

# COMMISSION OF THE EUROPEAN COMMUNITIES

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Commission Communication  
"TRANSPORT INFRASTRUCTURE"

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Proposal for a  
COUNCIL REGULATION (EEC)

amending Regulation (EEC) No 3359/90 for an action  
programme in the field of transport infrastructure  
with a view to the completion of an integrated  
transport market in 1992

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Implementation Report provided for in Article 11 of  
Regulation (EEC) No 3359/90

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Commission Communication  
and  
Proposal for a  
COUNCIL DECISION

on the creation of a Trans-European Road Network

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Commission Communication  
and  
Proposal for a  
COUNCIL DECISION

on the creation of a European inland waterway network

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(presented by the Commission)

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## I. COMMISSION COMMUNICATION

### "TRANSPORT INFRASTRUCTURE"

#### 1. PURPOSE OF THIS COMMUNICATION

1.1 This communication deals with transport infrastructure in terms of Title XII of the Maastricht Treaty on European Union, which concerns trans-European networks: it lays down the procedures for Community involvement in the construction and financing of those networks. Implementation of this Title entails use of the new decision-making rules by the Council and Parliament and consultation of the Committee of the Regions.

1.2 While the Commission, in line with Parliament's request to that effect, is willing to anticipate the application of those provisions of the Treaty, it cannot overlook a number of problems arising in the transitional period, particularly in the transport infrastructure field, which requires a certain continuity if measures are to be effective.

1.3 Last December the Council asked the Commission to present by May a report on the progress of work conducted at its behest on the masterplans for combined transport, motorway and inland waterway networks, taking due account of the decisions of the Maastricht European Council. The masterplans follow on from the high-speed rail network masterplan already approved by the Council.

1.4 The Commission's intention to make the Cohesion Fund operational next year presupposes that masterplans identifying transport projects eligible for support from that fund will be available at very much the same time.

1.5 The Commission believes it possible to meet both of the above requirements. It feels there is nothing to stop presenting at this time masterplans based on the Treaty currently in force so that the Council and Parliament might begin work as soon as possible. The entry into force of the Maastricht Treaty will alter the legal basis and decision-making procedures governing the masterplans. It may even be agreed with the Council and Parliament that the work accomplished prior to the Treaty's entry into force be viewed as a "first reading" in respect of the prerogatives of the new - and as yet unestablished - Committee of the Regions, to which the matter will have to be submitted.

1.6 The Community already has a Community transport infrastructure policy in the shape of a three-year Regulation due to expire on 31 December. A legal vacuum is incompatible with that Community policy's consistency and could threaten certain major projects now being financed. The Commission therefore feels it necessary to propose that Regulation (EEC) No 3359/90 be extended beyond that date, pending the entry into force of Title XII of the Treaty and any attendant implementing procedures.

1.7 Apart from these transitional problems, the communication, in line with the Treaty on European Union's stance on trans-European networks, gives a broad overview of the approach that the Commission hopes to develop in the field of transport infrastructure. The aim is to establish a trans-European network for each mode of transport, gradually integrating them in a multimodal approach destined to guide future Community action, with due regard for the principle of subsidiarity. The Community will accordingly restrict itself to promoting and encouraging national projects of Community interest.

1.8 It is against this background that the Commission is presenting to the Council and Parliament:

- a general communication regarding trans-European transport networks;
- a proposal for the amendment of Council Regulation (EEC) No 3359/90;
- the report required by that Regulation on the work so far;
- three proposals for network masterplans (combined transport, motorways and inland waterways).

Masterplans for the remaining modes (conventional railways, air and sea) are under preparation and will be proposed next year.

## 2. THE ACQUIS COMMUNAUTAIRE IN TRANSPORT POLICY MATTERS

### 2.1. Existing rules and regulations

The revival of Europe's economy in recent years has been accompanied by substantial growth in transport. Major economic and social change coupled with increasing integration have increased the demand for mobility.

