

with the issue of TEN-Ts were set up by means of adding representatives from the states. In the case of the Van Miert High Level Group (created at the end of 2002), the representative from the Spanish state was Antonio López-Corral, Director General for Economic Programmes – Ministry of Public Works, who at that time counted on the minister Francisco Álvarez Cascos (from the conservative Partido Popular). Each member state was entitled to one representative, and in addition we can add observers from acceding countries plus one representative from the European Investment Bank. Similarly in the setting up of the Loyola de Palacio High Level Group (autumn 2004), once again there was a designated representative for each member state, plus others from acceding countries or those geographically neighbouring on the European Union. Once again, a representative from the Spanish Ministry of Public Works, this time under the ministry of Magdalena Álvarez (from the PSOE – Spanish Socialist Party), namely Pablo Vázquez (Director of Transport Forecasts and Studies), was elected to represent Spain, and accompanied by Pilar Castro, Ministry chief. With this kind of methodology, and that of the Commission's initiatives it was left in the hands of member states and, consequently, to their territorial logic. It is hardly necessary to point out that in states such as Spain, with a strong centralist tradition and radial perspective of infrastructures, there was a faithful continuation of these very principles when transposing to a European scale. There is no other way to explain why not even List 2 of the Van Miert Report included the Mediterranean corridor from Algeciras to France (and beyond both towards the south and north) linked to the dynamic parts of the West Mediterranean. Let us not forget that this list identified projects with "a particularly high European added value".

The fact is that the much sought after economic, social and territorial cohesion of the European Union, which the TEN-T attempted to achieve, has rested on the articulation, sometimes forced, of individual projects presented by the various member states. Whenever Europe has proposed a list of priority projects or has drawn up a map, it has done so based on material provided by high-ranking civil servants or public officials from the member states' central governments. In my view, this fact reveals, on the one hand, the weakness of the European Union to achieve a structure that is not just a mere appending of states (and of their interests), and on the other hand, explains the scant relevance the Mediterranean corridor has had in this history of the TEN-Ts. All in all, the TEN-Ts have been established in a way that is closely related and linked to the view that each state has contributed to the Commissions, European Councils or High Level Groups. In this way, in the case of Spain, as we have seen in this analysis of the projects selected as well

as the investments made up until 2002, TEN-Ts have meant the marginalisation of the Mediterranean corridor (with the corresponding doubts as to whether its inherent high-orbit standing with respect to the European centre of gravity will be addressed in the future), the transposition to a European level of the principles of radiality of the traditional Spanish conception as regards infrastructures and the increase of the "...radial character of Spanish communications, increasing the well-established existing concentration of Spanish transport..." (as stated in the document by the Murcia Chamber of Commerce²⁵ during the public comment period for the De Palacio Report in 2006). Only thus can one understand why the Mediterranean corridor, which hosts a major part of economic activity, logistics and transport in Spain, has not been taken into consideration in any of the TEN-T priority projects from 1990 to 2006, with the exception of a general mention about the sea motorways and the convertibility of Spain's railway network into high-speed systems, issues which, not being of a minor nature, have not reached the same degree of realization as other projects that have been singled out for special treatment.

Looking ahead to the review in 2010, nobody could now argue that there is a lack of strategic objectives regarding the Mediterranean corridor. What is needed is a coordination between all the governments, associations and institutions within the Mediterranean axis, from Andalusia to Catalonia in this case, embracing the Valencia Autonomous Community, Murcia and the Balearic Isles (and which does not rule out the French regions affected), so that this economic macro-region can rely on, as of then, priority projects for the cohesion of the European Union and the development of the economy of this façade of the Mediterranean. The coordination of efforts, a clear definition of strategic objectives and priority projects at the level of the Mediterranean corridor and a decisive policy of information directed towards Madrid and Brussels must be objectives that guide the actions of the societies and economies implicated in the years that remain until the review of the TEN-T.

- 1 *Official Journal* num. C033 08/02/1991, pp. 1-3.
- 2 *Trans-European networks. Interim report of the chairman of group of personal representatives of Heads of State or Government to the Corfu European Council (Christophersen group) (1994).*
- 3 *White Paper on growth, competitiveness and employment.* COM (43) 700. Final. December 5, 1993.
- 4 Proposal resulting from the decision by the European Parliament and Council by which modifications were made to Decision 1.692/96/CE. Brussels, 2.10.2001 COM (2001) 544 final. 2001/0229 (COD), p.18.
- 5 "Networks for peace and development. Extension of the major trans-European transport axes to the neighbouring countries and regions". November, 2005.
- 6 This can be seen, for example, in articles that appeared in *Levante-El Mercantil Valenciano* on July 2, 16 and 17 2003, *El País* (July 3, 2003), in *El Temps* (weeks 8 to 14, 15 to 21 and 22 to 28 of July

2003), and in *El Temps d'Economia* (20-26, January 2004).

