a market for logistics is clear. A lot of logistics companies are active in the region, with emphasis on European and regional distribution centres, where goods are not only received and stocked, but also where diverse valued added services are taking place requiring all types of logistics competencies.

Another key element of the cluster is its broad intermodal infrastructure which is becoming vital to enable its function as a gateway to Europe. Indeed, for shippers worldwide, it is not only important to get the goods to a port or airport in the most efficient and effective way but also to get the products to the final customer. This is the door-to-door concept that all players are trying to deliver and for which the intermodal possibilities need to be present especially with the growing focus on ecological ways of transportation.

Experts witness also an intense competition in the regional cluster, which leads to competitive companies with very high service levels for the customers, but which also may result in slim margins, as companies in principle do not want to lose market share or even prefer to increase market penetration.

As a result of this competitive environment and large logistics market availability, experts confirmed that the sector shows a high degree of professionalism and works on innovative projects both in the area of processes as well as in technological advancement. In today's logistics environment, very often the availability of information about the flow of goods is more important and critical than the movement of goods. In other words, reliability and visibility can be more critical than the speed of the movement of goods.

All these elements logically lead to very competitive and creative companies looking for more innovative ways to meet customer requirements in the globalised world. Experts acknowledged that all major multinational logistics companies are actively present in the regional cluster as they have discovered the unique advantages of the region.

Without any doubt, the good performance of companies can only be delivered based on an excellent motivated and multilingual workforce and this is available in the cluster. It should be emphasized that all levels of competencies are required, from low level contributors to high level managers and engineers. This is indeed a complex sector operating in a diverse global and multicultural environment in a 24/7 continuous way. A lot of flexibility and dedication is therefore needed from the workforce.

Precisely the logistics expertise and knowhow, which has been built up in a long tradition of logistics activities, means that the cluster is an ideal location for setting up and implementing this role as orchestrator of the movements of goods and information into Europe.

Although the list of strengths from the interviews and the online-survey is quite impressive, the results revealed a number of weaknesses that need to be addressed.

First of all, there appears to be no clear regional strategy concerning logistics. Companies are missing the vision from the government that states the mission and objectives of the region in an unequivocal way. This absence of a clear vision leads to a lack of direction and often disperse and conflicting views and messages at different levels of the authorities. Even misplaced competition between public parties is taking place. Clearly, the business would benefit if a long term strategy was formulated and communicated in a broad sense.

Additionally, in the day to day working environment, there is still a lot of bureaucracy in the trans-border transport activities. For example in the customs area, there are interregional weaknesses in terms of cooperation and standardisation.

A different topic of a weakness is the process of financing for innovation projects. This is certainly true for small and medium-sized companies, where lack of people, money and time is often hindering to the participation in innovative projects. If the region wants to remain a leading edge region, innovative projects need to be undertaken and financed in a proper way.

Another weakness comes from a different angle and points out that there is not enough support for leading strong firms, in other words, there is not sufficient effort to strengthening the strong. This is clearly a viewpoint that believes that if there is sufficient strong support for the leading companies this will also be beneficial for the smaller followers in this sector.

Finally, a weakness that cannot be overemphasised is the negative image of the sector that acts as a barrier for attracting young motivated employees. This implies many aspects, such as a bad image impacting on how the government and society look at the needs for the logistics business. Without broad mental and financial support, the sector will suffer longer term. Fewer students will be interested in studying logistics and that will have a detrimental impact on the prospects of the business. With an overall bad image, the list of strengths will be in danger, as without correct focus on the image, a lot of dominos will fall. On top of that, other emerging competitive regions will not hesitate trying to take up the leading position that the regional cluster is enjoying today.

2.2 Discussion of project ideas

During the two cluster workshops, several project areas and fields of action were brainstormed, such as:

- Investigation of the development patterns and success stories of vertical clusters (customers, suppliers, universities/R&D working together as chain partners) versus horizontal clusters (companies with same position in the supply chain)
- Setting up of a regional strategy on logistics, e.g. on the support structure: "Why don't we just support 'the strong' (instead of the small)?"
- Lack of strategic long-term thinking within companies, with limited support for green, sustainable themes (encountering exclusive focus on share holder value/short term results orientation)
- Solving the gap between the need for innovation versus the small numbers of R&D employees within logistics companies
- Aligning small profit margins in logistics companies with financing issues of both R&D and pre-financing orders (reference to supply chain finance)
- Examination of the influence of competition on innovation power

- Answer the need for strategic thinking within companies and getting high-level people “around the table”
- The image of the logistics sector must be improved.
- Lack of cooperation possibilities in current ICT development - cooperation also is about individuals working together. Current logistics ICT systems do not support this ‘personal’ cooperation.
- High level of data availability is already existent, but existing databases related to logistics and supply chain innovation need to be opened-up in order to let the market/entrepreneurs make new products and services from them.