Thus, between 1970 and 1988, the volume of traffic in the Community grew by 3.1% a year for passengers and 2.3% for goods: simple extrapolation of these figures to 2000 suggests that volume will be 30% higher than in 1988 or nearly twice that of 1975. The growing saturation of some Community transport networks highlights an alarming problem, particularly on the eve of the entry into force of the internal market, which is expected to bring a further increase in traffic.

The situation has been aggravated by liberalization in Central and Eastern Europe, which is likely to lead to the development of new types of transport (primarily East-West), for which infrastructure has long been underdeveloped.

This situation should normally have led to increased investment, but the figures show that, in real terms, the share of GNP invested in transport infrastructure declined from 1.5% in 1975 to 1% in 1990.

This accounts for the accentuation of the imbalance between transport volume and investment. If the trend is not reversed soon, the objective of "the free movement of persons, goods and services" throughout the Community, a sine qua non for the completion of the integrated internal market in 1993, will not be achieved.

This is why transport infrastructure has for some years been a subject of concern not only to industrialists<sup>1</sup> and transport operators,<sup>2</sup> but to politicians as well. As long ago as December 1988, the Rhodes European Council was calling on the "Council to consider with the Commission possibilities in this area".

Long before that European Council meeting, the Community had equipped itself with an instrument enabling it to assist the harmonious development of communications networks of Community interest, namely the Transport Infrastructure Committee, which was set up in 1978 to ensure coordination between Member States.<sup>3</sup>

With a view to strengthening coordination and promoting the development of intra-Community networks, the Commission for many years argued for the right to encourage Member States to carry out transport infrastructure projects of Community interest. It also underlined the importance of a multimodal system.

It was very difficult to obtain acceptance for Community action in this field. Only in 1982 did the Council accept a one-year Regulation on the financing of transport infrastructure projects, thereby acknowledging the need for the coordination of national policies. However, until 1990 the year-to-year renewal of such a Regulation blocked medium- and long-term action.

In 1990 the efforts of the Commission and Parliament<sup>4</sup> to obtain a multiannual Regulation that would enable financial constraints to be counterbalanced by a longer-term commitment bore fruit in the form of Council Regulation (EEC) No 3359/90 of 20 November 1990 based on Article 75 of the Treaty.

The Transport Infrastructure Committee's role was transformed for the purposes of implementing that Regulation. It became a regulatory committee as well as an advisory committee.

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1 Industry has long been sounding the alarm: the Round Table of European Industrialists has, since its inception in April 1983, repeatedly drawn the attention of politicians to the need to do something about growing transport demand.

2 CER 1989: proposal for a European high-speed rail network  
IRF 1990: AIMSE - the blueprint for the European motorways of tomorrow.

3 Council Decision of 20 February 1978.

4 E.g. Romera report, Doc. PE 148.168 (final).

## 2.2 Financial support to 1992

In order to encourage Member States to invest in projects of European interest that would not otherwise be accorded the same degree of priority, the Commission in 1982 obtained the inclusion in the budget of resources for that purpose. After a series of annual regulations, the three-year Regulation (EEC) No 3359/90 was adopted in 1990.

Article 11 of that Regulation provides for the Commission to report to Parliament and the Council on the experience gained in the implementation of this financial support operation from 1982 to 1991 inclusive. That document is annexed.

The report shows that Community investment of ECU 702.7 million has led to the mobilization of ECU 11 167 million, an investment factor of 16. This Community policy has led to a considerable degree of alignment in Member States' investment policy objectives and priorities. The result has been the establishment of an initial development phase for networks of Community interest, particularly in the field of inland transport.

In the regions, the action programme has been complemented by the regional Funds. Thus in the period 1989-93, the ERDF will have contributed almost ECU 7 billion for transport infrastructure in Objective 1 regions, including at least ECU 3 billion for sections of major infrastructure of European interest.

The ECSC (in the field of railways) and the EIB have also provided loans to finance transport infrastructure projects.

The results and the experience obtained provide a solid foundation for capitalizing on the new opportunities offered by the Maastricht agreements. The multiannual programme has proved the most suitable instrument, particularly in view of the long periods required for the preparation and execution of projects. Since national planning and programming, to which Community measures must be subsidiary, is also multiannual, effective and consistent Community action requires a similar temporal approach.

