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PROSPECTS FOR LOGISTICS IN EUROPE IN THE 1990S

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ABSTRACT: Logistics is a key notion as far as the integration of the European economy is concerned. In this paper, prospects of regional development and traffic within the EC are dealt with, then perspectives of logistics are discussed and, finally, some reservations are called, such as environmental and geopolitical issues. In the section dealing with prospects of logistics, notes on the rise of a new comprehensive logistics are presented. Then the rise of integrators and architects, restructuring and concentration of forwarding and transport business as well as the creation of new distribution centres are touched upon. Finally, strategic advantages of outsiders and the prospects of the Nordic forwarding and transport branch are dealt with. In addition, problems related to traffic in the negotiations between the EC and EFTA are dealt with. Recent restructuring of the European railway equipment and truck industry is presented in the appendix.

KEY WORDS: European integration, regional development, transport, logistics, environment

Introduction

Europe is undergoing rapid transformation in the 1990s. The European Community is shifting towards a single market, the EFTA countries are negotiating about a common agreement concerning the formation of the European Economic Space with the Community, some EFTA countries have already submitted their applications for membership in the EC, the DDR was reunited with the FRG and other central and eastern European countries are looking for a close relationship with the Community as well.

Liberalisation of traffic is considered a key objective as well as an important means in the formation of a single market in the Community. The construction of the Channel Tunnel between France and Great Britain is symbolical expression of the increasing integration by means of ground transport. As there are important traffic connections between the EC and the EFTA countries, integration of transport between the EC and the EFTA is considered to be of prime importance. Because the actual transformation of central and eastern Europe will cause a considerable increase in traffic, the integration of transport systems between the East and the West is seen to be of great importance as well.

Simultaneously, new technological trends have contributed to the formation of new comprehensive logistical ideas. Logistics is considered to be a key issue in the integrating Europe in the 1990s. The distribution systems are changing rapidly and many companies are aiming to profit from this transformation.

On the other hand, environmental issues and are becoming more and more crucial and traffic congestion is extending in the 1990s. Problems related to the increase in traffic have already resulted in conflicts between the countries and within the countries. In addition, the recent transformation of eastern Europe has led to a rise in ethnic conflicts. Furthermore, the major oil-producing area in the Middle East was destabilized by the Gulf War recently and militant Islamic ideas are spreading on the southern flank of the Mediterranean. Those new problems and conflicts will set limitations to the realisation of new abstract logistical ideas in Europe.

In this paper I shall first present notes on the rise of new logistical ideas, secondly deal with the prospects for regional development in the EC, next turn to the propects for transport, then focus on prospects for logistics and finally deal with the some reservations. I shall deal with the recent restructuring of the West European railway equipment and truck industry in the appendix. I would like to stress that the problematics is very complicated. Therefore a large context is important in the study of logistics. The aim of this paper is only to give a general overview of the process. We have to wait for more detailed information.

Notes of the Rise of New Logistical Ideas

Originally a military concept, logistics became a business notion during the Great Depression in the 1930s; it signified efficient organization of materials handling. During the 1960s, when many products became technologically more complicated and maintenance problems grew

in importance, the organization of efficient maintenance became integrated in business logistics. The position of the logistics department in the company organization became more prominent.

The rise of the new information technology during the economic depression in the late 1970s broaded the scope of business logistics again. Purchasing, production and distribution were seen as an integrated logistical system by the companies. These ideas spread overall in the West and Japan in the 1980s. I shall take a closer look at the ideas of new comprehensive logistics in the context of the European integration later on.

As far as the research literature is concerned, the ideas of logistics have traditionally been dealt with for most part in the textbooks of military science and business management. The European Science Foundation funded a research programme "Euromobile: Transport, Communications and Mobility in Europe" in the late 1980s. Most of the participants in this programme stemmed from regional economics, regional science and engineering studies. Up to now, only a few geographers have paid attention to logistics (cf. van Crefeld 1977, Mathe & Tixier 1987, Cooper (ed.) 1990, Nijkamp, Reichmann & Wegener (eds.) 1990, Merta 1991).[1]

Those textbooks and studies mostly deal with logistical ideas and theories in a abstract setting. In contrast, studies on concrete cases and company activities in the field are only a few. In this paper I try to introduce the perspective of the activities of the companies, especially the transport and forwarding companies, in the context of the European integration. My source material on companies consists of articles published in major European business reviews and periodicals during the last few years. I would like stress the importance of MOCI, the weekly review of the French Foreign Trade Association. A list of the reviews in question is presented in the bibliography.