In the workshops, all participants provided their personal ideas on potential national and international projects. Some personal ideas where:

- Projects that stimulate cooperation, e.g. developing business clusters to combine freight
- Promotion of open manners of working together, investments in ICT platforms and digital infrastructures that help to share freight and promote demand forecasting. Logistics captains of industry/board of directors still have “old fashioned” views of ICT. Education on the newest possibilities of modern ICT is pivotal.
- Good infrastructure connections (e.g. the solution of the bottleneck in Bergen op Zoom A4/A58 due to the coming A4-highway connection between Rotterdam and Antwerp) already exist in the South West Netherlands. However, the connection of regional infrastructures with global business in world ports (e.g. China harbours) is the future.
- Better hinterland connections Rotterdam-Antwerp-Germany and other infrastructures, such as intermodal and ICT, are needed. Cradle to Cradle/reverse logistics solutions are in dire need (e.g. with regard to electronic equipment, paper, chemicals). The re-use must be organized trans-regionally and supply chain finance must occur across the supply chain.
- Strengthen the development and influence of regional think-tanks. It is important to show that cooperation and joint innovation will lead to benefits in the short term.
- Publish all logistics-related data that government already has and other available data with regard to logistics; start with this basis of information to stimulate joint (real time) information products (e.g. the site www.marinetraffic.com with crowd surfing functionality and adding pictures to vessel). Projects should start with a small experiment to show it works and that the control over data privacy and economic interests is guaranteed.
- Organisation of workshops on supply chain finance with the creation of a ‘game’ to let participants know the significance and functionality of the topic.

The proposals of participants concerning the JAPs are presented in the following matrix. These will be broken down into concrete projects in the upcoming work package of the development of a Joint Action Plan:

| | Technology | Processes | Infrastructure | Sustainability | Human resources | |
|--------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------------------|--|
| Policy making / public institutions | | Open data/ Common user platforms | A4-A58 Road connection Antwerp – Rotterdam | Vision Cradle-to Cradle | Focus on change of mindset / Image of the sector | |
| Research / Education | | Use Location (cluster) and systems to stimulate crosschain cooperation | | Tools for efficiency | | |
| Business / network | Collaboration ICT | Combine freights/Horizontal collaboration/Reserve Logistics Supply Chain Finance | Intermodal mental shift New business in upcoming world ports (eg China) | Re -use logistics | Training/Recruitment | |
| | | | | | | |

Figure 3 Project matrix of the Netherlands South West & Flanders Cluster
 Source: Own illustration, 2012.

3 Cluster Workshop Rhein-Main Region

Date: 27-09-2012

Location: HOLM Forum, Terminal 1, Frankfurt/Main Airport, Germany

Time: 10:00 am to 01:30 pm

Participants

| No | NAME | ORGANISATION | COUNTRY |
|----|------------------------|-----------------------------------------------------------------------|---------|
| 1 | Laura Becker | Goethe Universität Frankfurt | Germany |
| 2 | Dr. Jaime Cano-Belmán | EBS Universität für Wirtschaft und Recht | Germany |
| 3 | Sven Clasen | Landeshauptstadt Wiesbaden – Amt für Wirtschaft und Liegenschaften | Germany |
| 4 | Dr. Heinrich Frye | Fraunhofer-Institut für Materialfluss und Logistik | Germany |
| 5 | Markus Greber | Industrie- und Handelskammer Aschaffenburg | Germany |
| 6 | Florian Heinemann | EBS Universität für Wirtschaft und Recht | Germany |
| 7 | Pascal Huther | HOLM GmbH | Germany |
| 8 | Dr. Klaus-Peter Jung | Miebach Consulting GmbH | Germany |
| 9 | Ernst Kleinwächter | Regionalverband FrankfurtRheinMain | Germany |
| 10 | Michael Kluger | HOLM GmbH | Germany |
| 11 | Meike Märthesheimer | BENE GmbH | Germany |
| 12 | Jan Meinschmidt | EBS Universität für Wirtschaft und Recht | Germany |
| 13 | Frank Müller | Panalpina Welttransport (Deutschland) GmbH | Germany |
| 14 | Dr. Peter Pfragner | Fraport AG | Germany |
| 15 | Daniel Pulko | Schenker Deutschland AG | Germany |
| 16 | Dr. Falk Raschke | Goethe Universität Frankfurt | Germany |
| 17 | Carsten Schindler | Goethe Universität Frankfurt | Germany |
| 18 | Sebastian von Spalding | Goethe Universität Frankfurt | Germany |
| 19 | Volker Zintel | HOLM GmbH | Germany |

3.1 Final conclusion on the evaluation of the cluster

The Rhein-Main Region especially benefits from its geostrategic location in Europe, with an advanced multi-modal transportation and digital infrastructure and the best international accessibility. The cluster functions as a European transportation hub with access to the main European transport corridors from north to south and east to west. One of the main competitive strengths of the cluster region remains to be Frankfurt Airport as one of the European air transportation hubs in cargo and passengers and among the leading airports of Europe. Other transport modes are constantly developing, making Rhein-Main a multimodal logistics gateway on the continent and worldwide. Moreover, Rhein-Main has been presented as the cluster with the highest logistics employment concentration of all project clusters and highly above EU average, making the region a leading job engine for logistics in Europe.