### 3. THE NEW APPROACH

#### 3.2 Trans-European networks in the Treaty on European Union (Maastricht)

Groundwork for the single market could not be restricted to transport alone: it had to include telecommunications and energy too.

Following discussions at ministerial level, the Council in December 1989 and June 1990 showed the importance it attached to networks of European interest and called for "the development and interconnection of trans-European networks, notably in the area of air traffic control, the linking of the main Community conurbations by broad-band telecommunications networks, the most efficient surface communications links and energy distribution."

The Commission responded with the communication of 10 December 1990 entitled "Towards trans-European networks: for a Community action programme".<sup>1</sup> Parliament backed the Commission's approach in its resolution of 7 April this year.<sup>2</sup> Because completion of an area without internal frontiers has brought an urgent need for trans-European networks in the four sectors of transport, telecommunications, energy and vocational training, their construction has been stipulated in the Treaty on European Union.

In Articles 129b to 129d, Title XII provides that trans-European networks in the areas of transport, telecommunications and energy infrastructure should contribute to the establishment of the internal market and the promotion of economic and social cohesion.

The Treaty further stipulates that, in order to achieve this dual objective, "the Community:

- shall establish a series of guidelines covering the objectives, priorities and broad lines of measures envisaged in the sphere of trans-European networks; these guidelines shall identify projects of common interest;
- shall implement any measures that may prove necessary to ensure the interoperability of the networks, in particular in the field of technical standards;
- may support the financial efforts made by the Member States..."

In the transport field, the Commission had already begun the groundwork for this.

1 COM(90) 585 final.

2 Resolution A3-0125/92.

This policy must, however, also be developed in coherence with the principle of subsidiarity.

When applied to the trans-European transport networks, there are a number of aspects of this principle to be considered in terms of the extent of Community action.

The principle objectives of the networks are to ensure the efficiency of the internal market, by improving the mobility of people and goods, and to reinforce economic and social cohesion.

To achieve these objectives, Community action is needed on:

- the visibility of the overall development needs of the transport networks in the Community as a whole and beyond, in a multimodal perspective which ensures that the capacities and inherent problems of each mode are taken into account (drawing up master plans);
- the conditions of interconnection (completing the missing links) and interoperability of existing national links (e.g. ensuring technical harmonization) in order to ensure their total efficiency at Community level;
- the development, consistent with existing networks, of new networks where their absence causes isolation (integrating landlocked, island or isolated regions) or hampers the development of part of the Community's territory (participation in the internal market);

The task of definition should be carried out at Community level but it is for the Member States to determine the precise details, the timing and the pace of completion of the infrastructure required to achieve the network defined. The indicative nature of the master plans defined at Community level allows Member States the freedom to act or not to act, but their actions must follow the guidelines which they have accepted at Community level.

The incentives at the Community's disposal must allow it to help reduce certain constraints at national level and convince a Member State, if necessary, to carry out a project which is within its field of competence and is in the general interest. It is in this spirit that Community financing will favour measures on support or incentives.



Council Decision 78/184/EEC of 20 February 1978 setting up the Transport Infrastructure Committee was the beginning. It led eventually to the Council's request in December 1989 that the Commission set up a high-level working party with a view to drawing up a high-speed rail masterplan.<sup>1</sup> Ten months later the Commission was asked to set up similar working parties, first for combined transport and then for roads and inland waterways. The Committee's brief must now be extended to cover maritime and air transport, since the multimodal approach has now become a priority.

As a result of cooperation with the Member States and interest groups, the Commission, as explained in the working paper of 29 November 1991,<sup>2</sup> now has draft network masterplans for the four modes of transport mentioned above, which it is presenting, together with this communication, for the approval of the other institutions.

Preparations are now also under way for the drafting of network masterplans for conventional railways, maritime and coastal shipping and air traffic control.

