



LOGISTICS CENTRES

DIRECTIONS FOR USE



A report by EUROPLATFORMS EEIG
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The term “logistics centres” generally denotes those sites specially organised for carrying out logistics activities. The name of these sites may vary depending on the customs in practice in each country – for instance we may find:

1. Centres logistiques de fret
2. Gares routières de marchandises
3. Logistics park
4. Platform freight terminal
5. Interporto
6. Centro integrado de mercancías
7. Güterverkehrszentrum
8. Transport centre
9. Freight village
10. Transport center



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CHAPTER -1-

What is a Logistics Centre

1.1 Definition

A Logistics Centre is the hub of a specific area where all the activities relating to transport, logistics and goods distribution – both for national and international transit – are carried out, on a commercial basis, by various operators.

The operators may be either owners or tenants of the buildings or facilities (warehouses, distribution centres, storage areas, offices, truck services, etc.) built there. In order to comply with free market rules, a Logistics Centre must be accessible to all companies involved in the activities set out above.

A Logistics Centre must also be equipped with all the public facilities necessary to carrying out the above-mentioned operations. If possible, it should also include public services for the staff as well as users' equipment. In order to encourage intermodal transport for goods handling, a Logistics Centre should preferably be served by a variety of transport methods (roads, rail, sea, inland waterways, air).

It is vital that a Logistics Centre be managed as a single and neutral legal body (preferably by a Public-Private-Partnership) if synergy and commercial cooperation are to be ensured. Finally, a Logistics Centre must comply with European standards and quality performance in order to provide the framework for commercial and sustainable transport solutions.

1.2 The most important elements

The Logistics Centre concept is based on three important elements:



- 1 Territorial planning alongside infrastructure rationalization
- 2 Transport quality
- 3 Intermodality development

These in turn generate other relevant effects from economics and transport standpoints.

1 Territorial planning alongside infrastructure rationalization

Going back to the Logistics Centre definition at the top of the page is useful to a better understanding of this point.

*The Logistics Centre is a **specific area** where all the activities relating to transport, logistics and goods distribution, [...], are carried out by various operators.*

Dedicating a specific area to transport, logistics and goods distribution automatically implies planning the territory and rationalizing infrastructures in order to optimize area utilization, to safeguard the environment (moving the heavy traffic concerned from residential areas to the Logistics Centre), and to build the infrastructures following specific criteria based on operator necessities.

2 Transport quality

The high service quality standard is certainly one of the most important elements in assuring an excellent level of competitiveness, particularly when considering that nowadays *competing* means surviving the effects of globalisation.

Globalisation, the increase in freight transport, and growing competition between all local production areas have been forcing industries to ask for more efficient transport and logistics solutions: this means removing bottlenecks and diseconomy.

Specialization is the key word. Logistics Centres can offer the local production system the best solutions in terms of logistics, transport and storage activities. This involves controlling both transport cost increases and industrial productivity competitiveness.

The main objective of all those working inside a Logistics Centre is to assure a high quality level, generating the following transport system effects:



1. Optimization of the logistics chain
2. Optimization of lorry utilisation
3. Optimization of warehouse utilisation
4. Optimization of manpower organisation

as well as

5. A decrease in the total transport costs
6. A decrease in the total industrial costs
7. A decrease in personnel costs
8. An increase in the transport operators total turnover.