The regional diversity of the industrial core has proven to be another competitive advantage. Regional economic prosperity is based on a broad cluster presence with a variety of locally present industry clusters. This also holds true for the logistics sector. The sector is highly diversified, with all core industries and many peripheral logistics-related sectors present in the cluster. SMEs and larger companies alike drive economic development and innovation in the cluster region. The cluster enjoys high market attractiveness for the logistics and logistics-related sector. It is an important hub for logistics in the present, with high growth potentials in the future.

Among the weaknesses and challenges to tackle in future are factors that have already been brought to the attention of the economic, scientific and political agenda in the cluster. The shortage of real estate and the lack of logistics-oriented land use planning are one of the major challenges for logistics infrastructure in the cluster. Space in the urban core of the cluster is becoming scarce, and a new approach to infrastructure planning and more efficient usage of it is required. Another weakness is the poor public image and visibility of the logistics sector, especially near the airport. This leads to a lower acceptance of logistics (infrastructure) projects in the cluster and is also a barrier to human resource development.

Indeed, the shortage of skilled labour force and the improvable training situation within the logistics sector is another major issue for cluster actors. Even though the educational landscape is broad, logistics is still perceived to lag qualified human resources in certain employment fields of logistics. The sector is not as attractive as it could be marketing its importance for the economy and society as a whole. These common problems could be solved by internally networking the cluster and work on joint solutions; yet, there is only a slow beginning of networking and cooperation between actors from politics, economy and science which needs to be intensified and tailored to topic and project trends in the cluster in the future. Also, cross-border coordination and project funding between the federal states the cluster is spanning across is often times hindering to the public funding of innovation activities. The high cost of doing business index additionally burdens the attractiveness of the cluster as a place of living and targeting company investments to.

3.2 Discussion of project ideas

During the workshop, several guiding questions, project areas and fields of action were discussed. For these, answers and solutions need to be found in mutual projects in a Joint Action Plan:

- How can universities/educational institutions meet the requirements of companies concerning education of future employees and research? - alignment of education supply and demand is needed
- Why do companies move their headquarters and branch offices etc. to the region? What are the strengths to capitalize on in future and to develop cluster competitiveness?

- Offer networking possibilities to small and medium-sized companies and facilitate getting into contact with universities and research institutions on a more informal level (low threshold opportunities in regional think-tank series)
- Image of the sector leads to problems when planning and developing new land and real estate property – creating awareness among political actors and promote public acceptance of infrastructure projects
- Promotion of the image of the logistics sector in the education landscape to attract potential young human resources (both academic and vocational junior employees)
- Customer information – creating awareness for supply chains and for how goods move and get to the supermarket (“Public learning about logistics”)
- How does the airport look like in 2050? What are future developments and scenarios in (airport) logistics?
- Strengthening research and firm efforts to improve sustainability in logistics (e.g. technology development, joint corridor optimization)
- Development of urban logistics concepts – How does the smart city of the future look like and what are its (logistics) interfaces to other hubs in the European logistics network?
- Enhancement of infrastructure – development of intelligent infrastructures of the future and optimized usage of existing infrastructure
- Development of a dynamic Logistics Competitiveness Index for whole Europe in order to map and track the performance of the sector in regions and/or clusters in the future

| | Technology | Processes | Infrastructure | Sustainability | Human resources | |
|-------------------------------------|------------|-----------------------------------------------------------------------|--------------------------------------|--------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------|
| Policy making / public institutions | | | | | Creating awareness / Change of mindset / Image | |
| Research / Education | | What are future developments in logistics? What is logistics in 2050? | Why do companies move to the region? | Strengthening research to improve sustainability | | |
| Business / network | | | | | Identifying needs of companies concerning education | Offer networking possibilities to small and medium size companies |
| | | | | | | |

Figure 4 Project matrix of the Rhein-Main Region

Source: Own illustration, 2012.

