ELENA MAGGI, D. Sc. GIORGIO MAGGI, D. Sc. ISTIEE University of Trieste Traffic Policy
Preliminary Communication
U. D. C. 338.47:656.1
Accepted: Sep. 1, 1998
Approved: Dec. 23, 1998

# THE ADRIATIC CORRIDOR: A STRATEGIC PART OF THE EUROPEAN TRANSPORT NETWORK

#### SUMMARY

The article describes the project of the Adriatic Corridor, analysing the European and Italian framework in which it could be collocated, the planned structure of the Corridor in terms of geographic extension and infrastructure elements, the main objectives of the project, the works that it includes, the present obstacles to its development and, finally, the present and future freight and passenger transport demand in the area covered by the Corridor.

The realisation of the Adriatic Corridor is considered strategic in order to contribute to achieving the main objectives of the European transport policy: the territorial and economic cohesion of the EU Countries, the development of the trade with the non-EU regions and a sustainable mobility.

## 1. THE ADRIATIC CORRIDOR IN THE EUROPEAN AND ITALIAN CONTEXT

One of the principle objectives of the European transport policy, as defined in Section XII of the Treaty of Maastricht, is the development of the Trans European Networks (TENs)1. The TENs system, as stated in article 129 D of the above mentioned treaty, consists in the realisation of the European transport network by the year 2010, as a result of integration of national and international networks. This system should cover the whole territory of the member states, improving the accessibility of isolated and peripheral regions and guaranteeing an efficient link with the EFTA countries, the countries of Eastern and Central Europe and the Mediterranean regions. The main aim is, therefore, to improve territorial cohesion between the community countries and to encourage economic relations both among European states and between the EU countries and Central and Eastern Europe (the PHARE Program) on one hand and the Magreb countries (the MEDA project) on the other<sup>2</sup>.

In more detail, the objectives of the Trans-European transport networks, according to the European Commission white paper, "Growth, Competition and Employment" [2], are the following:

- greater economic growth
- better functioning of the internal market
- improved competitiveness
- better economic and social cohesion
- better quality of life
- less pollution
- easier integration of new members into the EU
- better links between the EU and its neighbours.<sup>3</sup>

In addition to the principle Community objectives, such as smooth functioning of the internal market and economic and social cohesion, the transport network also has the "specific objectives of sustainable mobility of persons and goods under the best possible social, environmental and safety conditions and integrating all modes of transport, taking into account their competitive advantages" [1].

Within the frame of reference and the above mentioned objectives, the European Commission has defined the base plans for the Trans-European Networks. In December 1994 the Summit Meeting of the Heads of Government at Essen approved 14 infrastructure projects identified as priority by the Christophersen Group<sup>4</sup>.

The Adriatic Corridor was not included in the 14 initial projects. Or rather, only a section of it was included, even if an important one, the Brennero line from Verona to Munich. Another section, the motorway Bari-Brindisi-Otranto, was included from the beginning, among the important, if not priority, projects. In May 1995, having realised that the initiative had all the characteristics necessary to be included among the corridors of interest in that it favours links both inside and outside the EU, the European Parliament proposed with amendment number 166, to insert the Adriatic Corridor among the 14 priority projects [4].

The EU accepted to jointly finance the feasibility study of the corridor.

The project has also attracted the attention of the Greeks. They have begun a feasibility study of their own, which is also jointly funded by the EU.

With reference to Italy, the Adriatic regions, Friuli-Venezia Giulia, Veneto, Emilia-Romagna, Marche, Abruzzo, Molise and Puglia signed in October 1995 an agreement (*Protocollo d'Intesa* [5]) for the realisation of the study in question, undertaking to contribute to its financing.

This initiative which has seen seven different Italian regions react in a co-ordinated way, is a novelty in Italian transport policy, which is normally based on a logic of segmentation of interventions. Thus, the basis has been established for better planning of transport with respect to the past. In fact, only systematic and co-ordinated action will guarantee the individual transport corridors a harmonic development.

The agreement signed by the above mentioned regions has established a committee (Comitato Istituzionale) made up of the presidents of the regions which are taking part in the initiative. This committee has to check that the received tasks are carried out correctly, manage the feasibility study, including its assignment through European competitive bidding, involve countries from outside the EU<sup>5</sup> who are interested in the Corridor and, finally, institute the so called "Co-ordination Group of the Adriatic Regions". This group has been assigned the task of carrying out the feasibility study, of putting together the call for bids and co-ordinating the phases of realisation of the project.