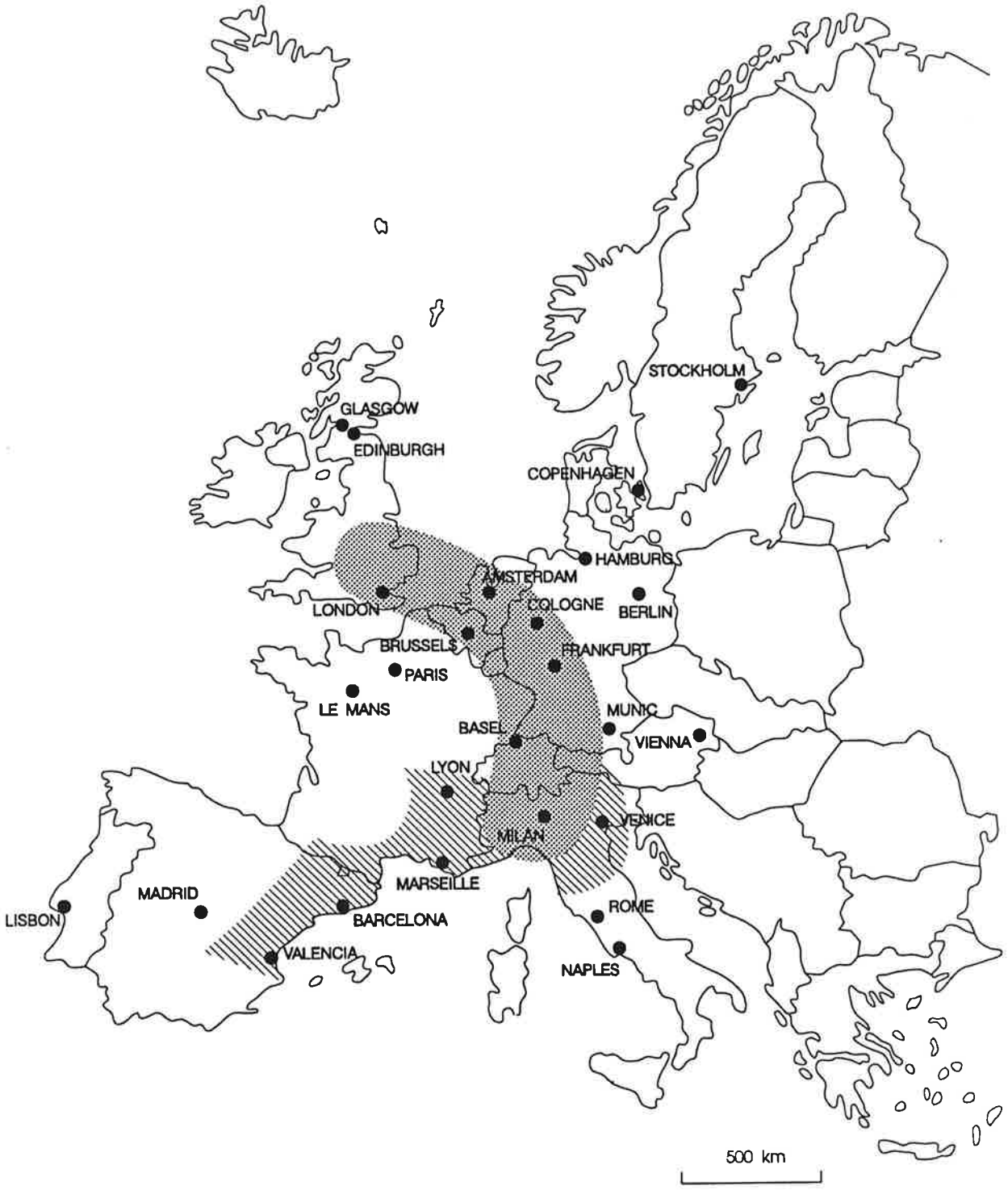
Prospects for Regional Development

The regional point of view is becoming more an more important as far as the transformation of the European Community is concerned. The economic gravitation centres extend over national boundaries and, on the other hand, the Community has decided to increase considerably funding for regional development in order to prevent widening of disparities.

A couple of recent studies such as that of the French DATAR on the development of the urban structures in western Europe or that of the German Ifo-institute on the competitiveness of the regions in western Europe have presented the vision of the Banana-Sunbelt zones as new power constellations of regional development in the Community (cf. DATAR 1989, Nam, Nerb, Reuter,Russ 1990; map 1.).

1) In this context, mention should be made of some classical articles of the role of transport in the development process, especially those of the German economist Fritz Voigt and the French economist Philippe Pottier. These studies dealt eg. with the regional polarisation due to the construction of traffic and transport axes and various linkage effects of the development of the modern transport systems (cf. Voigt 1953, pottier 1963).

Map 1. The Banana - Sunbelt Zones Within the European Community



The Banana Zone is seen to extend from southern England through the Benelux-countries and southern Germany to northern Italy. This zone has long historical roots in the Medieval times: sometimes it has been called Lotharingia. Many traditional significant urban centres, such as London, Bryssels, Rotterdam, Frankfurt, Munich, Zurich and Milano are located in the zone. The centre of the German economic dynamism is seen to shift from the Ruhr area to southern parts of the country.

The Sunbelt Zone mainly lies on the northwestern coast of the Mediterranean. It extends from the Valencia region in Spain through Catalonia and southern France to northern Italy. This is a new rising zone of dynamic economic activities and it overlaps the Banana Zone just in northern Italy around the Milano region.

Some important urban centres, such as Paris, Lyon, Hamburg and Berlin are located outside these zones. They seem, however, to have capabilities to preserve their positions even in the changing conditions. The German unification and the recent transformations in central and eastern Europe, strengthen the positions of Berlin and Hamburg, which will recover their traditional hinterlands. As far as the studies mentioned above are concerned German scholars evidently place more emphasis on new prospects opened up in the East whereas French ones pay more attention to southern prospects.

A new aspect in the regional policies of member states is an effort to promote activities which would profit from the dynamic development taking place in the Banana-Sunbelt zones. For this purpose, member states are creating new infrastructures, building technology villages and giving special tax concessions to companies.

On the other hand, regional policies on both the national and community level continuously support the development in the backward areas. The EC particularly has directed a considerable amount of funding for these purposes eg. by constructing new infrastructures in the backward areas in southern parts of the Community.

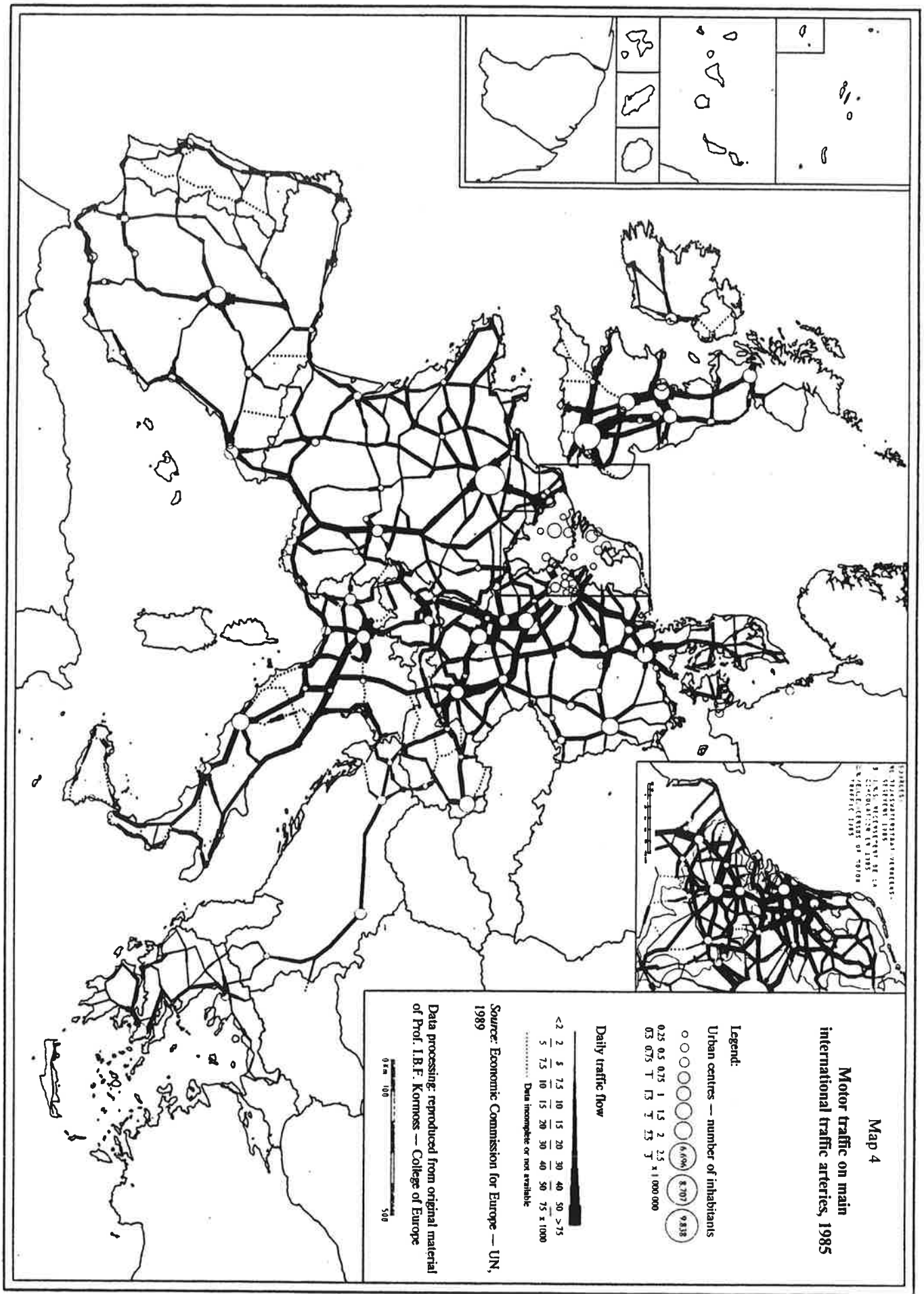
The Nordic countries are not included in these visions, especially in the case of Finland situated on the periphery of the Baltic Sea. The European Commission, however, recently took a decision to draft a new prospective plan for regional development in the Community, the so-called "Europe 2000"-document. In this document the interactions of the Community with the Nordic countries, central and eastern Europe as well as the southern and eastern parts of the Mediterranean area will be dealt with (cf. Commission of the European Communities 1991).