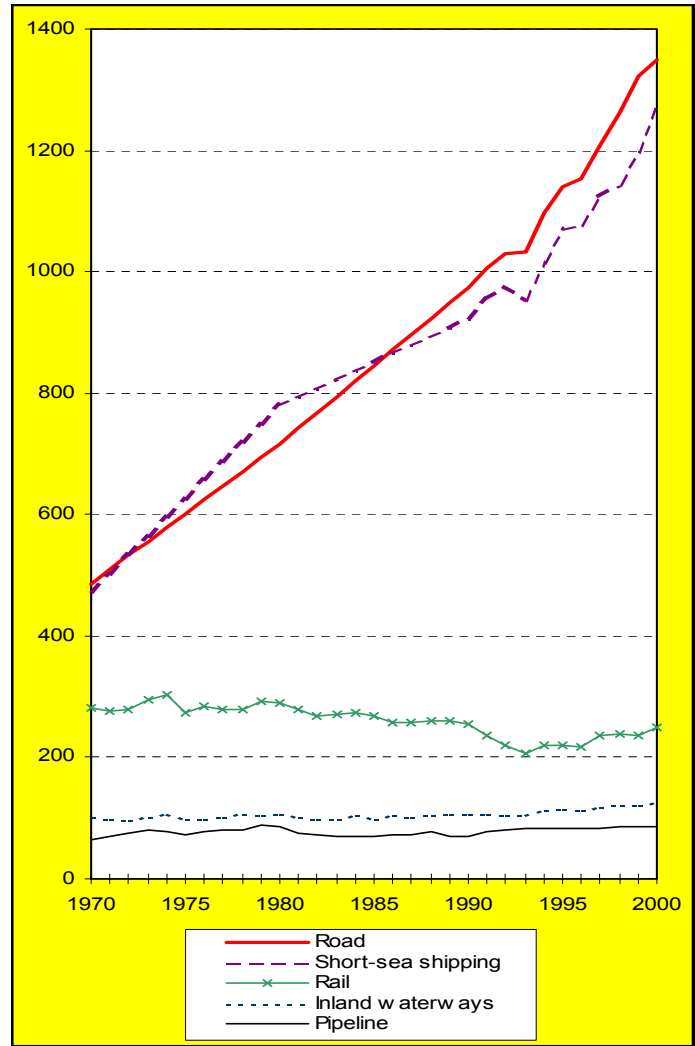
3 Intermodality development

Road transport is still the most common transport mode in Europe.

According to the White Paper, the demand in road transport has been constantly increasing over the last 20 years, against a steady decrease in rail freight transport. This considered, the most important goals of a Logistics Centre are to:

bring together the flow of the freight transport managed by the transport and logistics operators;

- offer very convenient transport and synergic solutions (rail/road/short-sea-shipping), using block shuttle trains on long-range journeys



Source: EU White Paper - 2001

1.3 Location

Location is a key factor for all the transport operators whose main activity is moving freight from one place to one another using different modes of transport.

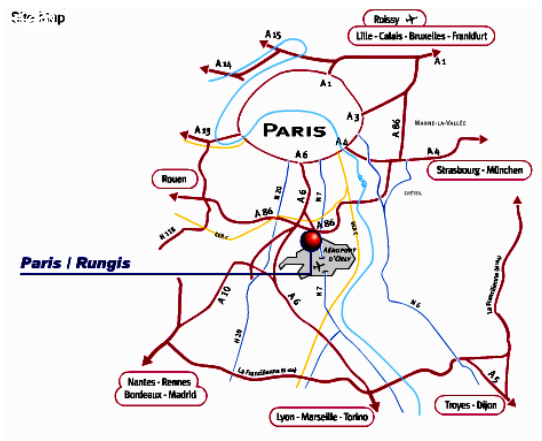
Optimization – or rather reduction – of the delivery time to the final destination or to the following passage of the logistics/transport chain is one of the elements that could make

that important difference when a transport operator is being chosen.

Assuring fluidity between all the transport connections and coordinating all the transport modes are some of the tasks of a Logistics Centre.

This is why most European Logistics Centres are located in hub points for transport and distribution activities.

Location at a hub point means, in short, being near the main railway, motorway and seaway arteries.



Plateforme Multimodale de Paris - France



Centro de Transporte de Madrid - Spain



Interporto di Bologna - Italy

1.4 Activities

It should be remembered that the activities referred to in this point are exclusively specific to the company managing the Logistics Centre.

1. *Defining infrastructure necessities*

these being:

- Road connections
- Rail connections
- Connections with ports

2. *Defining the Logistics Centre layout*

Considering:

- Customs infrastructures
- Postal/bank/insurance services
- Offices
- Intermodal terminals
- Warehouses



- Other general services

3. *Business Plan*

Management of a logistics centre also implies investment and development planning regarding its layout.

4. *Creating the general infrastructures, the warehouses and the integrated services*

The Logistics Centre management company is responsible for the construction of all the infrastructures, once layout planning and the business plan have been completed.

5. *Land leasing to transport operators / Warehouse and office leasing / Sale of warehouses and offices*

The Logistics Centre management company is responsible for all the procedures regarding the leasing or selling activities. It sees to both the commercial/marketing and legal procedures.

6. *Administrative, financial, commercial and operations management of the Logistics Centre* *Upkeep and management of common property*

CHAPTER -2- *Logistics Centre "features"*

2.1 Infrastructures

The most important infrastructures inside a Logistics Centre are the *warehouses* and the *intermodal terminal*.

The warehouse is the infrastructure where the transport operator mostly performs his business. There are different types of warehouses, depending on the activity the transport operator deals with and the freights it handles.

- General warehouses for storage
- Large warehouses (for logistics activities)
- Warehouses with rail-road interchange
- Warehouses with raised docking bays
- Air-conditioned warehouses
- Intermodal Terminal



Warehouses with raised docking bays



Large-sized warehouses (for logistic activities)



Interporto di Bologna- Intermodal terminal



Interporto di Verona Quadrante Europa – Intermodal terminal

The intermodal terminal is composed of one or more tracks linked to the main railway arteries and a large area used for dealing with all the train loading and unloading operations

2.2 Services

In short, the Logistics Centre is simply a village planned and built to best manage all the activities involved in freight movement. Just as with a residential village, a freight one comprises not only infrastructures but also the services necessary to satisfying and responding to the requirements arising from its primary transport activity.