Therefore, in a short period of time the pre-feasibility study [6] was completed with the following characteristics:

- the identification of the Corridor and its area of influence, based on indications of regional transport and territory plans;
- the definition of a multimodal graph of reference (see Fig. 1);
- the determination of the main problems emerging in order to analyse them in depth in the next feasibility study, for example problems of efficiency derived from the unbalanced use of the network, possible saturation, territorial and environmental incompatibility, etc.;
- the preparation of a single frame of reference for the plans, programs and initiatives in progress, in the zones through which the Corridor passes;
- the preliminary evaluation of the dimensions of the freight and passenger demand for transport in the area of influence of the Corridor.

Each region taking part in the initiative has produced its own document, according to the standard criteria, that presents a summary of the regional infrastructure situation, the quantitative and qualitative aspects of the traffic flow, the objectives and the limitations of the regional territorial and transport plans, the method of access to the Corridor (the bottlenecks in the system, the evolution in time of the system of de-

mand and supply, etc.) and finally, the proposals and the interventions to be carried out.

The feasibility study is about to be completed. The "First Progress Report" was published in December 1997 [7] and recently the "Second Progress Report" was presented at Jesi.

### 2. MAIN CHARACTERISTICS OF THE CORRIDOR

The Adriatic Corridor, which progresses geographically from the passes in the North East of Italy (Brennero, Tarvisio and Villa Opicina), along the backbone of the Adriatic peninsula, to the Ionian ports, was conceived as an integrated system of linear and nodal transport infrastructure to supply high quality services for, above all, the demand for freight but also passenger transport. It consists of a system of complex infrastructure, made up of railway lines, roads, motor-ways, ports, airports, freight centres and interports, short-sea shipping systems, inland waterways and intermodal systems.

The project also foresees the activation of maritime and air traffic management systems and of positioning and navigational systems for the means of transport<sup>6</sup>.

The realisation of the transport network in question, similar to other Trans European networks, must respect a series of constraints: security and protection of the environment, integration of the different modes (in such a way as to allow optimal use of the existing transport system) and finally financial and economic limits.

The Corridor, considered in a global sense as a traffic route from Italy to Greece, provided that it improves the links with Greece, can be seen as part of the larger north-south European Corridor, Munich/Vienna-Bologna-Ancona-Brindisi-Igoumenitza-Patrasso-Larissa, including the Brennero and Tarvisio mountain passes.

The Adriatic Corridor is an integral part of the main communication routes, not only at the service of the Adriatic regions and a good part of the Italian economic system, but also of the adjacent economic areas. Given the present situation, the Corridor, understood as an integrated land-waterway corridor, does not have valid alternatives for the links between Central Europe and Greece, Turkey and the Eastern Mediterranean countries.

The Corridor in question should satisfy the needs of movement of goods and passengers along the North Europe-Middle East/Africa route and vice versa, even if a part of this traffic could be absorbed by the networks which cross France. Thanks to the interconnec-

tion with the other Trans European networks, it could also serve the ex-Soviet Union and the Balkans.

The activation of the Corridor could give way to the creation of a network of ports along the Adriatic