The establishment of masterplans for all modes of transport heralds a multimodal transport system, capitalizing on the advantages of the different modes. Such an approach has become vital, since it paves the way for more rational use of existing and future infrastructure and so recognizes the environmental constraints on the expansion of transport infrastructure. It is one of a series of measures required to reconcile the transport infrastructure needed to provide the mobility generated by the freedom of movement with the need to respect the environment.

In the field of maritime transport, ports and sea corridors should be integrated into the multimodal system by ensuring their connection with other transport networks. The different aspects of this integration are already being studied with interested parties. At the same time a proposal for a traffic management system is in the pipeline (the establishment of a vessel traffic system (VTS)). It should also contribute significantly to the protection of the environment by reducing the risk of accidents at sea.

The need to develop a transport network that is more sensitive to the environment is another major element of the Community's new policy approach. In its Green Paper on Transport and the Environment, the Commission identified the areas in which transport has a major impact, be it in the form of local air and noise pollution at local level or global warming - some 25% of the Community's CO<sub>2</sub> output is generated by transport use. The Green Paper, born both of the Community's commitment to stabilize CO<sub>2</sub> emissions and the goal of sustainable development set out in the 5th Environmental Action Programme, asserts the need for new thinking in transport if mobility is to be sustainable.

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1 Doc SEC(90) 2402 final.

2 SEC(91) 2274.

At the fourth informal meeting of the ministers responsible for regional policy and land-use planning, held in Lisbon on 15 and 16 May, it was agreed that account must be taken of the territorial and regional aspects of trans-European networks, namely:

- the links between regional and local infrastructure;
- the concept of "overall viability" (incorporating land-use and environmental considerations);
- the need to coordinate the different network financing instruments.

The efficiency and interoperability of the various modes of transport will be further increased by the development of an information, management and command and control system drawing on state-of-the-art communications technologies.<sup>1</sup> Furthermore, the white paper currently being prepared by the Commission will show the importance of intermodality as a means of achieving greater flexibility in the management of supply. Intermodality should also help resolve the transport system's capacity problems by integrating different networks and connecting them to the urban network.

When priorities are being established, a distinction must be made between long-term objectives, i.e. those to be attained within 10 to 20 years, and medium-term projects for execution on a time-scale of 5 years, the duration of the financial perspectives.

Thus the masterplans describe the infrastructure of Community interest needed to meet increased demand for mobility. They also detail the priority projects to be implemented as and when funds become available.

The limited resources available will be allocated to priority projects in accordance with policy objectives: a substantial percentage could, for example, be earmarked for rail and inland waterways in view of their comparative advantage in terms of protecting the environment, while road could be a priority in other regions for reasons of economic and social cohesion.

Article 129d provides that the series of guidelines shall be adopted by the Council, acting in accordance with the new joint decision-making procedure. Since the new Treaty is not yet in force, the Commission proposes that the legal instruments be based on Articles 75 and 84(2) of the Treaty and that they be transitional to permit their amendment once the Maastricht agreements and their implementing provisions have entered into force.

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<sup>1</sup> Account should be taken of the experience obtained from research programmes, such as DRIVE, EURET and ATLAS.

The Commission draws to the attention of the Community institutions the fact that there must be continuity in transport infrastructure measures if projects, and in particular the high-speed rail network, currently receiving Community support are to continue according to plan.

### 3.2 Future financing

In the years ahead transport infrastructure will require considerable financial investment. The volume of investment required in the Community's transport infrastructure during the period 1990-2010 has been estimated at from ECU 1000 billion to ECU 1500 billion, i.e. between 1 and 1.5% of GDP.

However, there is a danger that Member States' budget resources and borrowing capacity will become increasingly scarce. The tax burden appears to have reached the limits of the acceptable, while the scope for increasing the public debt burden is limited, especially in view of the 1997-99 deadline agreed for monetary union.

It is clear that any effort to increase the volume of present investment, for which Member States retain chief responsibility, will require new solutions to the problems of financing.