4 Cluster Workshop Region of Aragón

Date: 02-10-2012

Location: Chamber of Commerce of Zaragoza - Paseo de Isabel La Católica, 2, Zaragoza, Spain

Time: 01:00 to 05:30 pm

Participants

| No | NAME | ORGANISATION | COUNTRY |
|----|---------------------------------------|-----------------------------------------|---------|
| 1 | David Gonsalvez | Zaragoza Logistics Center | Spain |
| 2 | Diego Artigot | Cámaras de Comercio | Spain |
| 3 | Emilio Larrodé Pellicer | Universidad de Zaragoza | Spain |
| 4 | Enrique Gómez Berned | Logistics Center Zaragoza Plaza - ADIF | Spain |
| 5 | F. Javier Gracia Martínez | Intecsa-Inarsa | Spain |
| 6 | Fernando Liesa | Zaragoza Logistics Center | Spain |
| 7 | Francisco Bordejé | ALIA | Spain |
| 8 | Gerardo Escobedo | Red Aragón 7PM | Spain |
| 9 | Guillermo Espiago | DISTRIBUIDORA DE ARAGÓN, S.L. (DASA) | Spain |
| 10 | Ignacio Martinez de Albornoz | Aragón Exterior | Spain |
| 11 | Isaac de Castro | Deloitte | Spain |
| 12 | Javier Flores | Instituto Aragonés de Fomento - IAF | Spain |
| 13 | Jeanett Bolther | Zaragoza Logistics Center | Spain |
| 14 | Joaquín Franco | Cámaras de Comercio | Spain |
| 15 | Johanna M ^a Lobo Gutiérrez | Intecsa-Inarsa | Spain |
| 16 | José Manuel Almarza | Intecsa-Inarsa | Spain |
| 17 | Jose Manuel Hernández Pérez | Master-D | Spain |
| 18 | José Miguel Guinda | AEPLA - Asociación Empresarial PLAZA | Spain |
| 19 | Juan Antonio Pérez | Aragón Exterior | Spain |
| 20 | Juan Carlos Trillo Baigorri | Gobierno de Aragón | Spain |
| 21 | Katharina Maria Mormann | Aragón Exterior | Spain |
| 22 | Miguel Angel Barcelona | ITA | Spain |

| | | | |
|----|----------------------------|-------------------------------------|---------|
| 23 | Miguel Ángel García Muro | Gobierno de Aragón | Spain |
| 24 | Miguel Ángel Piñero | Fundación Transpirenaica | Spain |
| 25 | Miguel Asin | Terminal Marítimo de Zaragoza - TmZ | Spain |
| 26 | Olivier Brunet | Comisión Europea | Belgium |
| 27 | Óscar López | Universidad de Zaragoza | Spain |
| 28 | Pascal Huther | HOLM | Germany |
| 29 | Pilar Fernández de Alarcón | ITA | Spain |
| 30 | Pilar Roser | Transportes Carreras | Spain |
| 31 | Santiago Tenorio | SAMCA | Spain |
| 32 | Teresa Gaspar | ITA | Spain |
| 33 | Ximena Farro | Consejo Aragonés de Cámaras | Spain |
| 34 | Yari Borbón | Zaragoza Logistics Center | Spain |

4.1 Final conclusion on the evaluation of the cluster

The Region of Aragón is an important location for the logistics and logistics-related sectors, both in the present and the future, due to its geostrategic location, the existing logistics infrastructures, a favourable business environment, attractive markets, and high industrial efficiency. The region has an improving and favourable competitive position, among the top five logistics regions in Spain, but it faces the challenge to develop and strengthen its position as a logistics hub worldwide. An increase in the road transport volumes has been detected although the region has a substantial higher competitive advantage and potential in rail and air transport. Although the cargo volume in road transport is superior in the region compared to other transport modes, Aragón exceeds the European average in terms of volume sent and received to and from other European regions by rail. The logistics sector is therefore expected to experience a high future growth in the region and Aragón expects future economic recovery, partially through the improvement of logistics technologies and services, especially for air and rail transport, and continuous innovation in management and production.

The predominant industrial sector in the region, which is characterized by a high population of SME's, is the automobile industry although companies in almost all of the different logistics areas are present in the region. Nevertheless, the employment concentration in the transportation and storage sector in Aragón is below the EU average. All primary and secondary business activities of the logistics companies are present locally although there is a deficiency of R&D departments. An intense competition in the logistics sector and a fragmentation of transport companies has been identified as five of the most important road transportation companies in Spain are located in the region as well as a large number of small carriers.

Generally, the Aragónese industry lacks cooperation with European partners and even the collaboration with different local industries is considered low. Nonetheless, a high cooperation among land transport and warehousing as well as air transport and water transport is demonstrated. The local industry shows a growing interest in participating in R&D projects to absorb more knowledge and innovation. Increasing or maintaining market share is the most important driver for innovation although the cost of innovation and the lack, or uncertainty, of customer demand is a barrier to carrying out the same. Currently, more than 70 projects in the area of logistics innovation have been identified in the region and cost efficiency, quality, and strategy for regional companies are seen as future fields of action.