The services normally found with a Logistics Centre are:

- Customs district
- Post office/Public telephones/Bus services
- Areas for parking and loading/unloading operations
- Restaurants/cafés
- Filling station with vehicle washing facilities



2.3 Advantages

Operating inside a specialized area dealing solely with transportation and equipped with all the connected services implies, for transport and logistics operators, benefiting from many advantages:

- Connection with the main road/rail/port networks
- Transshipment availability
- Using integrated logistics services
- Using public services

2.4 The organizational structure

The *Private Public Partnership* (PPP)¹ is the most widespread and efficient organizational structure for companies managing Logistics Centres.

Share capital is owned by public and private partners in different percentages. In most cases however Public Authorities constitute a company's main shareholder.

The choice of the PPP model as well as the involvement of Public Authorities is linked to financial, infrastructure and planning reasons.

Building a Logistics Centre involves – from the very beginning – huge investment for the creation of not only large warehouses but also all the urban intervention and services. Considering that the Logistics Centre is a long-term enterprise that, at least in the start-up phase, does not represent a truly tempting business for private investors, financial support from Public Authorities becomes a key element for its development.

The Logistics Centre, purely in terms of the size it may reach (millions of square meters) and the effects it has on the local economy, becomes part of a greater local territorial development plan constituting the basis for all infrastructure and territorial implementation.

¹ See “*Guidelines for successful Public-Private Partnership*”, EC Directorate General Regional Policy – March 2003



2.4.1 Shareholders

On the basis of what has been priorly stated, the share capital of most companies is subscribed between:

- National and local territory planning Public Authorities
- National and local railway companies
- Local transport associations
- Chamber of Commerce
- Banks
- Insurance companies
- Industrial associations



CHAPTER -3-

FV-2000

3.1 FV 2000

FV²-2000 was a project – co-funded by the European Commission (DGVII) within the Fourth Framework R&D Programme – involving study of several Logistics Centres equipped with intermodal terminals.

The study was carried out in 9 Countries and 140 structures and organisations operating inside logistics centres equipped with intermodality services on a European scale were analysed.

It has been demonstrated, concretely and with the support of data, that:

- 1) an increase in intermodality is possible solely within Logistics Centres, due to the concentration of private freight transport operators;
- 2) transport companies, situated inside the FVs, have a higher turnover from the intermodality than companies operating outside the Logistics Centres;
- 3) operating inside a Logistics Centre involves reaching higher productivity values both for total flow and R/R flow.

² Freight village or Logistics Centre

3.2 Results

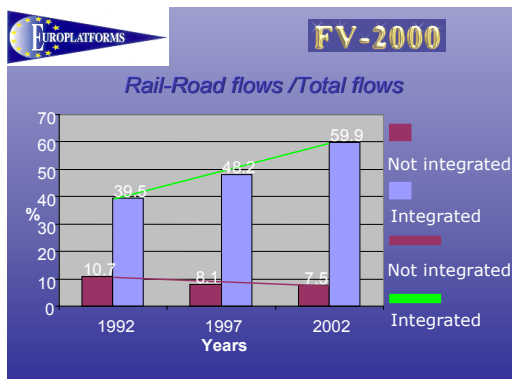


Chart no. 1

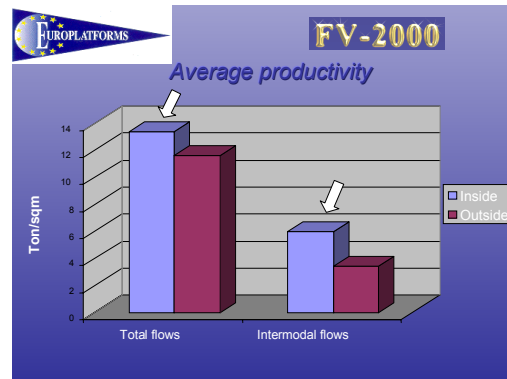


Chart no. 2

The study has shown that the use of intermodal transport is greater inside FVs than outside.

In particular, it has been demonstrated that:

- the logistics synergies developed inside “integrated Logistics Centres” (equipped with an intermodal terminal where intermodal exchange takes place) are a key factor for intermodality improvement (chart no. 1);
- in terms of tons moved, productivity per square metre of each warehouse inside an integrated Logistics Centre is higher than the productivity per square metre of each warehouse outside a Logistics Centre (chart no. 2).

The proximity of different transport and logistics activities and the services that this model of FV supplies to logistics and transport companies increase the attractiveness of intermodal transport for industrial and transport operators, making it more reliable, flexible and therefore more competitive.



3.3 Conclusions

An attempt has been made to outline all the various elements involved in a Logistics Centre.

The Logistics Centre is not a new concept – it was first seen 30 years ago – but if it is meeting with so many difficulties in growing as a transport reality then perhaps all the various implications and factors involved are today unclear or little known. With the present report, we have tried to bridge this gap in understanding.

Lastly, we may state that:

- The integrated Logistics Centre model is preferable to the non-integrated one
- The concentration of transport and logistics activities in larger infrastructures is more convenient and efficient than several smaller intermodal terminals scattered over the territory
- Coordinated planning and funding is necessary to develop Logistics Centres and intermodality.