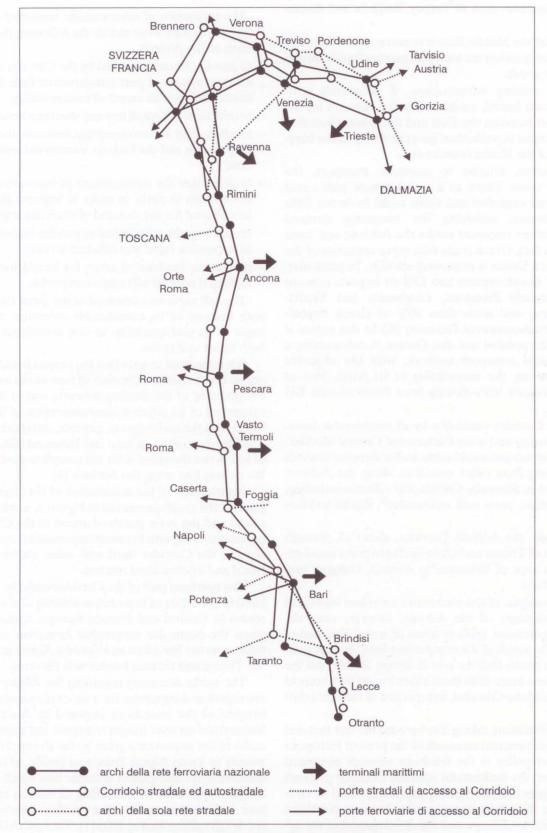


Figure 1 - Graph of the Adiatic Plurimodal Corridor system

Corridor and on the Black Sea, (e.g. Haydarpasa, Burgas, Varna e Costanza) and on the Danube (e.g. Braila, Galati, Tulce, Ruse and Lom), involving other countries such as Turkey, Bulgaria and Romania.

As far the Middle East is concerned, the Corridor could easily satisfy the transport needs of crude oil and of other goods.

The existing infrastructure, if adequately reinforced and linked, could satisfy the demand for air transport between the East and the West, given that the Corridor is positioned geographically at the barycentre of the Mediterranean area.

However, relative to maritime transport, the role of Gioia Tauro as a transhipment port could be further exploited and there could be better links with Greece, satisfying the increasing demand for maritime transport across the Adriatic and Ionic Seas. In fact, Greek trade with other countries of the European Union is increasing steadily. In particular, 14% of Greek exports and 17% of imports concern Italy (mainly Piemonte, Lombardia and Emilia-Romagna) and more than 20% of Greek importexport trade concerns Germany [6]. In this regard it should be pointed out that Greece is constructing a multimodal transport network, with the objective of improving the accessibility of its ports. Two of these projects have already been financed with EU funds<sup>7</sup>.

The Corridor could also be of considerable interest to Turkey and other Eastern and Central Mediterranean states and could serve traffic directed towards or coming from other countries along the Adriatic Sea, that is, Slovenia, Croatia and Albania including, for example, ports such as Durazzo<sup>8</sup>, Rijeka and Koper.

Finally, the Adriatic Corridor, above all, through the port of Trieste and other northern ports could extend its area of influence to Austria, Hungary and Switzerland.

An analysis of the alternative corridors highlights the advantages of the Adriatic itinerary over the Italian peninsula, both in terms of travel time and of costs. The result of the comparison with the best eastern link shows that the cost is almost double and the travel time more than three times longer with respect to the Adriatic Corridor, irrespective of the ports chosen [6].

In conclusion, taking into account the fact that one of the fundamental elements of the present European transport policy is the tendency towards combined transport, the multimodal Adriatic Corridor presents possibilities that, if correctly exploited, could be strategic for the economic integration between Northern and Southern Europe and the development of the areas affected.

### 3. THE INFRASTRUCTURE OF THE CORRIDOR

The realisation of infrastructure necessary for the Adriatic Corridor must match the following main objectives of the project:

- to provide the area crossed by the Corridor with an efficient system of port infrastructure linked to the hinterland with an aspect of intermodality;
- to develop a system of fast and short maritime links;
- to allow easy interconnections between the maritime system and the Padano-Veneto waterways system;
- to guarantee the development of innovative logistics systems in ports, in order to improve the services offered for the demand of maritime transport;
- to speed up the administrative process in such a way as to provide rapid and efficient service;
- to increase the level of safety for freight transport, making it ecologically more compatible.

The infrastructure involved in the given Corridor, both because of its considerable extension and because of its multimodality, is very articulated and is both linear and nodal.

It is important to note that the project is addressed not so much to the realisation of new works as to the trengthening of the existing networks and to the development of an efficient interconnection of the networks with the nodes (ports, airports, interports, etc.). The foreseen cost is at least five thousand billion lire, of which two thousand is for the complete doubling of the railway line along the Adriatic [6].

An overview of the articulation of the Corridor is given in the graph presented in Figure 1, in which the routes and the main points of access to the Corridor are shown along with the most important interconnections of the Corridor itself with other routes of national and international interest.

The northern part of the Corridor could be articulated in a number of branches consisting of the access routes to Central and Eastern Europe; routes, that, given the particular orographic formation of Italy, must cross the Brennero and Tarvisio Alpine passes or the Trieste and Gorizia border with Slovenia.