Prospects for Transport

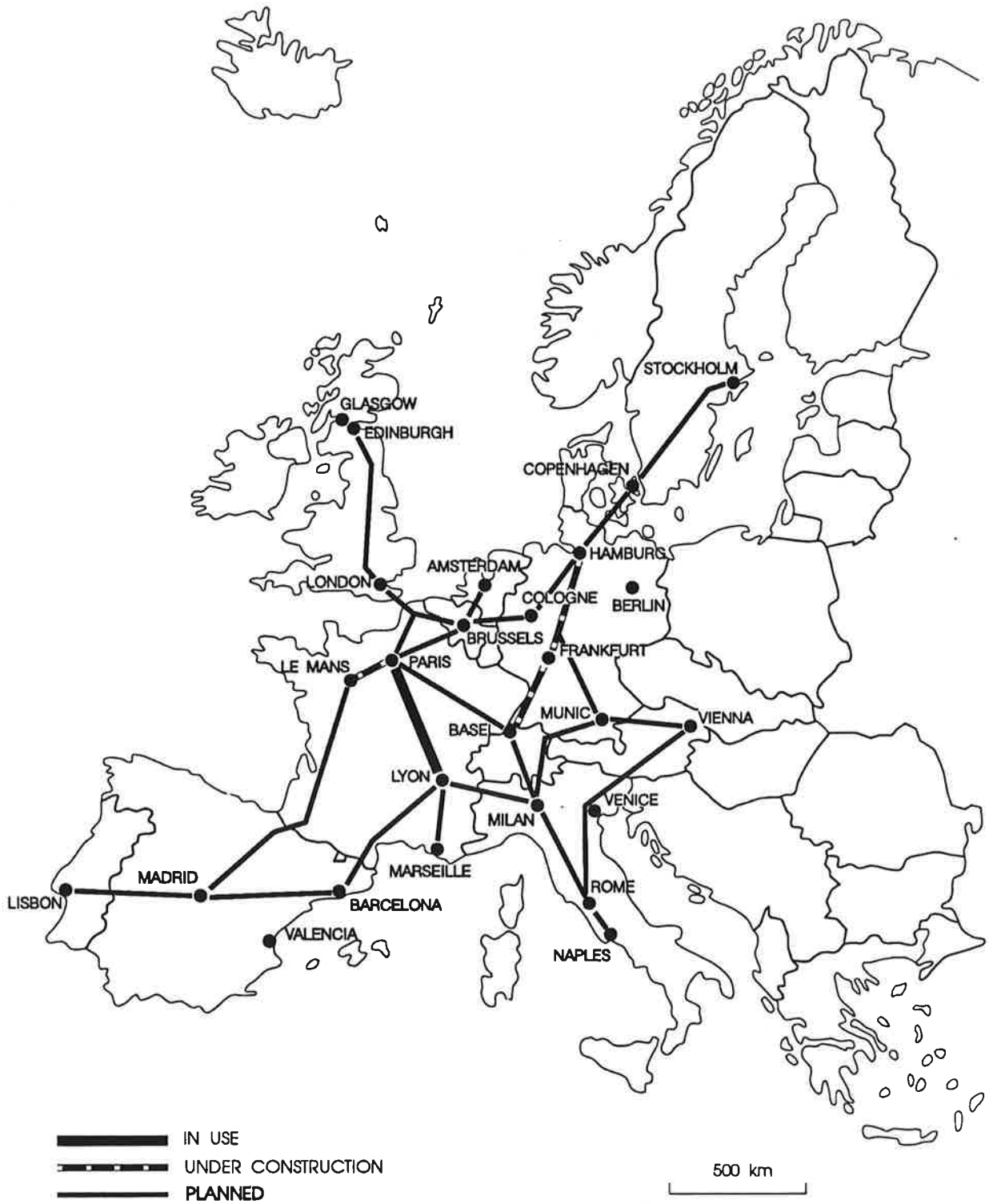
One of the major aims and means of the creation of a single market in Europe is liberalisation and harmonisation of transport. Many reports have made a prognosis of a considerable increase in transport in the 1990s.

As transport, in particular air traffic, has been traditionally under strict public regulation, the realisation of those aims has met with difficulties. As far as road traffic is concerned, many

Map 2. Motor Traffic in the European Community



Map 3. The Basic Network of High-Speed Trains in the European Community in 1990



conflicts have arisen during the last few years such as the aims of Alpine countries to limit the movement of the heavy trucks in their territory and conflicts between Spanish and French truck drivers in the Pyrenees.

According to recent reports the growth of transport will lead to difficult problems due to traffic jams in roads and congestion in airports. Concerning road traffic, such areas as southern England, the Benelux countries, the Rhone River valley and the Alpine passages are considered to be hit by the most serious traffic jams in the 1990s. Those areas are located in the Banana Zone or adjoining the Sunbelt Zone (cf. Map 2.)

Many large airports in Europe have already met with serious congestion problems and the situation seems to worsen all the time. Leading constructors of commercial airplanes, such as Airbus in Europe are planning to meet the challenge by introducing new giant aeroplanes in the late 1990s. To be able to do this, they are asking for ever larger subsidies from the states concerned.

In recent reports, such as in those prepared by the ECMT (European Conference of Ministers of Transport) or in a preliminary overview of Europe 2000 by the Directorate-General for Regional Policy of the European Commission, it is clearly stated that investments in new infrastructure would be necessary to meet with this challenge. Many factors, however, prevent the realization of these aims.

Firstly, the share of transport investment in the GDP has declined during the last few decades in the West. It is not possible to expand this share rapidly. Secondly, there is no physical space available especially in most densely settled areas, eg. the building of new airports is practically impossible. Thirdly, popular movements will oppose the construction of new motorways and airports. Fourthly, environmental issues, such as air pollution due to traffic will become more and more an important political question which will pose limitations as to the growth for major transport investment.

Therefore, it seems to unavoidable that there will be more and more traffic jams in the roads and congestion in the airports in the future. This crisis perpective has led to a spread of new ideas in the transport policy both among the member states and in the European Commission in the last few years. Now it is emphasized that a construction of a network of high-speed railway connections between the important urban centres is of utmost importance. Except for the movement of people railways should take care of an increased amount of transport of goods. The stress is laid on the combination of rail and road transport.

Many urban centres try to attract new high-speed lines as high-speed railway network seem to polarize regional development in Europe in the future.The construction of new high-speed railway tracks is, however, meeting local resistance eg. in southern France where people are complaining of their environmental impact (Cf. Map 3.).