- 7 This letter prompted my own reply, published the following week in the same magazine.
- 8 At the time of writing this article (July 2006), these documents can be found at the following web address: http://ec.europa.eu/ten/transport/external_dimension/hlg/2006_02_17_tent_consultation/index_en.htm
- 9 You will find the original quoted text into the Spanish version.
- 10 to 20 *ibid.*
- 21 Letter by Edgar Thielmann dated June 12, 2006. Director of the Office for TENs and technological development. Directorate B - Transeuropean Networks Energy and Transport. Directorate General for Energy and Transport. European Commission.
- 22 Contribution by the Autonomous Government of Catalonia to the public comment period in reference to the HLG report on the extension of the major trans-European transport axes. The Spanish Mediterranean rail axis and the feasibility of the sea motorways, Barcelona, March 1, 2006.
- 23 You will find the original quoted text into the Spanish version.
- 24 Public consultation on the extension of the major trans-European axes. Contribution by the Valencia Community-European Region Foundation, Brussels, March 1, 2006.
- 25 Allegations by the Murcia Chamber of Commerce addressed to the HLG concerning the network for peace and development of November 2005. Murcia.

PROSPECTS FOR DEVELOPMENT OF THE TRANSPORT SYSTEM IN THE MEDITERRANEAN

Jean-Claude Turret

1. The challenges in southern Europe

The European Spatial Development Perspective (ESDP) recommends the establishment of an international "economic integration zone" in southern Europe, integrating the major European poles from Seville, through Valencia, Barcelona, Lyons, Marseilles, Genoa, Milan, Rome to Naples, which could act as a counterweight to the regions of central Europe. In specific terms, this strategy involves the implementation of a competitive transport system in this area, which can provide an effective and long-lasting guarantee for the circulation of people and goods.

However the problem of transport has become an obstacle in the Mediterranean today. Mountain ranges (the Apennines, the Alps, the Massif Central and the Pyrenees) divide the region and are a significant hindrance to the circulation of flows. As a consequence, land networks are discontinuous, have very little continuity and are highly saturated, which is a disadvantage compared to northern Europe, an area which is much better equipped from this point of view. As a consequence, the costs of north-south or east-west transport in this region are among the highest in the world.

This area also lacks an organised waterway system like those with a structural function in exchanges in Europe in the Rhine and Danube regions. For this reason, rail transport needs to be much more important. However, as we will see below, this transport sector suffers from considerable deficiencies in terms of infrastructure. This means that road transport is the most frequently chosen option, leading to disadvantages in environmental terms which are even more important due to the concentration of networks in corridors as a result of the region's geographic fragmentation.

As a result, the consolidation of transport networks is a basic challenge for the Mediterranean area. In specific terms, this consolidation entails the development of east-west, transalpine, air and sea links. To that end, it is necessary to overcome the physical barriers of the Alps and Pyrenees, among others, as well as to make the essential reinforcements of communications between the coastal and inland zones, which are much less accessible.

Maritime transport is still much more predominant in international trade thanks to the development of containerisation. However, Europe's Mediterranean coast has yet to obtain an important niche in this respect. Coastal traffic acts as a very useful complement to land corridors. Furthermore, it is an essential tool in island transport services, whether for their links with the mainland or for the connections between islands. As the Mediterranean is one of the most heavily used sea routes in the world, the subject of security in this means of transport is obviously of interest to coastal countries and regions.

Improving the organisation of logistics is also a very important challenge in the Mediterranean region. Transport will only be fully functional to the extent that it is possible to integrate, interconnect and operate the various air, sea and land modes linking this geographical area within a single system. The use of computers, telematics and control and security technologies will contribute extensively to this, as well as the integrated management of transport data and documents.

2. A substantial increase in traffic in all modes of transport

As mentioned above, exchanges and flows of people and goods in the Mediterranean region will increase at a rapid rate over the next few years due to the combined effect of European integration (the effects of which are still far from being complete), the expansion of Europe with ten new member countries, and the strong dynamism of the Asian economies. A great deal of this trade with Europe will pass through the Mediterranean. In the future, the southern Mediterranean economies could also contribute to this dynamic, making the

Mediterranean area the centre of new flows of globalisation.