The works necessary regarding the Alpine passes are urgent and important for a series of reasons. First, because of the limitations imposed by Austria and Switzerland on road freight transport and second, because of the importance given by the European Community to Trans Alpine links, and finally, to face the constant and rapid growth in traffic flow which tripled between 1965 and 1987 reaching 62 million tons per year and that, according to a prudent forecast, will reach 118 million tons by 2005 [7]. The Italian General Plan for Transport considers that only a strong devel-

opment of Trans Alpine rail transport will allow Italy not to be excluded from the European economic development.

In particular, as far as the Brennero Pass is concerned, the risk of saturation on this line is well known. A number of projects have been proposed for works to be carried out on the line: from the ambitious plan to build an Alpine tunnel to those which aim to increase the capacity and speed on the existing line.

The 1995 Agreement on the Large International European Railway Networks, signed by 26 European countries from the East and the West, identifies in the framework of the "international E railway network", two tracks of interest to the Corridor: the E45 (Innsbruck)-Brennero-Verona-Bologna-ancona-Foggia-Bari and the E55 (Arnoldstein)-Tarvisio-Udine-Venezia-Bologna. This agreement also identifies the technical characteristics that the European railway network must have: minimum speed of 160 km/h, double tracks, modification of the tunnels and overpasses, etc. [6].

The Adriatic railway line which makes up the basis of the rail infrastructure of the Corridor is an old line, not all of it is double track and at some points it has reached the saturation point. A considerable section of the line runs along the coast posing a series of security and utilisation problems in that it is subject to interruptions in the case of high seas and to possible saturation following further probable development of the tourist trade along the Adriatic coast.

The situation with road transport connections is better. The present system, in fact, starts at Brennero and continues to Verona and then to Bologna, and then along the Adriatic coast to Bari. However, as has been pointed out by a number of Italian regions, it is in need of repairs, for example the construction of a third lane for the heavy traffic sections, the improvement of the Romea, the extension of the A14 motor-way towards the South and the construction of by-passes and junctions (e.g. the interchange in Mestre).

Regarding maritime and air transport, the Corridor will have both several points of access to the sea through adequately equipped ports (Trieste, Venice, Ancona, Bari, etc.) and airports for passenger and goods transport. The interventions that these modes of transport require, are mainly the improvement of links between port and airport nodes and the large road and rail networks. This guarantees the development of intermodal transport and the improvement of the existing port and airport infrastructure in such a way as to be able to offer faster and more reliable services.

Finally, it is necessary to add that to adequately utilise the resources and the potential of the Corridor, the improving and adapting of transport infrastructure described briefly above is not sufficient. It is nec-

essary to develop a network of computerised information and telematics to service the Corridor. Acting as a marketing instrument, it should bring together the transport demand and supply, and also improve the planning of the transport service offered.

# 4. MAIN OBSTACLES TO THE DEVELOPMENT OF THE ADRIATIC CORRIDOR

The main obstacles to the development of the Adriatic Corridor as part of the TEN system consist, on one hand, of the problems mentioned above, of crossing the Alps and in particular the Brennero and Tarvisio passes and on the other, the reduced number of interconnections that exist today between the Adriatic Corridor and other Italian Corridors, above all south of Bologna. The realisation of a system of transport networks would, in fact, require a high level of compatibility and integration of the various corridors either already in existence or being developed.

Today, the transport of freight and passengers takes place mainly by road (about 63.4% of the total amount) causing big problems in terms of congestion and pollution. Furthermore, most of the freight vehicles travel without load. This happens mainly because a large part of the area affected by the Corridor is characterised by widespread industrialisation and a system of industrial areas made up predominantly of small to medium-sized companies. Demand is very segmented and it is difficult to utilise bulk maritime and rail transport systems because of the way in which the production process is organised. There is a prevalence of horizontal organisation by components rather than the vertical one.

An answer to these problems could be in a more widespread use of multimodal systems and a reorganisation of logistics systems at the service of companies in such a way as to regroup the fragmented demand which exists today. In this sense a centralised role can be played by nodal systems in reorganising freight and passenger transport (ports, interports, autoports, stations, airports), which will have to be both linked among themselves and to an efficient computerised information system.

## 5. VOLUMES OF FREIGHT AND PASSENGER TRAFFIC FLOWS

The Adriatic Corridor was conceived mainly to satisfy the growing needs of freight transport.