Although the region offers faster loans and more diversified funding sources, higher financial support with the provision of public funding is needed. Though the analysis shows public and governmental support for logistics development and innovations - especially for R&D, ICT and training - an improvement is needed in the support structure. Such support is already emerging with the creation of new cluster initiatives such as ALIA, IDiA and CAAR that can improve the coordination between different institutions related to the sector. Also, the Regional Government of Aragón has recently initiated the elaboration of a research and innovation Smart Specialisation Strategy (RIS3) that expects to build upon the regional feedback of SoCool@EU. Logistics is one of the sectors to be supported under the new regional policies.

A variety of educational institutions, such as training institutes, universities, business schools and R&D centres, are present in the region and as a result, the general educational level is above the national average. Also, the Aragónese industry indicates the importance of highly skilled labour for the economic success of the region. Attracting highly skilled labour may be favoured by the high quality of life, the high purchasing power in the region and the fact that Zaragoza is one of the main economic, commercial and university cities of Spain.

4.2 Discussion of project ideas

The necessity to set up think tanks to exchange projects, sharing information, knowledge, and capabilities was set forth. These projects should be thought for incentivising SMEs, which are usually reluctant to actually share experiences because of their lack of resources, time, knowledge or interest.

A number of fields of actions, which are indicated in details below, were discussed during the workshop. Summarized the following were mentioned: Cost efficiency, high quality end products and services, intelligent transport and carriage systems, supply chain collaboration, collaborative industrial delocalization, knowledge exchange systems, human resources development, reverse logistics, new business models, inter- and multimodal transport, optimisation of rail hubs, urban logistics, and electro-mobility.

Intermodal transport

A need for projects to manage the critical volume of intermodal transportation was identified during the discussion and is considered as the key concept. Companies consider that changing transport modes is not easy or cheap, although they expect a cost reduction once implemented. Four elements that influence intermodality were identified as of interest:

- Infrastructures: R&D projects to identify the needs of the existing infrastructures and technological capabilities to improve operations management of vehicle integration, interoperability, intermodal operations, and customs simplification.
- Technologies (integration, interoperability, information and communication): Tools that allow for reliable knowledge about empty containers, trains, warehouses, routes and so on, without sharing financial, commercial or market information (tools for information sharing without exposing sensitive and confidential information). It would be especially important that the tools are constructed in a way that it would be possible to attract small businesses into collaborative logistics and supply chain operations.
- Administrative procedures and handling:
 - Customs procedures
 - Single Logistics Window
 - Accompanied combined transport (Ferroustage). This is a form of intermodal transport, which is the movement of goods in one and the same loading unit or road vehicle, using successively two or more modes of transport without handling the goods themselves in changing modes.
 - Trade networks, with the presence of clients and integrating with other clusters to attract transport flows to Aragón through marketing improvements.
- Training: It is important to highlight the managerial capabilities of logistics centres for intermodal research linked to attaining higher market share, identifying the logistics partners sending cargo to or throughout Aragón, and partner with them for logistics and supply chain cooperation in intermodal transportation.

A focal point may be the Zaragoza airport and PLAZA, where air, rail, and road transport could be investigated for optimising the mix of transport modes and routes. Business will only use intermodality (or any innovation) if it truly reduces their cost or significantly improves their service performance and ideally both.

Rail cargo transport

Road transport is expensive while rail has a large underutilised capacity and the workshop participants indicated that experts need to search for the way of switching the cargo from roads to rail. However, rail transport has several inefficiencies that need to be remedied:

- There is a need for projects that speed up the transition of increasing the economies of scale, speed and scope of the rail transport by dynamically reducing their uncertainty and inefficiencies. Otherwise, the switch from road to rail will be the mere result of increasing costs of road transport.
- Analysis of the inter-rail connection in the Pyrenees, which remains as the main physical barrier for Aragón with respect to rail transport with the rest of Europe. There are only two rail ways though the Pyrenees, and none of them is currently specialised for cargo.
- Infrastructures:
 - The standard European rail width only reaches Barcelona and therefore limits European rail transport in Spain.
 - There is a need for more space in the railway dry ports that allows for more and easier movements of containers.
 - There is a need for larger cranes for handling containers.
 - There is a need for a third train rail from/to Barcelona.
 - A disadvantage exists with regard to other European countries, such as Italy having 5 specialised railways through the Alps.

