CIP INTERREG IIIB – ARCHIMED MED.IN.TRADE. PROJECT

WP 2.4
Feasibility Study for the creation of a

"OPERATION BUSINESS CENTER FOR THE LOGISTIC AND INTER-MODALITY"

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Input	**Feasibility Study For The Creation of a "Operation Business Center for the Logistic and Inter-Modality"**
Partner Resp.	**1,5**
Partner involved	**3,4,6,7,8**
Output	**Feasibility Study**

1. FOREWARD

Despite the low interchange of goods between Italy and Greece, the South-Eastern Mediterranean area is a natural platform that is strategically important to convey trade towards North-Western Europe as well. Therefore, Southern Italy seems to be an ideal place for the implementation of an Operative Centre for Logistics and Inter-modality (OCLI).
OCLI shall be based on a public-private partnership aimed to coordinate and manage the logistic/transport sector at a transnational level.
On the basis of a preliminary feasibility study carried out to identify a proper physical site for OCLI, the partners of Medintrade project have decided to implement 2 OCLIs: one in Matera (Italy) and the other one in Igoumenitsa (Greece). The target area has been identified in the district territory of Matera which is characterised by a severe infrastructural gap due to the lack of railways and direct connection roads. Accordingly, this is the regional area that mostly requires a well organized structure supplying material services, ICTs and horizontal connections (railways and direct connection roads) with the main inter-modal structures of Apulia. OCLI activities shall be supported by an ICT tool set up by the Region of Apulia. This tool is able to combine the logistic and transport flows moving in and out of Brindisi Port, that is the most important port structure in terms of numbers and volume, with the present structure of exchanges between Apulia/Basilicata and Greece.

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2. DEMAND AND SUPPLY ANALYSIS WITHIN THE DISTRICT OF MATERA

The transport sector has been seriously affected for the last years by the decline of industrial activities in the district of Matera: the growing crisis of the Chemical Pole in the Basento valley and the unceasing "deflation" of the upholstery furniture industry have had a serious impact on third party goods transport companies. As a matter of fact, long-standing companies shut down and heavy downsizing of car fleet occurred.
Nowadays, the few companies that are still working are those that moved the core of their business to Northern –Central Italy on time.
Therefore, the demand in logistic services has increasingly weakened, thereby ensuring the supply to very few companies of the sector. Furthermore, the few middle-sized transport companies working in the district of Matera improperly work as managers of logistics on behalf of their customers.

Transport of commodities – Source: Istat 2005

GOODS TRANSPORT (tons per year)	**CATEGORY OF GOODS**	**CONCENTRATION OF TRANSPORT**
1,5 billion tons of goods per year in Italy.	**Half of the goods are made of :** raw minerals or manufactured goods: cement, lime, construction materials; foodstuff ;	80% Northern-Central Italy 20% Southern Italy (300 million tons)

2.1. SWOT Analysis

SWOT Analysis of the Transport System in the Region of Basilicata

STRENGHTS	WEAKNESSES
• Good amount of Information Companies and growing presence of ICTs; • Favourable European-community and regional action plans	• Slowing down of the development dynamics and transformation of the regional economic system during the last years. • Limited opening of the regional economic system to foreign trade and poor capacity to attract direct foreign investments; • Poor interchange of goods between Italy and Greece within the targeted territories ; • Poor dissemination of Research and Development activities in particular in the private sector.; • Severe infrastructural gap in the accessibility to logistics. Inadequate connection/accessibility to the main routes of national and international trade; • Inadequate connection/accessibility of smaller centres, characterised by a great potential of development of their local production systems, to the main regional routes; • Low integration of infrastructures and limited development of the inter-modality of passengers and goods; • Inadequate infrastructure to connect the region to the main ports, airports, railways and roads of the other areas; • Serious inadequacy of the road network affecting the crucial axes of regional mobility and territorial areas of the main urban centres. • Lack of port and airport infrastructures; • Lack of railways in the whole region of Basilicata; • Limited number and functional inadequacy of infrastructures to manage the goods flow. .