The traffic, which has its origin and destination in Italy, is prevalently on-land and above all by road. Given the large economic differences existing along the territory covered by the Corridor, the traffic rate varies from 2 to 4 per cent [8]. High development of the maritime mode is predicted as a consequence of the increase in hub and spoke traffic from the transhipment port, Gioia Tauro. In fact, this port is destined to become a hub in the Mediterranean area.

The analysis of international traffic is of greater interest considering the Corridor within the framework of the TENs system. The demand for freight transport of interest to the Adriatic Corridor is mainly connected to traffic between Central and north-eastern Europe and the Eastern Mediterranean area (Greece, Turkey and the Black Sea, the Middle East and the Suez) and between these areas and the Italian Adriatic coast.

Above all, it can be seen that the area of influence of the Adriatic Corridor is very dynamic and increasingly growing. Between 1980 and 1996 the quantities exchanged between Eastern Europe and the Mediterranean more than doubled, going from 260 million tons to nearly 530, while the relative nominal value almost tripled. In particular, after the opening of the borders and the transition to the market economy of a part of the ex-socialist republics, the 1990's have been characterised by a large increase in trade both from and to Eastern Europe [7].

The scale of international flows of traffic which concern this project are shown in the Tables below.

Table 1 describes the principal exchange flows between the EU countries and the Eastern Mediterranean countries which could become the major users of the Corridor, that is, Egypt, Israel, Lebanon, Jordan, Turkey and Cyprus. In fact, the interconnecting flows between the North Western African countries (Morocco, Algeria, Tunisia and Libya) and Central Europe largely pass through France.

Table 1 - Import and export flows between some EU countries and the East of the Mediterranean (millions of tons)

Country	Import	Export	Total
Germany	4.4	1.6	6.0
Denmark	0.1	0.3	0.4
Belgium-Luxembourg	0.8	1.1	1.9
The Netherlands	2.8	0.8	3.6
Austria	0.1	0.1	0.2
Sweden	0.5	1.2	1.7
Finland	0.1	0.7	0.8
Total	8.8	5.8	14.6

Source: Bonifica, 1997 [7].

Table 2 shows the long term dynamics of Italian trade with Eastern Europe and the Mediterranean area. In 1996 this trade reached 100 million tons, that is, almost a quarter of the entire Italian foreign trade. Within the context of the EU, Italy is the principal place of origin and destination of transit of traffic flows related to the two above mentioned areas or more generally between the North East and the South East. According to the estimates in "The First Progress Report" of the feasibility study [7] about a fifth of the comprehensive trade of the European Union with the Eastern European countries and the Mediterranean area originates and ends in Italy and therefore in the Adriatic Corridor.

Presently the majority of maritime traffic from and to Gibraltar and North Africa for the north western

Table 2 - Italian trade with East European and Mediterranean Countries

is fit placed to activities	Quantity of Italian trade (mill. of tons)	Value of Italian Trade (bill. of Ecu)	% of quantity on EU trade	% of value on EU trade
in a place law de days e	disting in this season	year 1980		
East Europe	27.9	7.2	21.2	15.6
Mediterranean Area	38.4	10.1	29.8	21.8
Total	66.3	17.3	25.5	18.7
		year 1990	Mean wh striant or	- milety of front or
East Europe	42.4	13.8	21.9	18.8
Mediterranean Area	69.6	16.3	32.4	22.1
Total	112.0	30.1	27.4	20.4
		year 1996		de at skjenstni.
East Europe	38.1	25.2	11.9	14.7
Mediterranean Area	61.8	19.7	29.7	20.0
Total	99.9	44.9	18.9	16.6

Source: Bonifica, 1997 [7].

regions use the Adriatic routes and the ports of Trieste, Venice and Ravenna [8].

Considering the geographic shape of the territory, it is interesting to identify finally the flows of exchange between the Italian and the principal Mediterranean countries (see Table 3).

Table 3: Tons of goods handled in Italy in 1996, per country of origin-destination (data in quintals)

Country	Import	Export	Total	% on total
Greece	21,772,392	25,676,181	47,448,573	28.60%
Turkey	20,409,989	19,975,565	40,385,554	24.34%
Israel	7,509,785	17,521,426	25,031,211	15.09%
Egypt	20,779,937	8,597,183	29,377,120	17.71%
Syria	6,694,747	3,061,001	9,755,748	5.88%
Lebanon	568,265	13,325,153	13,893,418	8.37%
Total	77,735,115	88,156,509	165,891,624	100.00%

Source: elaborated from Eurostat data.