Other areas of interest

- Supply chain collaboration: Research in innovative business models for supply chain coordination and information sharing with partners with similar loading and unloading points. This would imply supply chain coordination with better information systems, forecasting, and suitable software development.
- Reverse logistics (re-use of materials)
- Logistics projects enabling cost-efficient industrial delocalisation (outsourcing) throughout Europe, especially showing the advantage of locating the new delocalised manufacturing activities among the influence area (origin, destination, or transit) of the optimised logistics regions.
- New models for urban distribution of goods and more specifically the last mile distribution of goods. There are needs for projects for night distribution of goods, lighter and smaller transport vehicles, electric vehicles and infrastructure for more atomised urban distribution of goods.
- It is important to set up innovative business models in logistics, warehouse locations, internal logistics, and urban logistics.
- It is necessary to improve human resources: training, mentoring, promoting information exchanges.

5 Cluster Workshop Øresund Region

Date: 12-09-2012

Location: Maritime Development Center of Europe, Amaliegade 33B, 1256 Copenhagen, Denmark

Time: 01:00 to 05:00 pm

Participants

| No | NAME | ORGANISATION | COUNTRY |
|----|---------------------|-------------------------------------------------------|---------|
| 1 | Britta Gammelgaard | Copenhagen Business School | Denmark |
| 2 | Gunilla Jönsen | Lund University | Sweden |
| 3 | Helene Vogelmann | Lund University | Sweden |
| 4 | Jan Boyesen | Maritime Development Center of Europe | Denmark |
| 5 | Leif Gjesing Hansen | Region of Zealand | Denmark |
| 6 | Lene Rasmussen | Transport Innovation Network | Denmark |
| 7 | Marianne Jakobsen | STRING Logistics Platform, Roskilde University Center | Denmark |
| 8 | Mats Janné | Lund University | Sweden |
| 9 | Mats Johanson | Lund University | Sweden |
| 10 | Pascal Hunter | House of Logistics and Mobility | Sweden |
| 11 | Patrik Ryden | Lund University | Sweden |
| 12 | Paul Kleiby | Swedish Transport Administration | Sweden |
| 13 | Steen Sabinsky | Maritime Development Center of Europe | Denmark |
| 14 | Thomas Ney | Region of Skåne | Sweden |
| 15 | Urban Björn | Volvo Logistics | Sweden |

5.1 Final conclusion on the evaluation of the cluster

The Øresund Region is a knowledge-intensive region. This strength is reflected in the number of universities and students. There are a total of 12 universities in the region with around 165,000 students. Despite that fact, many participants in the survey point out that R&D and research facilities in general are rather irrelevant as a factor of regional quality, which would be inconsistent with the knowledge society previously assumed. However, this phenomenon can be explained by the R&D function being underrepresented within the responding companies and thus leading to the assumption. Another important point from the analysis is that the cluster needs more skilled labour force. Not only in terms of university graduates, who are recognised as sufficient, but also in terms of vocational graduates.

A heavily discussed topic during the analysis was whether the Øresund Cluster actually is a logistics cluster. The cluster has been defined and agreed upon before the actual analysis began. However, it is important to recognise that the definition of the cluster can lead to a bias, since it can be argued that there is a lack of cooperation between the Danish and Swedish part of the cluster. The strengths are very diverse in terms of nationality. For instance, the Danish part of the region is a strong player within air transportation and maritime logistics. From a Swedish point of view, these are not the strongest regional types of logistics. In fact, the Swedish part of the Øresund Region is a strong player in railway transport and has almost no activity within air transportation. Consequently, it is crucial to be aware of how the participants saw the Øresund Region in terms of their nationality in the discussion. This was further illustrated by participants arguing how the findings did not correspond to their specific part of the cluster region.

A central weakness or challenge is also the current railway system in Øresund. At the moment, the system is not sufficient for the demand, especially considering that it is one of the goals for the region to shift transportation from road to railway in terms of achieving more sustainable logistics. The Øresund Bridge is considered as a central infrastructure bottleneck of the region where the limit of capacity is reached. Participants in the analysis mentioned that at present, there are only two hours at night where there is vacant capacity. One solution could be a higher degree of cooperation between the competing firms. The competitive environment can cause even larger capacity problems if the occupied capacity is not fully made use of. Furthermore, in order to ensure cluster efficiency in the future it is needed to identify all other current and future bottlenecks in the region as to avoid and prevent capacity problems. The efficient use of infrastructure is pivotal. Additionally, an expansion of the railway system, a shuttle train for instance, can encourage a greener development of the logistics sector in Øresund and Europe in general.

The analysis also shows the significance of a differentiation between the different logistics sectors within the analysis, since the answer behaviour between the different sub-sectors differs a lot most likely. The Øresund Region is not yet fully integrated and a presumably distorted picture of the analysis should not be drawn prematurely.

5.2 Discussion of project ideas

During the workshop, several ideas with regard to projects and fields of action came up. All of them are listed below.