The background to all this may be found in the Commission's communication of 10 December 1990 on trans-European networks<sup>1</sup> and the explanatory memorandum of the Commission communication of 24 February concerning the declaration of European interest of infrastructure projects.<sup>2</sup> As elsewhere, private-sector financing is becoming increasingly important in the transport sector. To that end, the declaration of European interest will, in the form proposed, encourage and succour transport infrastructure projects financed wholly or partly by the private sector.

The use of various Community instruments for the financing of trans-European networks was broached by "From the Single Act to Maastricht and beyond: the means to match our ambitions"<sup>3</sup> and "The Community's finances between now and 1997".<sup>4</sup> Coordination between them must be improved.

The horizontal networks policy will be supported in Spain, Portugal, Greece and Ireland by the Cohesion Fund or, where appropriate, by the regional Funds.

A special EIB operation is also planned, in particular for the implementation of the financial support instruments listed in Article 129c of the Maastricht text.

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1 COM(90) 585 final.

2 COM(92) 15 final.

3 COM(92) 2000.

4 COM(92) 2001 final.

### The 1993 budget

The 1993 budget framework for transport infrastructure operations must be consistent with the overall perspectives proposed by the Commission in the two documents mentioned above. The guideline given covers the Community's financial contribution to the development of trans-European networks under budget heading 4, which concerns horizontal internal policies.

The transitional nature of the extension of the action programme in the field of transport infrastructure requires that financing for next year be established within the perspective for the Delors II package and the proposals of the 1993 preliminary draft budget. A sum of ECU 180 million is requested for this year. As emphasized in Commission communication COM(92) 2001, the role of Community intervention after the entry into force of the Maastricht Treaty should be characterized by three criteria:

- close coordination of national and Community programmes,
- effectiveness, through the identification where necessary of the implications of economic and social cohesion,
- an emphasis on promotional measures and incentives in line with the principle of subsidiarity.

Community financial support in the field of transport infrastructure has generally taken the form of cofinancing. Financing procedures will gradually be brought into line with Title XII of the Maastricht Treaty. During the transitional period the Community will give priority to feasibility studies and interest rate subsidies, in line with the Regulation of 20 November 1990, and subsequently (other than the Cohesion Fund or the ERDF) to the three forms specifically mentioned in Article 129c, namely feasibility studies, interest rate rebates and loan guarantees.

At the same time, and in a similarly transitional vein, thought must be given to the possibility of using the Cohesion Fund to finance trans-European transport networks in Spain, Portugal, Greece and Ireland, for which the Commission has earmarked ECU 1.565 billion. Although that fund should be set up by the end of next year at the very latest, an interface will be necessary between it and the networks proposed in this communication in accordance with Articles 129c and 129d of the Treaty on European Union.

The following table illustrates the modal breakdown of the Community funds available under the networks heading for the period 1993-97.

**Indicative breakdown of aid for transport infrastructure in 1992**

<b>Network</b>	<b>Total investment (ECU billion)</b>	<b>Projects of Community interest (ECU billion)</b>	<b>Breakdown of funds available 1993-97 (%)</b>
<b>High-speed rail</b>	<b>150</b>	<b>45</b>	<b>30</b>
<b>Combined transport and conventional railways</b>	<b>100</b>	<b>15</b>	<b>20</b>
<b>Motorways</b>	<b>120</b>	<b>12</b>	<b>15</b>
<b>Inland waterways</b>	<b>15 to 25</b>	<b>2</b>	<b>7</b>
<b>Airports and air traffic control</b>	<b>8*</b>	<b>3*</b>	<b>20</b>
<b>Maritime transport</b>	<b>N.d.</b>	<b>1**</b>	<b>8</b>
		<b>TOTAL</b>	<b>100</b>

\* Air traffic control only

\*\* Southern European VTS

### 3.3. Cooperation with non-member countries

The EEA Agreement, the Europe agreements with Poland, Czechoslovakia and Hungary, and the cooperation agreements with the other countries of Central and Eastern Europe provide for close cooperation between the Community and its co-signatories in the field of transport infrastructure. The same is true of the Alpine transit agreements recently initialled with Switzerland and Austria. Last year's transit agreement with Yugoslavia will have to be renegotiated with the republics concerned.