European integration continues to be a significant vector of developments in land traffic. However, as we have seen previously, European construction has not yet eliminated frontiers. Far from it, they remain a significant obstacle to exchanges, which basically continue to take place at domestic level. We can also see that frontiers frequently divide flows by ten, which shows the work that remains to be done before a complete unification of the internal market is achieved, and the pressure on the European transport system that this will entail.

As a consequence, flows of people and of goods around the Mediterranean arc and in particular, on the Barcelona - Lyons - Marseilles - Turin - Genoa axis, is undergoing heavy expansion. The increase in all types of traffic is around 10 percent annually, i.e. it doubles every seven years.

This dynamism of flows also affects touristic activities. The pleasure cruise industry in the Mediterranean has thus developed substantially. The number of passengers increased from 7.5 million in 1997 to 11 million in 2005, i.e. an annual increase of 6%.

3. A problematic modal distribution

The main hindrance to the improved circulation of traffic in southern Europe is not so much a problem of capacity but rather a problem of the modal distribution of transport, which is dominated by roads.

The railways linking Italy and France are not very competitive in terms of either cost or service. The journey between Marseilles and Milan currently takes 8 hours. The cost is also unattractive compared to aeroplanes. The situation is particularly bad in the Southern Alps. The networks are poorly connected, operations on the Italian side are problematic (except for intermodal transport, which is very competitive), and there are no links between Modane and Menton. As a consequence, railway goods traffic between France and Italy is approximately seven times less than that which goes by road, and is declining.

The railway links between Spain and France are also extremely weak. This is due above all to the different gauge used on the Spanish network, which means that a change of train is necessary at frontier stations (except for direct trains such as the Talgo Express). The Barcelona/Perpignan train journey currently takes more than three hours, and the journey between Barcelona and Marseilles takes more than six. For this reason, 85% of goods traffic between Spain and France travels by road.

The road links between the two countries are only efficient at either end of the Pyrenees mountain range. The coastal

route between Perpignan and Barcelona is the only transit axis between the east and west. This axis, which is still far from being saturated, is nonetheless recording an annual rate of increase in traffic of around 8%. The routes through frontier points are not yet saturated. However, traffic across the Spanish and French frontier is increasing at an annual rate of around 10%.

4. Towards a gradual saturation of transport axes

A recent French report auditing major transport infrastructure projects confirms the risk of saturation on the roads in the Mediterranean arc between Barcelona and Genoa within a period of fifteen years.

The Languedoc corridor is a particularly good example of this situation. This axis, which runs between Nîmes and Narbonne, is used by 75,000 vehicles every day (the State Highways Office says that the problem threshold is an annual daily average of 65,000 vehicles) and by more than 41,000 vehicles a day up to the Spanish frontier.

The main bottlenecks will arise:

- In Spain, on the outskirts of the Barcelona Metropolitan Region;
- In France, at the intersection of the A61 and A9 motorways (Narbonne), on the A9 between Nîmes and Montpellier, and on the A8 between Aix-en-Provence and Nice;
- In Italy, on the coastal motorway (mainly Savona-Genoa) and in the Milan area, where the road network is particularly overcrowded.

The points of overcrowding also tend to be concentrated around the main towns, where local traffic converges with transit traffic.

5. Major East-West railway projects

New infrastructure projects such as Lyons-Turin, the Franco-Spanish TGV¹, the Rhine-Rhone TGV, the Provence-Alps-Cote d'Azur, Genoa-Milan LGV² and its connections will have a profound effect (if they are built) on the high speed scenario, leading to a lasting change in the type and volume of exchanges.

The Lyons-Turin line is an essential missing link in the European "Axis 5" between Lisbon and Kiev, on which there will be a great increase in traffic as a consequence of the expansion of the European Union. Obviously, this link is strategic for the MEDOC³ space as a whole, because it is an opportunity to transfer part of the growth in traditional freight to railways, or to carry out transport on lorries using the rail expressway.

The completion of the Barcelona-Marseilles-Genoa high speed line is also

strategic, making the PACA TGV line on the French side⁴ a link in the international segment.

The new “Languedoc-Roussillon” railway line, to be used for passenger and goods traffic, is a solution that should, in terms of its impact, enable the high-speed line between Perpignan and Montpellier to be completed. This is anticipated in the best case scenario for 2025.