As can be easily seen from Table 3, the traffic from Italy is very intense, above all to and from Greece and Turkey, but the trade with the other Mediterranean countries mentioned above is considerable and in continual growth.

With regard to the demand for passenger transport, even though the Adriatic Corridor is conceived to satisfy first the transit of goods, it should be remembered that it is also of interest to large numbers of passengers. There are considerable numbers of tourists, since the Adriatic coast has many attractions both at the national and international levels.

The demand for passenger transport is very difficult to quantify in that there is almost complete lack of homogeneous statistical determination of the origin and destination of flows, also because of the high level of variability due to their seasonal nature. As has been specified above, this marked seasonal aspect is also the cause of very congested infrastructure, primarily of road infrastructure. In fact, about 89.53% of the total passenger traffic is road traffic (47.8% for distances over 200 km), that is almost 600,000 passenger journeys by road per day [9].

It is necessary, therefore, to evaluate how to organise the flows of travellers in such a way as to restrict as far as possible the negative effects on the environment and not to allow these flows to impede the free flowing transport of goods. The way ahead is to direct the demand, through the correct supply, towards modes other than road or better still towards an intermodality which respects the environment and the territory. In particular, it is necessary to try to find solutions capable of transporting significant amounts of passenger traffic to the railways. These solutions have to both ex-

tend the capacity of the lines and to offer qualitative levels of rail service in order to attract users who are accustomed to using the automobile.

The main international passenger traffic links regarding the Corridor are the ones with Greece and Turkey. These links are both maritime, and utilise the RO-RO ferries leaving from the principal Adriatic ports, and air, mainly from the Rome Fiumicino airport and Milan Linate. This type of traffic has an annual increase equivalent to about 4%. It was the same in 1996 at 1.3 million passengers compared with Greece and 0.35 million compared to Turkey and 0.4 to Israel and the Middle East [8].

#### 6. CONCLUSIONS

To conclude, we considered it useful to recapitulate the main objectives of the repairs on the infrastructure planned for the project. Most of all, the elimination of the bottlenecks and the development of some routes will lead to a considerable increase in the speed of trade both by rail and by road. The specialisation of some ports in South Italy and the consolidation of those in the North Adriatic will allow for more use of maritime transport and a strengthening of maritime links with the Balkan states, Greece and the South Mediterranean. The realisation of adequate links among ports, the railways, roads and efficient interports will allow the development of combined transport. The development of the access routes to the mountain passes will make rail traffic faster and more free-flowing, reducing the strain on the roads. Relevant to the objective of the realisation of an efficient European transport network is the development of the links with other corridors, complementary to the Adriatic Corridor such as Corridors 5 and 8. Finally, the realisation of an efficient intermodal system could encourage greater use of waterway transport through links between the Adriatic ports, the Padana area and Central Europe.

The Adriatic Corridor is a structural element of the European transport network in that its realisation would make an easy and fast link between the European Union states and the eastern and Mediterranean states. This will satisfy one of the main objectives of the European Union, that is, the territorial cohesion and the development of trade between the EU and its neighbouring countries.

The considered project has therefore, a clear international value consisting in the creation of an intermodal transport system at the service of north-south links, that is, of the North Eastern regions and the Eastern and Central Mediterranean regions. The development of intermodality means the realisation of another important objective of the Union policy, that is, sustainable mobility, which aims to restrict conse-

quent negative repercussions on the environment and to provide a better supply of transport.

### IL CORIDOIO ADRIATICO: PARTE STRATEGICA DELLA RETTE DI TRASPORTO EUROPEA

Nell'articolo viene sinteticamente presentato il progetto Corridoio Adriatico, descrivendo il quadro di riferimento europeo ed italiano in cui e inserito, i principali obiettivi sottesi al progetto, la struttura del Corridoio sia in termini geografici che infrastrutturali, gli interventi che sono previsti dal progetto stesso, i principali ostacoli alla sua attuazione ed infine, l'attuale e futuro traffico di trasporto merci e passeggeri che il Corridoio dovrebbe servire.

La realizzazione del Corridoio Adriatico risulta strategica al fine di contribuire al raggiungimento dei principali obiettivi della politica di trasporti europea: la coesione territoriale ed economica dei Paesi dell'UE, lo sviluppo dei traffici con le regioni extra-UE e una mobilita rispettosa dell'ambiente.