There is within the EC, in particularly in France and in Germany, a strong engineering industry producing railway equipment. This industry is undergoing a restructuring in order to be able to meet the new challenges. The demand for high-speed rapid railways is growing, not only within the Community but in central and Eastern Europe, in North America and even in the

newly industrialized countries such as South Korea. The West European railway equipment industry is very competitive in the international market and will be a growth industry in the 1990s (cf. L'avenir à tres grande vitesse...1990; Appendix).

The traditional state railway companies are making an effort to upgrade their services but they are not profitable and work under severe budgetary constraints. This, of course, makes it difficult to develop rapidly a new railway system. Traditionally, an active transport policy has not been followed on the level of the Community, national policies have dominated the stage. Still now the Community seems to have difficulties in creating an integrated transport system and in raising funding for the construction of new railway lines. It is pointed out in many reports as well that railways will not become competitive with motorways unless there is a change in the prevailing price structures.

The recent reports prepared by the European Commission also stress the new importance of water transport. By shifting the transport of goods to waterways it would be possible to diminish both congestion and air pollution. The introduction of stricter security norms on water transport is in view as well.

Efforts are taken to increase the flexibility of the road traffic by the introduction of sophisticated electronic monitoring systems in the cities and new hauling systems based on satellite technology. There is also an internationally strong truck and bus industry in the Community which is introducing new applications of car electronics and developing new engine technology to curb pollution. A strong concentration has taken place in this industry during the 1980s; this process will continue as the companies have to create an European-wide sales and maintenance organization and to invest heavily in research and development (cf. Appendix).

The shift in central and eastern Europe towards market economies will result both in an international opening up of traffic and in a rapid increase in traffic flows. The traditional railway systems are poorly competitive in the new conditions; some of them are close to collapse. A considerable expansion of truck transport seems to be necessary as far as cargo is concerned. It is also possible to upgrade the major river transportation systems (cf. ECMT/OECD Prospects for East-West European Transport 1991).

This opening up means that Europe becomes more continental from an economic-geographic point of view. East-West directions of traffic flows will grow in importance and the role of the Berlin area and Austria as gateways will eg. gain new significance. The virtual chaos affecting traffic in and around Berlin is a kind of microcosmos of the problems of the integration of the traffic systems between the East and the West.

As the development of the transport systems and links is hampered by insufficient funding, the experts have proposed selective construction of new motorways and railways as well as focusing on combined transport.

This would make it easier to take into consideration environmental damage caused by the increase in traffic (cf. op. cit.).

As far as the enterprise structure is concerned, the established state monopolies in transport and forwarding are breaking down whereas such dynamic companies as Hungarcomion are trying to upgrade their services and develop new links to the West. The western transport and forwarding companies are extending their activities towards the East. Recently German truck drivers have loudly complained about the bureaucratic regulations still prevailing on the frontier between Germany and Poland.

Prospects for Logistics

This section has been divided in several sub-sections indicated by several underlined headings within the text. These headings are Technological Trends and the Formation of the Single Market Are Sustaining Each Other, New Comprehensive View of Logistics, the Rise of New Integrators and Architects, the Concentration of the Enterprise Structure in the Transport and Forwarding Business, Examples on the National Level, a Regional Point of View, Why Is the Formation of the European-Wide Distribution Networks Slow?, Logistical Advantages of Outsiders, Prospects for Nordic Companies, Which Will Be the Largest Companies in the Late 1990s? Let us hope that these impressions will bring some order in the actual chaos in the field.

Technological Trends and the Formation of the Single Market Are Sustaining Each Other: The upheaval caused by the introduction of microelectronics since the 1970s is extending to many fields: the principle of flexible production and automation have been adopted in production, distribution systems based on on just-in-time principle and storage automation, while EDI and telecommunication satellites accelerate information transfers both nationally and internationally.

Simultaneously a liberalisation and harmonisation of traffic is taking place in the EC, barriers to the movement of goods and people are being lowered and technical norms and stardards are harmonised. This coincidence of new applications of microelectronics and information technology, the elimination of obstacles to competition and the extension of the market resulted in strong expansion of logistical ideas in Western Europe in the late 1980s: it was thought that large savings in costs - up to 20 percent - were possible by the application of new logistical ideas. In general, it is considered that logistics is a key concept in the European integration in the 1990s.

New Comprehensive View of Logistics: The new comprehensive view consists of several elements:

- the integration of purchasing, production and distribution (transport, forwarding, storage, package, marketing)

- the creation of a European-wide distribution network

- the combination of different modes of transport
  (land, water, air)

- the upgrading of services
  (punctuality, speed, door-to-door services)

- the integration of the whole system by information technology:
  CIL or computer integrated logistics

The last element is a key element. Mastering it presupposes good knowhow in information technology and the capability to develop new efficient systems. The adoption of this new comprehensive view of logistics is not unique to Europe whereas large transnational corporations see Europe as a part of their global strategy.

The Rise of New Integrators and Architects: As it is a question about considerable savings of costs, large industrial corporations, large trade companies and large transport and forwarding companies are all interested in fulfilling the role of an integrator or an architect of the logistical system. The leading car makers and wholesale and retail trade companies have eg. built logistical systems of their own. The leading international trading houses have gained considerable experience in transport and logistics already long ago (cf. Chalmin 1985).

Large European transport and forwarding companies are naturally making efforts in the field. In addition such international transport and forwarding and express-parcel companies as the Australian TNT and the Americans DHL, Federal Express, UPS and Emery have started pay more attention to the expanding European markets. DHL has gained by far the leading position while TNT is the second largest in the European market.

Table 1. The Leading Companies in the Private Express-Parcel Business in Europe

International	European
TNT (Australia)	Securicor (UK)
DHL (USA)	DPD (Germany)
Federal Express (USA)	Jetserve (France)
UPS (USA)	Seur (Spain)
Emery (USA)	

In addition, the traditional state-owned companies, in particular post offices and telecommunications companies try to upgrade and develop their services. The traditional monopoly position enjoyed by them is put into question; privatisation has proceeded especially in Great Britain. The West European post offices have entered in closer collaboration eg. in the development of international express parcel and telecommunication services. Recently, TNT and a couple of national post offices have proposed a joint venture called GD Net.

This new situation and the new related opportunities provoke an intense competition and create conflicts between main actors. The traditional division of labour between industry and trade becomes more and more obscure and the logistics interests of the trade companies and the transport and forwarding business may stand in conflict. Such basic questions as who is the system integrator, who takes care of warehousing, who is responsible for transport of goods and how much one should pay for services, especially for quality services rendered are

still very open. The large industrial corporations will, in particular, consider carefully the advantages and disadvantages of internalisation and externalisation of logistics services.

The Concentration of the Enterprise Structure in the Transport and Forwarding Business: The adoption of the idea of the new comprehensive and European-wide idea of logistics is hardly possible for small and medium-size companies. Instead, the largest European transport and forwarding companies are able to adopt idea. These tendencies will provoke a strong convergence in the branch in the 1990s. Some recent consulting reports tell us that there will be only 20-25 large companies left in Western Europe in the late 1990s.

This convergence does not, however, mean that there would not be opportunities left for important smaller companies in the business. Very specialized companies working in the areas which presuppose special knowhow, such as transport of chemicals and following a consistent niche strategy still have their chances.

This convergence neither means that the large companies would integrate all the tasks in their structure. They will control the strategic tasks such as the integration of the system and coordination whereas they will use many local sub-contractors as far as the transport of goods is concerned.