Taken as a whole, the high speed line projects in Spain, France and Italy will make a considerable improvement to the “major accessibility” by railway to cities in the MEDOC area. As a result, in around 2030, Marseilles could be, in the best case situation:

- thanks to the PACA TGV: approximately 2 hours 45 minutes from Genoa and 3 hours 30 minutes from Milan, and the journey time between Genoa and Milan could be reduced by an extension of the CA TGV⁵ towards Ventimiglia¹;
- thanks to Lyons-Turin: around 3h from Turin – a service offer should be sought in this regard;
- with the Languedoc-Roussillon TGV: just under three hours from Barcelona (and 3 hours from Toulouse) providing that the Montpellier-Perpignan section is completed, which currently seems optimistic (the date of 2030 is the most frequently mentioned), without which these journey times would be 45 minutes longer.

The dates announced for the completion of the East-West links are, as we shall see, a long way off (between 2025 and 2030). Experience has also shown that postponements of deadlines are common in this field. The fear is that during this period there will be a gradual saturation of the railway and road routes, which is a very significant disadvantage for the integration of this space.

6. A rail project structuring the North with the South: FERRMED

An association called FERRMED, the objective of which is to promote the Rhine - Rhone - Western Mediterranean goods rail axis, is currently promoting the creation of a railway axis linking northern and southern Europe. The main branch of the FERRMED Axis begins in Duisberg, fans out to connect Scandinavia, Great Britain, all the North Sea ports and those on the western Baltic Sea, links the main river ports, passes through the Rhine and Rhone valleys and along the entire western Mediterranean coast from Marseilles to Algeiras, and links up the most important east-west axes in the European Union.

Indeed, a large proportion of trans-European goods traffic is currently concentrated on the roads and motorways of the Rhine-

Rhone-western Mediterranean axis, which are now on the verge of saturation.

The Spanish and French Mediterranean coast and the Rhine and Rhone valleys are areas with no significant geographical obstacles. For this reason, the transport and communication routes between northern and southern Europe have been along this axis for centuries. The North Sea ports have always been very important economic and trading centres for Europe. Furthermore, due to the economic emergence of Asian countries and the proximity to Africa, trade in the Mediterranean ports is increasing at a spectacular rate year after year.

The FERRMED Axis is the fastest inter-connection route between the North Sea, the western Baltic Sea and the Mediterranean. This axis links the north and south of Europe and is also a compulsory transit point for goods transport between the east and the west.

In 2005, land traffic on this axis on the Pyrenees route exceeded 40 million tonnes and all forecasts suggest that it will increase by 50% by 2010.

However, the economic importance of the FERRMED axis goes beyond the areas crossed by its main line and the interconnection range of the northern sector with the Spanish and French Mediterranean coast, the Rhine and Rhone valleys, north-eastern Germany, Benelux and the southern half of Scandinavia. It is also important to numerous regions in Germany, Austria, Belgium, Denmark, Spain, France, the Netherlands, Italy, Luxembourg, Poland, Portugal, the Czech Republic, the United Kingdom, Sweden, Switzerland, Morocco, Algeria and Tunisia.

A revitalisation of the FERRMED axis according to European directives would lead to improved interconnection between the European regions and would as a consequence ensure a consistent planning of Europe as a whole.

Finally, the revitalisation of the FERRMED axis would enable balanced intermodal development of the land-based network, river lines and maritime lines of the North Sea, the western Baltic Sea and the western Mediterranean basin. Its revitalisation would also promote coastal traffic.

7. Sea highways

In recent years, the gradual saturation of the transport axes in the Latin Arc has led to the establishment of maritime links which compete with the existing land motorways for the use of a mode of transport that is less pollutant and less expensive in infrastructure terms. Connections of this type already exist, especially between Spain and Italy, and are managed by private companies that operate over distances of 1,000 km and more. The European Commission aims

to promote the development of this type of connection in the Mediterranean over shorter distances and has applied several consecutive programmes in this area. However, these connections, known as “sea highways,” which are part of a logic that could be defined as maritime transport of lorries, have some difficulties with their development. In 2003, a connection was projected between Fos and Savona, but this has yet to be established. Another connection between Toulon and Rome has been operating since 2004 with European aid, but its results are not very encouraging.

However, it is important to take into account that the true concept of maritime transport of lorries has yet to be implemented and the various actors, and the road hauliers in particular, are especially worried by it. Indeed, this project has run into several obstacles, some of which were identified by the European Commission in its report of 2nd July 2004; according to this document, coastal traffic is not fully integrated in the door to door supply chain, it is subject to complex administrative procedures and it requires a high level of efficiency in the ports.