Within this framework, the Community will have to promote the interconnection of its network of major European routes with those of its neighbours. The AGR, AGTC, TEM and TER agreements concluded at Geneva within the framework of the ECE for the identification of the major European routes will also have to be taken into account. The Commission will continue to work in the ECE for the application and development of these agreements.

The above is in the spirit of the conclusions of the Prague Conference on pan-European transport policy.

### 4. THE PROPOSAL FOR A NEW REGULATION

In line with the preceding point, this communication is accompanied by a Commission proposal amending the Regulation to ensure the continuation of the Community action programme in the field of transport infrastructure in the light of the Maastricht agreements.

The amendments do no more than bridge the gap between the three-year programme (1990-92) and the new Treaty. The changes include the filling-out of the objectives to be pursued. The articles laying down the procedures for Community financial support are unchanged.

The declaration of European utility provided for in Article 2 of the present Regulation will in due course be replaced by the Declaration of European Interest proposed by the Commission on 24 February,<sup>1</sup> depending on the order in which this proposal for extension and that proposal concerning the declaration are adopted.

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1 COM(92) 15 final - Proposal for a Council Regulation (EEC) concerning the declaration of European interest of infrastructure projects.

#### **4.1. Objectives**

Article 1(1) of the proposal includes most of the objectives for the development of networks of Community interest that have proved themselves in previous years. Some new objectives have, however, been included to underline the need for interconnection and interoperability not only between national networks but between modes too. Traffic management, safety and respect for the environment have likewise been included among the objectives.

Article 1(2) of the proposal extends the powers of the Transport Infrastructure Committee to the air and maritime sectors in order to preserve the multimodal approach and take account of their growing importance to the transport system.

#### **4.2 The extension of the programme of financial support**

The extended action programme follows the broad lines of the previous Regulation. Article 3 is particularly important in that it specifies those priority projects of each network masterplan eligible for Community financial support under Article 4, where such support is vital to bringing the project under way.

To the list of priority projects in Article 3 of the initial Regulation have been added the inland waterway, motorway, conventional rail, maritime transport and air networks. The traffic management system has also been included.

The amendment made by Article 1(5) provides for an annual report.

A new Article has been added on forecasting at Community level.

As regards the duration of the Regulation, Article 1(7) provides that it will be replaced, as and when necessary, upon the entry into force of the Treaty on European Union and its implementing provisions.

## 5. CONCLUSIONS AND PERSPECTIVES

In pursuit of aims connected with the working of the internal market and economic and social cohesion, the scope of future Community policy on the European transport infrastructure network must be widened.

The short-term measures planned for this purpose and covered in part by the proposals accompanying this communication are:

- (a) the establishment by the end of next year of series of guidelines for the different modes of transport, such as high-speed rail, road, inland waterways, combined transport, transport by air or sea, and for a European multimodal transport system; the development with the Member States of cooperation in the field of transport forecasting;
- (b) the continuation and reinforcement of measures taken since 1982 with regard to transport infrastructure financing, based in particular on the adoption of multiannual programmes and the focusing measures on the priorities established when modal masterplans are drawn up;
- (c) the implementation of measures relating to interoperability between networks.

At the same time, further back-up or follow-up measures must be planned to support the action taken, namely:

- (a) the coordination of Community or other financial instruments with a view to developing trans-European transport networks;
- (b) the decisive role that trans-European transport networks must play in land-use management and narrowing the gap between regions;<sup>1</sup>
- (c) the conclusion, within the appropriate forums, of agreements with non-member countries regarding the interconnection of different networks and measures for the interoperability of those networks;
- (d) the enhanced coordination of measures aimed at ensuring that transport infrastructure is developed and used in a context of sustainable mobility;
- (e) the study of methods for the social and economic analysis of infrastructure projects to identify clearly criteria of Community interest without neglecting externalities, all of which entails a suitable information system;
- (f) the in-depth analysis of the interplay of transport infrastructure and safety with a view to infrastructure measures aimed at increasing safety, especially on the roads;

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<sup>1</sup> Cf 4th informal meeting of the ministers responsible for regional policy and land-use planning, held in Lisbon on 15 and 16 May.