OPPORTUNITIES	THREATS
• A strategically important position for the connection with other regions of continental Mezzogiorno; • The South-Eastern Mediterranean area is a natural platform, strategically important to convey trade towards North-Western Europe, too; • Qualified internationalization processes already activated by Public Bodies; • Availability of a potential amount of human resources which is not yet fully enhanced; • Development of projects related to the implementation of the Adriatic Corridor for North-South axis and the corridor n. 8 for the East-West axis. • Opening of new markets and new opportunities of trans-border integration towards North-African and South-Eastern European countries.	• Difficulties in making cohesion policies efficient and effective due to the lack of common actions aiming to strengthen the governance of the main sectors of regional intervention; • Insufficient public financial resources to meet the need of infrastructures and construction of strategic public works; • Competition with other European and Italian areas that have showed a great power of investment in infrastructure.

3. "OCLI"- Definition

The model of "OCLI" as defined by the Consortium Med.In.Tra.D.E. is a public-private partnership aimed to coordinate and manage the logistic/transport sector at trans-national level.

3.1. Localization of "OCLIs": HYPOTHESIS

Within the Italian territory, OCLI shall be set up within the district of Matera, more precisely near the town, almost along the border with the Region of Apulia. Such a choice was the result of both a material analysis of current territorial infrastructures as well as of a more immaterial analysis regarding the strategic importance of the area.

- Material analysis: the territorial need to fill structural gaps through a facility whose services and ICTs are its strenghts;
- Immaterial analysis: near the town of Matera, almost along the border with the region of Apulia, there is an infrastructure that could be used as a proper site for the OCLI platform after being supplied with the most advanced technologies,.

Target Areas

(a) Town of Matera – Pantano district

The above-mentioned facility is **"Autoparco di Matera[1](Motor-Vehicle parking area of Matera)** covering a surface of about 100,000 sq.m. It includes a parking area for motor-vehicles, coaches, caravans and cars, as well as workshops and warehouses.

However, there is an urgent need for a **Computer Infrastructure** to ensure proper transport and logistic operations and to meet the high standards of service companies in real time.

The rational and efficient management of warehouses and distribution networks would also be improved by the setting up of a decentralised localisation system consisting of a CED (Data Processing Centre) connected to peripheral stations through a computer system.

(b) Basento Valley

Within this area the Consorzio ASI built a facility in the past with public funds but it has never been used up to now. In fact, the site offers many advantages such as the direct access to the main road S.S. 407 Basentana road as well as to the main road S.S. 106 Jonica road and it is not very far from the Port of Taranto. Moreover, the ongoing construction of the runway in Pisticci and the completion of the railway junction from Ferrandina to Matera and probably to Bari shall have a positive impact on the development of the local communication system.

3.2. EXISTING MODEL / BEST PRACTICES

Definition of the Management Model: on the basis of the relationships developed with the Provincia di Matera, Med.In.Tra.D.E.-project partners and the representatives of economic sectors involved in the process, the study carried out highlighted the need to set up a two-level public-private structure.

- **An Institutional level of "orientation and coordination**" managed by the Provincia di Matera;
- **A proper management level** set up as a social and associative company working with highly skilled professionals.

At present, the companies working at an international level are forced, for either mere distribution or production needs, to manufacture components in several geographical areas and to assemble the finished products in final assembly centres. In order to save money and make their logistic system more efficient, the companies should convert the local logistic distribution chain to a national and European chain.