Examples on the National Level: As concerns the industrialized core area of the Community the concentration within the transport and forward branch has proceeded up to now in an uneven manner. In Germany and the Netherlands this process has progresssed far. Instead, the major structural change is still taking place in Great Britain and France.

Table 2. The Distribution of the 50 Largest Transport and Forwarding Companies in Western Europe (according to the turnover in 1989)

country	number of companies
UK	12
France	12
Germany	6
Netherlands	5
Sweden	4
Italy	3
Non-European	3
Switzerland	2
Denmark	1
Spain	1

Source: Motor Transport/Eurobusiness, December 1990

Typical of Germany is that large multibranch companies and trading houses such as Krupp and Klöckner have created considerable transport and forwarding units of their own. A considerable restructuring of activities has taken place there especially during the last few years.

Klöckner belongs actually to the large holding company Viag. The large multibranch company Veba has acquired the big trading house Stinnes and has a controlling interest in Schenker, which belongs to the largest transport and forwarding companies in West Europe.

The transport units of Thyssen Handelsunion and the big trading house Franz Haniel merged last year. In addition, Otto-Wolff-Bereiche Handel und Industrieanlagen was acquired by the Thyssen corporation.

In addition, the large multibranch companies Preussag and Salzgitter merged last year. Over half of the activities of this new company is related to trading and transport. I shall deal with the case of Krupp later on.

As far as the large German specialized transport and forwarding companies are concerned Hapag-Lloyd based in Hamburg is among the leading specialists in container transport and forwarding. Lufthansa is aiming at gaining a strong position in air transport and forwarding of goods as well. It acquired last year in collaboration with Japan Air Lines and the large Japanese trade house Nissho Iwai the European activities of the European activities of the American specialist in express parcel transport DHL.

The liberalisation of air traffic together with the growing need for investment in the fleet will provoke a shake-out in air traffic business in Western Europe in the 1990s. The concentration that took place in the United States after the deregulation of air traffic has been used as a comparison. Lufhansa together with British Airways and Air France are competing for the role of the leading European company in this branch in the future.

Lufthansa is facing hard competition after the leading American companies have started to expand their activities in the unified Germany whereas British Airways and Air France are aiming at gaining control of the Belgian Sabena together with Brussels international airport in the heart of Europe. Air France seems to be winner in this contest.

There are two large international transport and forwarding companies in the Netherlands, Nedlloyd and Franz Maas, which are expanding their European networks. Nedlloyd has acquired eg. two important German transport and forwarding companies, Union-Transport-Gruppe and Andreas Christi during the last few years. On the other hand, it recently sold Union Air/Gerlach Air to Klöckner. In addition, there are both smaller niche specialists and large trading houses, such as Internatio Muller, which has important international shipping activities and which is integrated into distribution activities in the Netherlands as well.

It is worth mentioning in the context of Germany and the Netherlands that there are two large international transport and forwarding companies in Switzerland as well, Danzas and Panalpina, which are extending their activities in Europe.

Turning to Great Britain, there are traditionally large British shipping companies as well as multibranch companies with considerable trading activities, such as Unilever. In contrast, the companies specialized in land transport and forwarding have traditionally concentrated their activities in the British Isles. Now the largest among them, NFC, TDG and BET are trying to

gain a foothold on the Continent. The opening of the Channel Tunnel will pose a new challenge to them.

The British multibranch company Lonhro, which has important international trading activities, is aiming at becoming a leading transport and forwarding company in Europe. It entered into collaboration with the German multibranch Krupp corporation by establishing a common trading, transport and forwarding unit Krupp Lonrho in 1988. Krupp Lonrho acquired the transport branch of the large multibranch corporation Mannesmann in 1991. Lonrho has also acquired the large German transport and forwarding company Kühne& Nagel as well as smaller companies in the branch in several parts of Europe.

As far as France is concerned the largest land transport and forwarding companies, such as Calberson and GEFCO have acquired several smaller companies during the last few years and the leading shipping companies, such as CGM and Delmas (formerly SNCDV) have expanded their container transport activites and extended to land transport as well. Delmas eg. has acquired a minority position in Dubois et Fils, which belongs to the leading land transport and forwarding companies in France.

The most dynamic French enterprise in the branch seems, however, to be an outsider, the multibranch Bolloré Groupe. In 1986 it acquired SCAC, which had transformed from a large African trading house to a large transport and forwarding company, among other things. It has also acquired some smaller companies in the branch as well. In addition, Bolloré Groupe has interests in the wholesale trade in France. It has announced its aim to become a strong actor in logistics (cf. Bonin 1989).

As the leading traditional French shipping companies tried to prevent the access of Bolloré Groupe to shipping, it made a strategic alliance with the Norwegian international shipping company Hoegh and the large Swedish transport and forwarding company Bilspedition. Those three companies established a new company Joint Service Africa in 1990. Bolloré Groupe also acquired 20 % of the shares of Delmas and made recently an alliance with other French multibranch company Rivaud. Bolloré was able to acquire control of Delmas in 1991 and became the leading private transport and forwarding company in France.

In this context, another dynamic French company, Novalliance should be mentioned. It acquired the large land transport and forwarding company Mory TNT and some smaller companies in 1990. It has announced its aim to become a strong actor in logistics and business services in the future.

It seems that if a transport and forwarding business based on traditional family-owned companies is not able to undertake a restucturing and concentration of its activities, external forces will take care of the process.

A Regional Point of View: New logistical ideas adopted by the large industrial corporations has led to an idea to construct special European distribution centres. Those centres would be responsible for the distribution of goods across Europe. Large wholesale and retail trade companies, for their part, are planning to establish special European purchasing centres alone or jointly (cf. Raumolin 1990).

Many countries and regions in the Community are competing to become hosts of those centres but it seems to be so that the Benelux countries have a priviledged position in this respect. The Netherlands, in particular, has adopted a national strategy of seeking to attract important logistical activities. The government has upgraded traditional and developed new infrastructures: the country is at the traditional crossroad of sea, air, land and telecommunications traffic in the European Continent. The Benelux countries will, however, suffer from congestion problems in the 1990s (cf. deSmidt 1990).

The state of Nordrhein-Westfalen in Germany characterised by a strong industrial infrastructure and which is located close to the Benelux countries has good chances to become a strong player in European transport and logistics as well. The largest inland port in Europe Duisburg and the headquarters of some largest German transport and forwarding companies, such as Thyssen Handelsunion and Krupp Lonrho are located there. Recently, ideas about the need of restructuring of the traffic in NRW with heavier emphasis on public transport have been put forward. The alternative ideas emphasize the need to cut down the emission of greenhouse gases (cf. Petersen 1991).

Northern Germany and Denmark are struggling for the control of distribution networks between the European Continent and the Nordic countries and the Baltic Sea area. The German unification and the integration of the former coast of the DDR to FRG seems to strenghten the German position. Those transformations had led to ideas about the formation of a new Hanseatic League among the major cities in northern Germany. Businessmen of those cities are now looking for prospects in the Kaliningrad area (formerly Königsberg). There are plans to turn this Russian enclave on the Baltic Sea into be a new free-trade zone between the East and the West.