Knowledge

- Mobilizing a knowledge node in logistics for Urban Mobility. The partners could be the partners from the SoCool@EU project and the German Association for Transportation.
- Knowledge networking in humanitarian logistics, it could be a sub network. The potential partners could be the universities, UNICEF, UNORS, Red Cross, and companies such as DHL, Copenhagen Airport etc.
- Increase of the research awareness in logistics companies.
- A higher degree of cooperation between companies and universities, in terms of students writing theses and performing research for firms. Further, many theses are written (ph.d. and masters) every year, it would be very relevant to tap into these research results since it is free knowledge.
- Many SMEs do not employ academics in their business. This is predominantly a question of financing, since it is expensive to hire academics. However, it can be argued that this opinion is a result of the firms not knowing the competitive advantages they can achieve by employing academics. Awareness-raising activities are needed in this respect.

Education

- Benchmarking of logistics education in the respective regions of SoCool@EU partners can help all partners to learn from another
- Marketing of what logistics education is gives a clear picture of an education vision and mission
- Getting the message of scientific logistics education across to make it more attractive to hire academic personnel
- Advocacy for subsidizing salaries when hiring people with a higher education can alleviate the labour shortage

Sustainability

- Biogas network – exchange of experiences with the use of biogas for transport, exchange of knowledge on regulations and incentives to use biogas. The potential partners could be the cities, regions, cluster initiatives, energy and vehicle companies.
- City logistics within the cluster: Freight network, best practice, common learning. Knowledge sharing on the use of different fuels and vehicles (biogas, electric, hybrids).
- Terminal development in terms of implementation and cooperation between actors.
- Green logistics (sustainability) is often seen by companies as an extra cost; therefore, it is important to inspire companies on how they can be more sustainable and at the same time lower their cost. This could be achieved through a more efficient use of resources, optimizing of load or with sustainable fuels.
- Shuttle trains between the region of Øresund and Frankfurt.

Other

- Re-introducing short sea-shipping in Scandinavia

6 Cluster Workshop Mersin Logistics Cluster

Date: 20-09-2012

Location: Mersin Chamber of Commerce and Industry, Cankaya Mah. Ataturk Cad. Mtso Hizmet Binası Kat 2, 33070 Mersin, Turkey

Time: 00:00 to 04:00 pm

Participants

| NO | NAME | ORGANISATION | COUNTRY |
|----|---------------------|-----------------------------------------|---------|
| 1 | Jozef ATAT | Atako Group | Turkey |
| 2 | Fuat ÖZDEMİR | Önder Gümrükleme | Turkey |
| 3 | Cem ALTINIŞ | Tria Logistics | Turkey |
| 4 | İbrahim KITAPÇI | Arkas Logistics | Turkey |
| 5 | Tolga ÖZDEŞ | Shencen Arkas Logistics | Turkey |
| 6 | Bora GÜNER | C.Steinweg Levant Logistics | Turkey |
| 7 | Fikret ZORLU | Mersin University | Turkey |
| 8 | Köksal HAZIR | Çag University | Turkey |
| 9 | Hüseyin GÖKTEN | Nokta Logistics | Turkey |
| 10 | Kaan ÖZDEMİR | Önder Denizcilik | Turkey |
| 11 | Ufuk MAYA | Ufuk Logistics | Turkey |
| 12 | Ayşe Müzeyyen DEMİR | IMI Denizcilik Hizmetleri | Turkey |
| 13 | Yılmaz Çakır | Mer EDU | Turkey |
| 14 | Halil DELİBAŞ | Mersin Chamber of Shipping | Turkey |
| 15 | Kadir DÖLEK | Mersin Chamber of Commerce and Industry | Turkey |
| 16 | Esra AÇIKGÖZ | Açığöz Logistics | Turkey |
| 17 | Özmen KIZILKOCA | Tema Teknik | Turkey |
| 18 | Ali İŞ | Tuncay İş Dorse | Turkey |
| 19 | Mehmet TANYAŞ | LODER | Turkey |
| 20 | Fevzi FİLİK | Mersin Chamber of Commerce and Industry | Turkey |
| 21 | Nuri PEKER | Mersin International Port | Turkey |
| 22 | Vefa SUCULARLI | Mersin Municipality | Turkey |

6.1 Final conclusion on the evaluation of the cluster

The analysis has shown that one of Mersin's major competitive advantages is the international port enjoying the benefits of an active Free Trade Zone with its own pier, a relatively advanced transport infrastructure with a good international accessibility and significant potentials for proper transit carriages. The port is closely situated to 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, having effective links through both road and railway facilities and being granted with exceptional climate enabling logistics activities in all seasons. Mersin accommodates a well-trained and well-equipped work force that is sufficiently enough internationally oriented and able to communicate at least in one foreign language. The area is host to an 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 on the national and regional economic growth, with an increasing amount of export and import volumes and high availability of cheap labour.