The existence of a commercial and technical hinterland, port passage costs, the lack of frequency and regularity, and the major inclination towards roads should be taken into account.

As a result, it is necessary to tackle this situation. Firstly, it is obvious that states must intervene heavily, providing special guarantees with regard to the duration for the various actors, dockers, shipowners and hauliers who take the risk of investing in these projects. Furthermore, according to the Commission's recommendations, it seems necessary to establish “single ticket offices,” covering all those with a role in the logistics chain (dockers, road, railway and river hauliers). These could offer clients management of all the operations.

Finally, the modernisation of ports and the improvement of their transport service - especially rail transport - is an essential condition for the success of these lines. It should be noted that the cost of transporting a container by land over distances of five hundred kilometres may be five or six times more expensive than going through ports. For this reason, those ports without competitive services will become secondary ports in terms of container transport. Opening up the European railway companies is also a very important challenge for the major French ports, which, unlike their competitors, do not have a major European river network.

8. An intermediate airport space in Europe

The European airport situation is characterised above all by a concentration of activities in a limited number of airports located in northern Europe. The major

hubs in northern Europe (like the ports of Antwerp and Rotterdam) provide the structure for the organisation of European skies. For the major European air companies, and especially for intercontinental companies, the airports in the Medocc space⁶ act mainly as feeders for the hubs of Amsterdam-Schiphol, Roissy-Charles de Gaulle, London Heathrow, Frankfurt etc.

Mediterranean Europe certainly has large airports, especially those located in its capital cities (Madrid, Rome, Athens) but in comparative terms, activity in these airports is at a lower level. Apart from these, there is a more extensive network consisting of smaller airports (Barcelona, Malaga, Marseilles, Lyons, Genoa and Seville). While Barcelona airport is the same size as the airports in Rome and Madrid, the other five must be classified as intermediate airports. Within the network of European airports, Barcelona is a second level one (behind those in London and Paris, and on the same level as those in Madrid and Rome). Three airports (Malaga, Marseilles and Lyons) are on the third level, while those in Genoa and Seville are on the fourth level.

Furthermore, the cities do not have an identical communications service in terms of railway connections. The city of Lyons is the only one with an interconnection between the airport and the high speed train. Although this articulation has yet to be optimised, it is a very important opportunity for the future.

Accessibility between the cities in the Medocc space is highly variable: it is good in Barcelona, average in Lyons and Marseilles and low in Genoa and Málaga. Given that these airports are not directly connected to each other, some are further away than others in terms of time. As a result, between three and seven hours are needed to connect Genoa and Marseilles, and Seville has three connections from other Medocc cities of over four hours.

Finally, the Medocc space suffers from a lack of intercontinental gateway airports, which remain exclusively located in capital city airports. However, intercontinental traffic to and from these cities is significant. Since the major air companies prefer a concentration of intercontinental connections in a very limited number of airports, it will only be possible to make their "hub" strategies evolve through the coordination promoted by different airport platforms.

of the major projects accepted by the Commission concern northern Europe. The northern ports have also attracted most of the traffic which in geographical terms should go to the south.

Those States which are responsible for major transport infrastructure implement their own strategies and only use European policy as a benchmark when it benefits their interests.

In the Mediterranean, structural projects are dealt with by Franco-Spanish and Franco-Italian intergovernmental committees. In general, these committees solve the problems arising from cross-frontier sections, such as on the Lyons-Turin line or the Perpignan-Figueres high speed line. However, they do not interfere in national projects.

This situation of a lack of connection between European policies and national policies will no doubt persist. Indeed, the Directorate General of Transportation should not receive funds for the next budget programme (2007-2013) of 7.000 million euros, when it had asked for more than 20.000. As a result, its room for manoeuvre is limited, which suggests that private financing will play an increasingly major role in major European structures. For this reason, opportunities will be increasingly assessed on a project by project basis. Given this situation, there is a risk that reference to the major European priorities enacted by the Commission will decrease. In specific terms, this fear refers to the numerous projects in the Mediterranean that can be considered important within a perspective of European integration, but that are not profitable enough to be at least partially financed by the private sector.

1 High speed train

2 High speed line

3 Western Mediterranean

4 The Provence-Alps-Cote d'Azur high speed line

5 The Cote d'Azur high speed line

6 Western Mediterranean

9. An inactive European transport policy

European transport policy has never been very favourable towards the development of major transport axes in the Mediterranean. Political mobilisations and major investments supported by the European Commission continue to be destined to the north. As a result, most