As far as the southern countries of the Community are concerned, the organization of the transport and forwarding business is lagging far behind the industrialized north. Many large northern transport and forwarding companies have acquired small and medium-sized ones in the saouthas they are aiming at creating European-wide networks of their own.

In southern France, the new "Euroregion" consisting of the provinces of Midi-Pyrenées and Languedoc-Roussillon in France and Catalonia in Spain is trying to develop an alternative to the dynamic axe of the Rhone River Valley and the port of Marseilles. The leading cities, such as Toulouse, are trying to be included along the new transport routes. New tunnels has been planned across the Pyrenees at Puymorens and at Somport but the development of new infrastructure links between France and Spain has met with the resistance of local environmental groups (cf. Marconis 1991)

Local independent truck drivers have everywhere tried to upgrade their services and to preserve their positions by creating regional associations during the last few years. Rhenania in Germany, Blueflight in Ireland and Stock-Europe in France are such associations.

Why is the Formation of European-Wide Distribution Networks Slow? In spite of the spread of the new comprehensive logistical ideas, the practice of distribution has not been transformed as radically as was supposed. Many large industrial corporations eg. have focused more on the development of purchasing activities than on the remaking of distribution of goods. It

seems the corporations do not believe that the same level of service can be guaranteed everywhere.

Although harmonisation of norms will take place in the transport and forwarding business differencies in habits and traditions will persist in different parts of the Community in the future. The practices of sub-contractor activities are different as well. Consequently, the large transport and forwarding companies have a lot to do in the development of European-wide networks. [2]

Logistical Advantages of Outsiders: The American and Japanese multinational corporations which have recently arrived in western Europe enjoy certain advantages from the logistical point of view. They can construct a new system from skratch taking into consideration new developments. Instead, the industries located traditionally in Europe are prisoners of the past structures and have to make an great effort to build new logistical systems.

For instance, Sony has constructed a large European distribution centre in the Benelux area and turned distribution over to the European subsidiary of the world's largest transport and forwarding company, the Australian TNT. The collaboration between Lufthansa and Japan Airlines and Nissho Iwai and the recent acquisitions of smaller European land transport and forwarding companies by the Japanese are signs of the future as well.

Future Prospects for the Nordic Companies: There are traditionally prominent trading houses and multibranch companies in Denmark, the most notable being East Asiatic Company which have been involved in the international shipping. During the last few decades, the multibranch company Maersk has become one of the leading shipping companies in the world. It is expanding its transport activities to land transport as well. Norway is well-known for its international shipping companies.

As far as Sweden is concerned concentration in the land transport and forwarding business has been rapid during the last few decades. There are only two major companies left, Bilspedition and ASG which is a subsidiary of the Swedish state railway company. Bilspedition has risen into one of the biggest transport and forwarding companies in Europe. It has acquired the largest transport and forwarding companies both in Norway and in Finland and a shipping company specialized in the Atlantic shipping. ASG has made an alliance with Federal Express and acquired a small German shipping company. Recently it made an alliance with the Swiss transport and forwarding company Gondrand and became a partner of the German transport and forwarding company Atege.

Both Swedish companies have, however, experienced difficulties in extending their activities to the EC. In addition, the German competition in the Baltic Sea area will certainly grow keener in the 1990s.

2) The French geographer Jean Labasse has dealt with the preservation of regional traditions and the existence of different regional distribution systems in his recent book "L'Europe des régions" (Paris 1991).

It is probable that there will be 2-3 Nordic companies among the 20-25 largest European transport and forwarding companies in the late 1990s. This situation is equivalent to the case of Switzerland or the Netherlands. On the other hand, there are many opportunities for competent sub-contractors which have adopted state-of-the art technology and upgraded services.

Which Will Be the Largest Companies in the Late 1990s? One could make a guess regarding which companies will be among the top twenty companies in the transport and forwarding business in Europe in the late 1990s. Those companies consist of two groups: 1) the companies which belong to large multibranch companies and 2) independent transport and forwarding companies.

The German corporations Veba, Klöckner and Thyssen, the British Lonrho, the French Bolloré/Rivaud and the Danish Maersk will belong to the first group.

The Dutch Nedlloyd and Franz Maas, the Swiss Danzas and Panalpina, the French Calberson and GEFCO, the British NFC and TDG as well as the Swedish Bilspedition will belong to the second group.

In addition, such companies from outside Europe as the Australian TNT, the American Federal Express, UPS and Emery and a Japanese company which are principally transport and forwarding companies will have large operations in Europe.

Interlude: Traffic and Conflicts in the EC-EFTA Negotiations.

The negotiations between the EFTA and the EC about the formation of the European Economic Space are actually in a deep crisis. Besides the fishing issues involving Norway and Iceland, the most serious conflicts regard transit traffic in Switzerland and Austria. In addition, the decisions about the construction of new brigdes over Store Belt in Denmark and over Oresund between Denmark and Sweden have provoked conflicts in particular between Denmark and Finland.

The Alpine countries Switzerland and Austria are traditional transit routes between the large EC countries Germany and Italy. After damages caused by air pollution to the forests and the rise in the noise level caused by road traffic became public issues, Switzerland set a ban on trucks exceeding 28 tons whereas the EC norm permits 40-ton trucks. This diverted a growing amount of road transport of goods to Austria and France. Austria followed the Swiss example in 1989 by setting a night-time ban on heavy trucks. This decision led to colossal traffic jams, retaliation from the Italian side and great animosity eg. in the German transport and forwading business.

Switzerland has started to give government subsidies to the promotion of combined road-rail transport. The Swiss Government has also presented new plans for construction of two new rail tunnels which would be available around the year 2005. There is a strong determination to shift a major part of the transit goods to rail.

As far as the negotiations between the EC and the EFTA are concerned, Switzerland and Austria have decided to keep their restrictions in spite of being accused of provoking transport chaos in Europe. The EC officials seem to be late in discovering the need for a coordinated and coherent transport policy for Europe.

Recently, the negotiations between Switzerland and Austria with the EC led to a compromise proposal concerning the transit rights. As far as the contents of this proposal is concerned, the Swiss side was able to well defend their original position.

Turning to the Baltic Sea, the Danish Government decided to build a big bridge over Store Belt in the late 1990s in order the create better opportunities for traffic between Germany and the major Danish isles. After the bridge-building contract was awarded in 1989, the big French construction company Bouygues complained to the European Commission that the Danes had broken the rules about open procurement of public works. In the end, the Danish Government had to pay damages.

This is good example of how it is difficult to open up public procurement in the Community. These kinds of questions will become more and more topical as the large-scale construction of new bridges, tunnels, roads, railways and harbours takes place in many parts of Europe 1990s.

This year, the Finnish Government filed suit to the International Court in the Hague that the new brigde would be against the principle of freedom of sea as it will prevent the transport of the oil drilling platforms built in Finland from the Baltic Sea to the North Sea. The Court took a preliminary decision which permitted Denmark to continue the construction of the bridge whereas it proposed that Denmark should negotiate with Finland about transit rights. The Soviet Union has given support to the Finnish claims. The United States has been concerned about the issue as well.

As far as the planned Oresund bridge is concerned, the Finnish Government recently complained that insufficient attention has been paid to environmental issues, in particular to the possible changes in the state of the Baltic Sea. In fact, Denmark has not followed the community directive according to which environmental impact assessment is obligatory concerning large construction projects. Similar complaints have been presented from the German side.