The Mersin Logistics Cluster provides for an investor-friendly environment with a prospect to continue as such. A Logistics Village is planned to be established in Mersin and large parts of investments are expected to be made in the harbour. After the privatization of the Port of Mersin, a significant productivity increase is expected. An international airport, Çukurova, is furthermore planned to be constructed soon, along with a proposal for a new Free Zone Law as part of the political agenda. The regional open-mindedness with favourable and friendly attitudes welcomes all domestic and foreign investors.

Among the weaknesses is the low demand for logistics research leading to low levels of research-driven logistics innovation. The analysis has revealed that in many areas there was a lack of skilled labour force with an increasing difficulty to especially find experienced personnel for middle management level in the logistics sector. The absence of a culture of working together along with insufficient collaboration among institutions is a further weakness. With regard to infrastructure, the digital infrastructure is insufficient, as is the physical infrastructure of railroads and the signal system. In the current structure, the productivity of the Mersin Port is low through old equipment, a lack of infrastructure, low automation rates, untidy port traffic and insufficient port storage fields. In similar dire is Adana Airport, suffering from insufficient loading and unloading equipments, capacity and warehouses. Also of competitive disadvantage are the relatively high business expenses, the envisioned restrictions by parts of the Mersin Free Trade Zone Laws (double taxation) and the low and slow customs operation services.

Further challenges are the availability of land and property as a threat for investment in the future, environmental and security issues with the growth of unplanned oil storage fields jammed in the Harbour Port of Entry and the harmonization of city traffic with port traffic. Similarly, energy supply and the cost for logistics are a challenge, as are the increase in the number of uneducated people because of extensive immigration flows and the difficulties arising with the compliance of regional, national and European law and regulations.

Finally, Mersin as mentoring region is confronted with the future challenge of long-term strategic cluster development in logistics and transport. Activities need to be initiated to make the Mersin Logistics Cluster tap into the knowledge of the other clusters in the project and across Europe. The dialogue and exchange need to be fortified in order to capitalize on the advantageous preconditions set in the cluster.

6.2 Discussion of project ideas

Workshop participants agreed on the priority of project areas; a ranking is provided in the following list:

- 1) Public institutions should develop, initiate, and implement infrastructure projects. The projects should aim at creating investment opportunities for companies. The Mersin Logistics Zone development project should be initiated as an intra-regional project.
- 2) Research and education institutions shall establish undergraduate programs for logistics. The industry needs skilled staff; however, employees are also trained “on the job” for which tailored further education and certificate programs are needed. Curriculum development, definition of program objectives and program model definition could be the objectives of a project aligned with the necessity to improve human resources. This is presumably an intra-regional project in cooperation with international partners.
- 3) The quality of custom’s services should be increased in the region (especially port and free zone) by the central government to guarantee productivity and reliability in international trade. This is an intra-regional project.
- 4) Infrastructure for multimodal transport and efficient infrastructure usage shall be improved in the region by regional and central government bodies in an intra-regional project.
- 5) An international business forum on logistics should be organized by the chambers in order to increase potential international trade between EU and the Middle East. This is an intra-regional/ national project in cooperation with international partners.
- 6) Regional coordination of stakeholders should be established by the regional actors, such as chambers coming together in an intra-regional project to exchange and come to agreements.
- 7) Marketing and exchange activities such as international conferences, seminars and fairs about logistics should be organized with international partners.
- 8) International trade delegations should be organized by the regional authorities, such as chambers or exporters' unions to analyse best practices. This is an intra-regional project in cooperation with international partners.
- 9) Networking between industry (logistics sector) and research sector should be promoted by the University, chambers and logistics associations. This effort could be part of an intra-regional project in cooperation with international partners.
- 10) The productivity of logistics operations in the Mersin International Port should be improved, e.g. by providing new infrastructures, such as cranes or land for container operations.

7 Conclusion and Outlook

The regional workshops in the clusters were conducted successfully and allowed the verification and interpretation of the data analysis, the discussion on possible project fields and offered the possibility for participants to engage in networking activities with new personal contacts or to maintain already existing relationships.

The discussion on the results of the public statistics, the online-questionnaire, the meta-analysis and the open expert interviews highlighted strengths and potentials of the regions and builds a sufficient basis for further discussion and research as well as interesting insights for regional actors.

In the later course of the project, common project fields and recommendations for action, which could be detected in the analysis and the workshops, will be further complemented and elaborated on in a Joint Action Plan in the subsequent work package. This Plan will contain specific joint projects and activities describing the overall strategy to drive sustainable economic development through research and technological development and innovation activities within and between the clusters.