### REFERENCES

- A good definition of TEN is "The TEN is intended as a multimodal infrastructure network which should progressively combine and integrate the different modes and national networks" [1].
- Corridors can be separated into those that are part of the Trans European Networks (TEN) and in those that are part of the Pan European Networks, linking the TEN to Central and Eastern Europe. The latter were proposed by the 5th Conference on Pan European Transport in Crete in March 1994.
- 3. The objectives summarised, even if their contents remain unchanged, have been further evidenced in the document relative to the "Decision number 1692/96/CE of the European Parliament and Council" of 23 July 1996 [3].
- 4. The Christopherson Group, made up of representatives of heads of state and government, was formed in Corfû by the European Council in December 1993 with the specific intent of contributing to the realisation of efficient and rapid trans-European transport and energy networks. To this end it identified, on the basis of precise criteria, projects, either already began or to be started soon, of priority for the TEN, inasmuch as they will probably affect added value.
  - The list should not be considered closed as it could be periodically re-examined by the European Council.
- 5. At the Essen Summit the importance of cooperating with the countries which border with the EU was fully recognised to link the Trans-European networks with those outside the Union in particular with Central and Eastern Europe and the Mediterranean basin including Malta, Cyprus and Turkey.
- 6. The importance of telematic and computerised information systems to manage traffic and support the TEN system of transport was highlighted by the Christophersen Group inasmuch as without efficient management of the networks they cannot fulfill their function.

- 7. There are two projects inserted among the 14 priority projects identified by the Christophersen Group and in particular: the PATHE motor-ways that link Patras-Athens-Thessaloniki and the Greek-Bulgarian border (Evzoni) and the Egnatia Road, that is the east-west motor-way corridor from Greece that unites Igoumenitsa, Thessaloniki and Alessandropoli.
- Durazzo is part of Corridor 8 which is considered priority by the European Commission.

### LITERATURE

- [1] Commission of the European Communities (1997), Proposal for a European Parliament and Council Decision amending Decision N° 1692/96/EC as regards seaports, inland ports and intermodal terminals, 10.12.1997.
- [2] Commission of the European Communities (1992), The White Paper, Growth, Competition and Employment.
- [3] Commission of the European Communities (1996), Decision on Community Guidelines for the Development of the Trans-European Transport Network, 23.07.1996.
- [4] Ministero dei trasporti e della navigazione, direzione generale programmazione, organizzazione e coordinamento (1996), *Il Corridoio Adriatico*, marzo 1996.
- [5] Protocollo d'Intesa tra le Regioni Adriatiche allo scopo di promuovere e sostenere la realizzazione del Corridoio Adriatico nell'ambito delle reti transeuropee di trasporto, ottobre 1995.
- [6] Coordinamento delle regioni adriatiche, comitato di progetto (1996), Studio di prefattibilita, agosto 1996.
- [7] Bonifica CSST (1997), Feasibility Study of Adriatic Corridor. First Progressive Report, vol. 1-2.
- [8] Uniontrasporti (1996), Corridoio Plurimodale Adriatico: studio di inquadramento generale, suppl. a Uniontrasporti Notizie, n. 8, dic. 1996.
- [9] Frondaroli A., Nuzzolo A. (1998), Domanda di trasporto di Corridoio: stato attuale e previsioni, Convegno Jesi 15.6.1998.
- [10] Accordo operativo dell'Intesa sul Corridoio Adriatico, gennaio 1996.
- [11] Commission of the European Communities (1994), Proposal for a European Parliament and Council Decision on Community Guidelines for the Development of the Trans-European Transport Network, 7.4.1994.
- [12] Commission of the European Communities (1997), Intermodality and Intermodal Freight Transport in the European Union, 29.05.1997.
- [13] Commission of the European Communities (1997), Towards a Pan-European Transport Network (Report on Adjustment to Crete Corridors), Helsinki, June 1997.
- [14] European Parliament (1997), Towards a European Wide Transport Policy, 3.7.1997.
- [15] Senn L. (1998), Corridoio Adriatico. Gli scenari di sviluppo economico, Convegno Jesi 15.6.1998.
- [16] Tsamboulas D.A. (1998), Feasibility Study for the "Corridoio Adriatico", Integrated Study and Design Services, 2nd Report, Convegno Jesi 15.6.1998.