Sweden is also involved in the construction of this bridge, but the Swedish Government is trying to keep a low profile in the issue. Swedish industry is particularly interested in the bridge construction because they create a rapid direct link from southern Sweden to the continental Europe. There has been opposition against this project both in Denmark and in Sweden.

There are conflicting interests in every Nordic country involved. On the one hand, the Danish, Swedish and Finnish governments and business interests are interested in creating efficient and rapid traffic and transport connections with the European Continent. On the other hand, there are industrial branches which have interests in freedom of sea and other interest groups which are seeking to promote the environmental protection of the Baltic Sea.

These conflicts and disputes seem to damage the political atmosphere among the Nordic countries in a situation where the negotiations between the EFTA and the EC are in crisis. It will be difficult to find a common line if the negotiations do not result in any solution.

During the last few months, the gaining of independence by the Baltic states has aroused new interest in the creation of a direct transport link from Finland through the Baltic States to central Europe. There is already a considerable transit traffic through the harbours on the southeastern coast of Finland from and to Russia.

It is perhaps interesting to note in this context that there are international corporations with a profound interest in the European transport and logistics among the economically strongest EFTA countries, especially in Switzerland and Sweden. One can mention the Swedish-Swiss giant ABB, which is a major producer of railway equipment, in the electrical goods industry. Volvo and Saab are significant producers of trucks and buses and Saab is involved in commercial airplane production as well. In addition, Danzas and Panalpina, which have profited from the transit position of Switzerland, as well as Bilspedition rank among the leading European transport and forwarding companies.

Closing Remarks

The prevailing views and theories of business logistics were developed during the 1980s when a period of long-term economic growth prevailed in the West, oil was cheap and major crises seemed a thing of the past. Systems planners did not pay attention to growing environmental problems either.

By and by, problems related to air pollution have become important issues of international politics. The increase in traffic is now seen to lead to growing congestion problems and provoke many accidents. It is resulting in an increase in air pollution and noise. The maintenance costs of roads are escalating rapidly (cf. ECMT/OECD Transportation and Environment 1990).

The Minister of the Environment in Germany, Klaus Töpfer, has on many occcasions stated that there is evident conflict between modern logistical ideas and the aims of environmental policy. As warehouses are shifted on the road according to the just-in-time principle, this produces higher pollution due to rising traffic. The conflicts along the borders of Switzerland and Austria are a striking example of this conflict. The Swiss model of combined transport will probably set an example for restructuring the transport system within the European Community in the future (cf. Töpfer 1990, Raumolin 1991a).

The gradual introduction of higher taxes on petrol will take place in the Community for environmental reasons. New road pricing instruments which include tolls on roads, tunnels and bridges will be introduced as well. This is the way to raise money for building new infrastructures.

The experts say that a new European fund using money raised by fuel taxes should be set up to help fund the construction of the railway system. The new EC transport policy should take

account of energy consumption, the impact of traffic on the environment, regional policy and demands of the society. Real non-subsidised prices would make transport more expensive.

There are thus several reasons to expect a gradual increase in transport costs. The view expressed in many reports in the late 1980s that the formation of the single market in Europe will lead to considerable savings in transport costs may be illusionary. The growing congestion problems will jeopardise distribution ideas according to the just-in-time principle. It may even be so that some companies have to rethink their location because of transport problems.

As far as geopolitics is concerned, the conflicts and the internal insecurity both in the area of the former Soviet Union and in the Balkans make it difficult to keep reliable transport connections through these areas. This is making it more difficult to keep up traditional connections from western Europe to Turkey and to the Middle East.

The road and air traffic in Europe is becoming more and more dependent on the Middle East oil due to growing problems in the oil production in the former area of the Soviet Union. The political situation in the Middle East is continuously unstable and susceptible to crisis. A crisis there and a consequent rise in oil prices would rapidly affect air traffic, in particular, as was seen recently.

Logistics is originally a military concept and the efficient logistical organization of the American Army in the Gulf War waged recently has aroused much attention in the business circles as well. There is evidently a need to focus on new means of cost savings in the light of the downturn in the European economy at the early 1990s. New attention is paid again to logistics by the companies. Let us hope that the theorists and managers do not forget the military origin of these ideas and the possibility of a major crisis in the future.

Appendix: The Recent Restructuring of the West European Railway Equipment and Truck Industry

Railway Equipment Industry

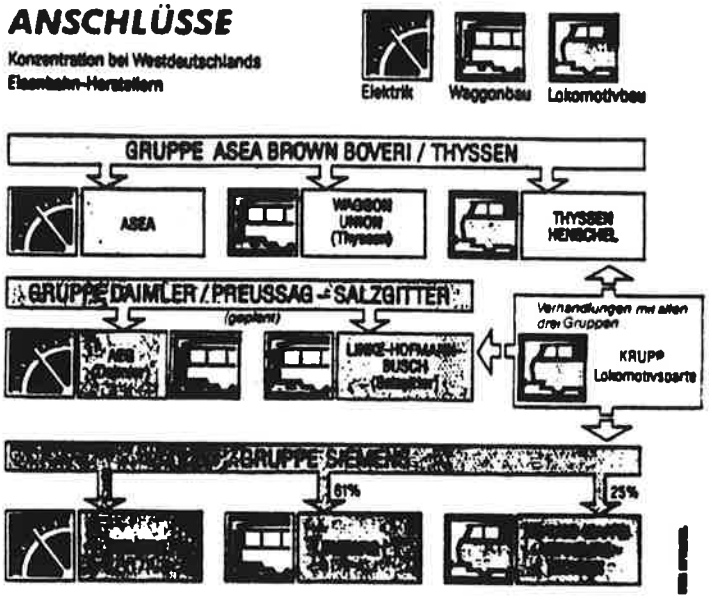
Alsthom, which belongs to the recently formed French Alcatel-Alsthom corporation, has the best opportunties to face the challenges of the 1990s. It has gained a considerable exprience in the construction of the French high-speed TGV railway and recently gained an order to build a high-speed railway system in Texas.

The Thyssen corporation, which belongs to the main constructors of the new German high-speed ICE railway system joined forces with ABB last year by establishing a joint venture named ABB Henschel. Siemens answered this challenge by acquiring 61 percent of the shares of the rolling stock manufacturer Duewag and 25 percent of the shares of the locomotive manufacturing unit of the Krauss-Maffei corporation. For its part, AEG, which belongs to the Daimler-Benz corporation, made an alliance with the rolling stock manufacturer LHB, which belongs to the Preussag-Salzgitter corporation. AEG has also entered into negotiations about cooperation with the locomotive manufacturing unit of the Krupp corporation, which has participated in the construction of the new ICE system.

Fiat Ferroviaria in Italy has developed a high-speed rail technology of its own. It made recently an alliance with Alsthom. Other Italian manufacturers of rail technology have made alliances as well; Breda (Efim) with ABB and Ansaldo Transporti (IRI) with Siemens.

Some of the leading Japanese multibranch corporations are the only ones capable of competing with the European offers in the international market as was the case in South Korea recently.

Table 1. The Recent Restructuring of the German Railway Equipment Industry



Source: Der Spiegel no 26, 1990.