[1] The area, which is completely fenced, includes: n. 1 mechanical workshop (800 sq.m.), sheds to be used as warehouses (2,800 sq,m), car washing for trucks, coaches, and cars, weigh –bridge, n.15 power and water distribution systems for caravans, cold storage rooms, n. 28 independent space – offices located in a 3-storey building (1,200,sq m) equipped with air conditioning system, technical rooms for fire-fighting systems, electric power, rainwater collection system, filtering system, parking area, 7,000 sq,m. container, n. 275 parking lots for trucks, n. 33 parking lots for coaches, monitoring system and 24h-a day surveillance. Offices that can be used for customs services. A lighting system made up of 5 towers

The activation of an integrated distribution chain is not only a common target but also the only tool to implement real economies of scales in goods flow, from production to final consumption markets. Moreover, it is the only way to make production and the whole distribution cycle flexible in order to meet the requirements of the final reference market.
The most obvious effects of this process are the significant reduction and concentration of centres of logistics (stocking areas) and distribution of finished products.
Logistic Centres that offer only a few services are too expensive and difficult to be supported by more and more competitive and international markets; therefore, they are replaced by integrated logistic platforms ensuring users all logistics-related services as well as amortization costs, thus improving efficiency, competence and flexibility.
In order to identify and improve the best practices /models to comply with, Autorità Portuale di Brindisi (the Port Authority of Brindisi), one of the partners of Med.In.Tra.D.E.,project, held some meetings with the representatives of the "**Federazione del Mare**[2]". Federazione del Mare gathers many industrial associations operating within the maritime sector. Federazione del Mare (**FdM**) was set up in 1994 and is made up of almost more than twenty national federations aiming at providing an appropriate institutional level: the widespread of companies and federations in Italy working in the maritime sector brought about the lack of units representing the companies of the sector, that would have implemented policies supporting sectoral competitiveness and development. In the last 10 years, "**FdM**" has published dozens of books on the current economy of the sector as well as on the need to support the professional growth of human resources working in the maritime sector (the research indicated can be downloaded free from the web site http://www.federazionedelmare.it). "**FdM**" tries to disseminate the culture and the status of the maritime sector. Therefore, OCLI should and could be meant as an "antenna" on the territory; it tries to fulfill all needs of the sea, air, road and railway transport sectors, thereby giving the company working within it both a regional and subregional support aiming at the development of companies. Thus, OCLI shall focus on its political and economic activities, thereby detecting the real needs of operators and supporting studies, reports on the development of the sectoral situation through monthly or three-month publications.
The FdM was assessed as for:

- Objectives
- Partners and operators
- Main activities

[2] **FdM – Federazione del Mare -** aims to be the spokesman of a group of associations, federations and industrial partners in the relationships with institutions and organizations at a national level. Therefore, its main activity focuses on reporting and publication of brochures and books about research and studies in the maritime sector. The FdM aims to disseminate the knowledge and the collected data to the companies aiming to arrange their targets. The FdM aims to find a contact point among the various organizations that although working in the same sector, may have different aims. It aims to reach a common unity of intents or at least a common position that could be more easily supported at an institutional level. The same idea could be reproduced by OCLI: the gathering of various local organizations /companies working in the logistic/transport sector, could give the whole sector more "voice" to define regional policies

4. Partners and Operators

OCLI partners can all be private enterprises working in the related sector/area although their participation within an organization could be the better solution. This is due to two main reasons:
a) each organization know very well the problems affecting associated companies as well as the sector they work in;
b) the enterprises should support these associations or bodies that already know the existing problems, so that they can be represented at a regional level; c) an OCLI, as was designed by Medintrade project, could be supported with a small amount of funds during the start-up phase in order to achieve the maximum result with the minimum effort ; consequently, problem solving will be optimized since there will be a low number of local associations representing a huge quantity of enterprises.
Among the main potential partners there could be for instance:
• Port Authorities
• Universities
• The Chamber of Commerce
• Entrepreneurs Associations
• Port Informers.
Obviously, whenever the organizations mentioned have their own analysis and study department, they must be all linked to each other in order to multiply the effects on the territory.

