The Unit activities find their roots in the strong awareness of how the sectors of logistics and transport, that have evolved towards the concept of supply chain management, have become strategic for the competitiveness and success of productive and economic systems at any territorial level. Such sectors nowadays urgently require effective innovative solutions to promote efficiency and effectiveness. Moreover, such an awareness determines a strong political relevance.

Currently, the competitiveness of companies and economic systems at territorial level no longer depends on traditional strategies, such as those of production and marketing. It rather relies on the ability of firms to generate “value” for customers and markets and develop the territory as a whole. The components of value-creating activities are more and more linked to “service” attributes, on top of quality and price factors. In particular, the ability of organizing integrated networks and systems (in terms of service and infrastructures – software and hardware) so as to effectively satisfy market needs by minimizing resources (economic, territorial, environmental ones) consumption is to be considered as a “resource” of the territory in itself. It critically depends on the planning, management and control of efficient and effective supply chains (from vendors to end consumers) and logistics and transort systems. It is a fact that nowadays competitiveness is a game to be played among supply chains rather than single companies.

The Unit aims at creating added value knowledge and applying it in the field of logistics by facing some of the most important challenges of today economic systems. We develop original and innovative approaches and methodologies which are the result of a clear-cut process of assessment of costs and benefits.

Activities have a twofold goal:

- to improve the analytical strenghts of studies related to logistics and transport sector on certain spatial areas
- to put forward innovative solutions capable of supporting the problem-solving processes of a number of issues in the transport and logistics

The activities are carried out on the basis of a strong integration with the academic (both scientific and educational) and operational (companies – related) environment and focus on the strategic planning of stock-flows components at spatial level, from a micro (clusters of companies, urban setting, regional areas, etc.) to a macro perspective (globalization processes, internationalization, etc.). The main focus, although not exhaustive, is on cluster of companies ("distretti"), that is, on the systems characterizing the "italian model" of logistics and supply chain management, in which coordination issues among actors clearly have strong spatial and locational dimensions.

Main activity goals are:

- to develop **analytical models of strategic decision-making processes regarding logistics systems** . Such models are based on benchmark analyses of the logistics of local productive systems (logistics performance parameters). In particular, we promote an innovative analysis approach of system competitiveness which are based on modern qualitative and economic parameters rather than on traditional quantitative and physical ones;
- to develop **normative models** – also, based on best practices – aiming at identifying innovative tools and solutions to improve supply chain competitiveness and logistics systems performance (process innovation) at strategic, tactical and operational level. Solutions are related to specific supply chains ("filiere"). The elaboration of performance parameters (benchmark analysis) serves to identify competitiveness criteria (strategic positioning analysis) at spatial level and consequently makes it possible the definition of appropriate "action guides".

Such overall goals and activities stem from the identification of main critical issues characterizing productive systems from a logistics point of view. Such issues can be summarized as follows:

1. generally speaking, the **overall management of added value processes**: currently it is strongly felt the need of process innovation on top of product one. There is the need of strategically re-organizing supply chains and logistics processes;

2. **operational efficiency**: in an environment characterized by strong international competition and/or economic stagnation, productive systems has the main goal of finding cost-saving activities within more critical and added value processes;

3. **the control of end markets**: as globalization develops, the control of distribution activities becomes more and more strategic as a competitiveness factor. There is then a downstream shift of added value processes.

Overall goals are attained by employing advanced tools of strategic planning of logistics and transport networks and supply chains (strategies, models, ICT, etc.), which are very often based on specialist softwares (MAP&MARKET, MAP&GUIDE, LOGWARE, SPSS, etc.). Such tools are capable of producing innovative solutions particularly in the areas of: network design, customer service, inventory and warehouse, transport.

The approach followed by the Unit is based on sound methodological rules and turns up to be relevant to practitioners. Bottom line concepts are:

- **Integration**
  the approach to logistics problems must consider a number of links and trade-offs among different economic items and activities;

- **supply chain-specific**
  logistics and transport analysis must no longer be based on quantitative parameters only and/or on mode of transport-specific projects (rail projects, road projects, etc.). Rather, they should be based on specific productive and logistcs chains (consumer goods, durable goods, chemical products, etc.): they should be considered as “logistics markets” and a process-oriented approach should be developed and implemented;

- **multi-actors oriented**

analysis should identify all the actors involved in the overall decision-making processes of strategic logistics planning.

Related Project

- NOvelog
- Sus Freight
- ACROSSEE - Accessibility improved at border Crossings for the integration of South East Europe
- Adria A - Accessibility and development of the Adriatic sea
- Intelligent Cargo Forum
- EURIDICE. European Inter-Disciplinary Research on Intelligent Cargo for Efficient, Safe and Environment-friendly Logistics
- TRIM
- I- LOG

Other useful Links

National Project

- LOGOSS (http://www.isfort.it/sito/osslog/fe/index.asp)

Edu Projects

- Master in Transport and Logistics (http://www.masterlogistica.it/)

International and national cooperation and dissemination

- UNIMED (http://www.uni-med.net/)
- European Transport (http://www.istiee.org/te/)
- ETRR (http://www.ectri.org/Publications/etrr.html)