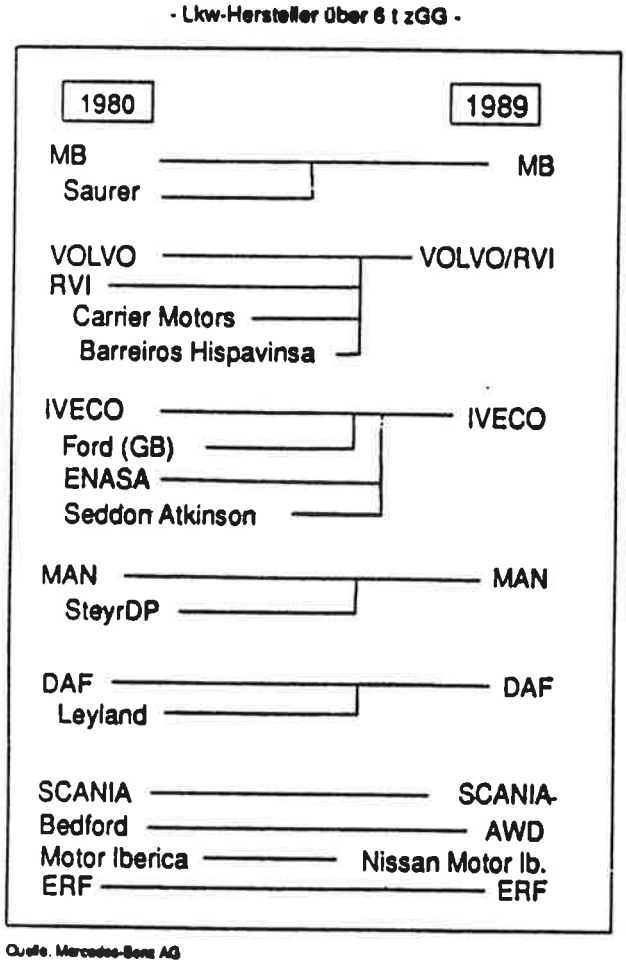
The Restructuring of the Truck Industry in the 1980s

The number of truck manufacturers in western Europe diminished from seventeen to nine in the 1980s. The British industry experienced a particularly drastic transformation. Iveco acquired the British truck manufacturing units of Ford in 1986 and General Motors withdrew from the European market the next year by selling Bedford. In addition, DAF acquired Leyland in 1987.

The alliance between Renault and Volvo in 1990 signified the formation of the leading truck manufacturer in the world. Mercedes, which belongs to the Daimler-Benz corporation, now occupies second place in the world market whereas it still holds the leading position in the European market. Iveco, whose largest owner is the Fiat corporation, acquired the former Spanish state-owned company Enesa last year. It thus strengthened its strong grip on the southern European market.

Such "medium-sized" manufacturers as MAN, DAF and Saab-Scania will probably be obliged to join forces or to make an alliance with the leading manufacturers in the 1990s.

Table 2. The Restructuring of the European Truck Industry in the 1990s



Source: Dietz 1990 p. 23.

Bibliography

L'avenir à très grande vitesse ferroviare. No spécial. Annales des Mines, octobre 1990.

Bonin, M. 1989. Le Groupe Suez et le commerce international (1967-1987) in: F. Crouzet (dir.) Le négoce international, XIII-XX siécle. Paris, 223-40.

Commission of the European Communities 1991. Europe 2000: Outlook for the Development of the Community's Territory. A Preliminary Overview. Brussels.

Chalmin, P. 1985. Négociants et chargeurs. La saga du négoce international des matières premières. Paris.

Cooper, J. (ed.) 1990. Logistics and Distribution Planning. Strategies for Management. London.

van Crefeld, J.L. 1977. Supplying War. Cambridge.

DATAR 1989. Les villes européennes. Paris.

Dietz, W. 1990. Die europäische Nutzfahrzeugunsindustrie im Umbruch. Ifo-Schnelldienst no 26-27, 1990, 22-27.

ECMT 1986. Trends in the Development in International Traffic and Infrastructural Needs. CM (86)2. Paris.

ECMT/OECD 1990. Transport Policy and Environment. Paris.

ECMT/OECD 1991. Prospects for East-West European Transport. Paris.

Erdmenger, J. 1984. Vers une politique des transports pour l'Europe. Bruxelles.

Labasse, J. 1991. L'Europe des régions. Paris.

Marconis, R. 1991. La reorganització de les grans infrastructures del transport a les rodalies de Toulouse. Revista Catalana de Geografia 6, no 15, 121-28.

Mathe, H & D. Tixier 1987. La logistique. Paris.

Merta, T. 1991. Tuotantofilosofian muutos ja logistiikka 1990-luvun aluejärjestelmässä (The impact of the change in production system and logistics on the regional structure in the 1990s). University of Helsinki. Department of Geography Series B 38.

Nam, Ch.W., G. Nerb, H. Russ 1990. An Empirical Assessment of Factors Shaping Regional Competitiveness in Problem Regions. Main Report. IFO-Institut für Wirtschaftforschung/ Commission of the European Communities. Brussels.

Nam, Ch.W., G. Nerb, J.Reuter, H. Russ 1990. Wettbewergsfähigkeit ausgewählter EG-Regionen. Ifo-Schnelldienst no 9, 1990, 10-21.

Nijkamp, P., S. Reichmann, M. Wegener (eds.) 1990. Transport, Communications and Mobility in Europe. Aldershot.

Nijkamp, P. 1990. Spatial Developments in the United States of Europe: Glorious Victories or Ignominious Defeats? Papers of the Regional Science Association 69, 1-10.

Petersen, R. 1991. Nordrhein-Westfälische Verkehrspolitik als Antwort auf den Treibhaus-Effekt. Paper presented at the International Conference "Klima und Strukturwandel" organized by the Wuppertal-Institut für Klima, Umwelt und Energie in Wuppertal September 19-20, 1991.

Pottier, P. 1963. Axes de communication et développement économique. Revue Economique 14, 58-132.

Raumolin, J. 1990. Suomalaisen kaupan toimintamahdollisuudet Euroopan yhdentyessä (Challenges facing the Finnish wholesale and retail trade vis-à-vis the integrated European Market). ETLA B 65. Helsinki.

Raumolin, J. 1991a. Euroopan yhteisön ympäristöpolitiikka (Environmental policy within the European Community) in: I. Massa & R. Sairinen (eds.) Ympäristökysymys. Ympäristöuhkien haaste yhteiskunnalle (Environment: a challenge for social sciences). Helsinki, 349-89.

Raumolin, J. 1991b. Logistiikan näkymiä Euroopan yhdentyessä (Prospects for logistics in Europe in the 1990s). ETLA Discussion Papers no 360.

deSmidt, M. 1990. The New Business Logistics and the Netherlands Randstad in J.-C.Hansen & M. Hebbert (eds.) Unfamiliar Territory - the Reshaping of European Geography. London, 73-84.

Töpfer, K. 1990. Umweltschutz und Europäischer Binnenmarkt - Herausforderung und Change für die deutsche Wirtschaft. Referat an der Podiumdiskussion. Ifo-Schnelldienst no 23, 1990, 11-18.

Voigt, F. 1953. Verkehr und Industrialisierung. Zeitschrift für gesamte Staatswissenschaft 109:2, 193-239.

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