5. GOALS, ACTIVITIES, SERVICES

In order to highlight the functional requirements of OCLI and to carry out the research and analysis of the logistics of the main observatories, an analysis was performed to detect several Italian organizations that could be defined as OCLI. Among these, the web sites of the most important ones are:

a) www.isfort.it/sito/osslog/index.asp
b) www.oltgenova.it
c) www.osservatoriologisticoveneto.it
d) www.osservatoriologistico.it
e) www.provincia.novara.it/osservatoriologistica/oss_logistica.html
f) www.trail.abruzzo.it/
g) map.provincia.bologna.it/ajaxportal/SITO/progetto_obiettivo.html

5.1 Goals

The main goals of local logistics pole shall be:
• the supply of information concerning quantitative and qualitative data, updating information of transport logistics (state of the art of data) in order to understand and face the trends and development of the sector;
• the support of involved stakeholders/users through a facility that can give advice on transport and logistics issues;
• the analysis of transport and the market logistics in order to support the setting up of new innovative enterprises for logistics and transport.
• integration and coordination of several local "sub-projects" dealing with logistics and transport.
The setting up of a Local Intermodal Platform shall be focused on:

- the localisation of "OCLI";
- the setting up of an IT network to optimize the logistics and the information systems;
- management of the production logistics that is able to:
    - move significant traffic volumes of goods from the road to railways;
    - integrate sea highways in the intermodal system;
    - correct the fragmentariness of the current transport systems;
    - reduce environmental pollution;
    - reduce the general cost of logistics to improve the general efficiency.
- Management control, cost systems and business accountancy;
- Support of the business processes of international logistics;
- Integration of the territorial logistic system;
- Supply Chain Management and assessment of logistic services.

5.2 Activities

The main activities of OCLI should be:
• The setting up of a network of business association operating in the sector of logistics and transports;
• processing of studies and research on logistics and transport;
• regional and district lobby activities;
• Consultancy services to the associated enterprises.
On the other hand, the Operational Information Point should be, as the word itself explains, a contact point where all potential users and associated organizations can ask for and receive information on OCLIs, thereby obtaining the first level support.

- The development of the IT and integrated logistic chain;
- The management of an ITC system, called Middleware, that manages the information and the communication for a better integration of logistics and transport needs in the South-eastern Mediterranean area;
- The implementation of strategic plans of the logistic process;
- The management of activities allowing the flow of materials and information which synchronize the logistic flow like within a network.

The setting up of a platform for territorial intermodal logistics is the tool to rationalize services, the purchase power, and to optimize transport cycles and schedules.

5.3 Services

Following the surveys carried out with different operators, the services that OCLI will provide are:

- The supply of high added value services:

a. Services for the logistics of materials:
   - packaging (parcels, cases, pallet, ecc.);
   - product scanning;
   - storage, assembly, intermodal transports;
   - porterage services;

b. consultancy services:
   - tax consultancy;
   - custom services;
   - optimization of transport times;
   - fulfillment of supply and demand;
   - implementation of vocational training and update courses;

c. supply chain service:
   - refreshment area for operators;
   - maintenance of motor vehicles;
   - organization of exhibitions.

d. IT services:
   - service centre provided with an Internet portal;
   - GSM/GPRS communication network (through commercial operator of mobile phones);
   - User peripherals (telephone or GSM/GPRS Ipod, web terminal);
   - entry/exit at OCLI.

The service centre will be the core of the system where all data collected and the information (position of vehicles, goods carried, destination of the cargo, availability of parking areas and level of congestion of the road system, conditions of accessibility to the limited circulation area) to be conveyed to users will be transferred and processed . The service centre shall be in charge with the structured filing of information on goods flow, thus allowing to read them and to process standard statistics. Furthermore, the service centre shall also be in charge with the management of an Internet portal – linked to connected sites – through which it will be possible to collect the request to access to OCLI and convey custom and/or collective information.

6. Feasibility

Therefore, in order to set up an Operational Point, a set of feasibility analysis shall be carried out. Actually, the feasibility study could be focused on the three following topics:
a) feasibility policies;
b) technical feasibility;
c) economic feasibility.

The analysis on each topic above mentioned is required to set up an organization that can supply the services previously mentioned for a continuous period of time.

a) analysis on the political feasibility

Since an Operational Point is an OCLI tool it should deal with local associations to check whether they want to be the regional and district representative units. Consequently, the Operational Point will act as a focal point without underestimating the roles of several associations and their relative representatives that, on the contrary, will play an active role as for the setting up of territorial policies.

b) analysis of technical feasibility

Setting up of a comprehensive database of qualifications and professionals available that work within several associations. The “list” drawn up shall highlight potential human resources that can support the Operational Point activities as well as the professions/jobs/positions that internal resources cannot deal with.

c) Economic Feasibility

Cost-Benefit Analysis (CBA)

The Cost-Benefit Analysis aims at assessing the setting up of an OCLI on the territory taking into account the goals to be achieved. It is worth highlighting that such analysis focuses on different components and objectives since it can be carried out by either a private or a public body. As a matter of fact, the private body assesses the costs and benefits of project implementation. It also carries out an analysis relying on entrepreneurial choices aiming at profit maximization. On the other hand, the public operator does not only assess the financial aspects related to the expenses that it has actually borne, but it also assesses the costs and benefits within the framework of public choices, thus maximizing the well-being of the socio-economic community within its own reference territory.
The “OCLI” model set up by Med.In.Tra.D.E. as well as its localization rely on a material analysis of current local infrastructures and on an “immaterial” analysis concerning the strategic value of the area chosen. The material analysis, though, highlighted the need of the reference territory to fill in the

infrastructural gap through a body whose services and ICT are its strengths. On the other hand, the immaterial analysis, highlights the need of setting up the facility within a strategic site, like the one that was detected near the town of Matera, almost within the area bordering the Region of Puglia. The Cost and Benefit Analysis highlights the costs and benefits relative to the structure and to the technology as an added value in order to set up targeted policies which do not rely on optimism. As a matter of fact, it is necessary to assess accurately not only the significant benefits, but also the trade off between the advantages and the costs of the society to widespread technology and the relative experiments in order to quantify and maximize the so-called social surplus. This well-being is generated (or destroyed) by a structure, in terms of resources spent and benefits generated.

A technological change, especially if it is supported by investments and public policies, is a consistent use of public resources and shall be assessed for its ability to:

- meet the need stated at the beginning: to fill in the infrastructural gap;
- generate more well-being compared to the costs it generates.

The efficient use of new technologies to achieve the objectives of territorial efficiency is widely supported by the benefits resulting from all contexts, since it helps fulfilling environment-logistic principles.

On the other hand, this study focuses on the economic efficiency of these solutions. Since all technological alternatives entails the decrease of environmental costs, such a benefit shall be assessed along with the cost of the technological change.

The Provincia di Matera aims to provide a structure - OCLI - with a series of resources among which the most interesting one is the IT system to manage the fleet in order to fill in the infrastructural gap.

The solution worked out foresees the development of a software, that is already available within the district territory, which will be working on a web-based platform that can provide a network of services to the members of the intermodal community that work and are connected to the joint of Brindisi transport. The project platform has the following peculiarities:

- it supplies services for the logistic cycle;
- the load and reception (that is to say the clients in and out of the chain of goods transport);

The on-line exchange of data, information and messages both for operational activities of the logistic cycle and for the supporting activities to transfer the charge in a simple and efficient way is the strength of the services offered by OCLI.

The platform shall guarantee an overall interoperability with all intermodal community set up by OCLI in different transport fields (sea, road, railway and air) through the use of a shared “language” relying on standard components and interactions articulated according to different levels of the organization-logistic system.Therefore, the model described aims at capitalizing the public resources that have already been invested and, at the same time, at widening the range of benefits, thus being available not only for local private socio-economic operators but also for the private-public operators involved in the project and that are situated in the territories included in the South-Eastern

Mediterranean area.From an economic standpoint, the analysis carried out highlights the cost of material resources due to the capitalization policies of the local resources that OCLI will be adopting. However, such a cost, is counterbalanced by the benefits concerning the solution of territorial issues, thus strengthening the value of the exchanges obtained thanks to the services offered by OCLI itself. Therefore, the setting up of the facility put forward is necessary not only to solve some problems but also to meet the efficiency and cost-efficiency criteria of the relative scenario.