- (g) the promotion of private-sector investment, and risk capital in particular, through the establishment of a framework conducive to solving the problems associated with public-sector and private-sector partnership and permitting projects to become self-financing in the longer term;
- (h) the development of a European approach on the application of the "user pays" principle with a view to helping rationalize the allocation of the capital available for new investment;
- (i) the continuation of concertation with the industry and other groups interested in transport infrastructure, and in particular with regard to logistics, telecommunications and telematic systems;
- (j) the continuation of research projects, especially in the fields of the traffic management and control and the interoperability of networks.
- (k) the establishment of the schemes needed for the standardization of transport infrastructure and its use.

Proposal for a  
COUNCIL REGULATION (EEC)

amending Regulation (EEC) No 3359/90 for an action  
programme in the field of transport infrastructure  
with a view to the completion of an integrated  
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**THE COUNCIL OF THE EUROPEAN COMMUNITIES:**

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 75 and 84(2) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas, since the first multiannual financial support programme for infrastructure projects is due to expire at the end of 1992 and the various Community networks remain incomplete, it is vital that the present programme be extended;

Whereas transport infrastructure is crucial to the working of the internal market;

Whereas pilot projects should be planned to further the interoperability and interconnection of networks;

Whereas the maritime and air sectors are also part of an integrated transport market;

Whereas the equilibrium of Europe's territory, and in particular links with isolated regions, is of constant concern when transport networks are being planned;

Whereas objectives should take account both of users' interests and requirements relating to the environment, safety and the rational use of energy;

Whereas forecasts of future traffic development and land use will be needed and it is therefore desirable that the national forecasting organizations and institutions and the Commission should cooperate;

Whereas, pending more comprehensive measures based on future decisions relating to trans-European networks, Council Regulation (EEC) No 3359/90<sup>1</sup> should be transitional in nature;

Whereas that Regulation should not lay down an expiry date in order to prevent any gap in the action programme in the field of transport infrastructure,

**HAS ADOPTED THIS REGULATION:**

### Article 1

Council Regulation (EEC) No 3359/90 of 20 November 1990 is hereby amended as follows:

1. Article 1 is replaced by the following:

#### "Article 1

The Community shall identify transport infrastructure projects of Community interest within the framework of the action programme defined below and aimed at meeting one of the following objectives:

- eliminating bottlenecks;
- eliminating missing links;
- integrating areas which, geographically, are either landlocked islands, or situated on the periphery of the Community;
- reducing the costs associated with transit traffic and combined transport in cooperation with any third countries concerned;
- providing high-quality links between the major urban centres, including high-speed rail links;
- furthering the interconnection and interoperability of different transport networks with a view to a Community-wide multimodal network;
- improving compatibility with European networks outside the Community in cooperation with the non-member countries concerned, particularly in Central and Eastern Europe;
- ensuring optimal traffic management;
- ensuring a high level of safety for all modes of transport;
- protecting the environment and foster the rational use of existing and future infrastructures."

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1 OJ No L 326, 24.11.1990, p. 1.

2. A new Article 1a is added:

"Article 1a

Council Decision 78/174/EEC(\*) shall apply mutatis mutandis to maritime and air transport infrastructure.

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(\*) OJ No L 54, 25.2.1978, p. 16."

3. In Article 3, points 4 to 7 are replaced by the following:

"4. Inland waterway network

East-West routes

- Twentekanaal-Mittellandkanal link
- Improvement of the Mittellandkanal and the links between the Elbe and the Oder
- links between the Elbe/Oder and the Danube (non-Community project)

North-South routes

- wide link between the Seine and the Scheldt

River ports

- intermodal development"

5. trans-European road network

- cross-border links
- links to Scandinavia
- links to Central and Eastern European countries
- interconnection of the motorway network with other networks
- bypassing of major cities

6. conventional rail networks

- Community internal and external cross-border projects
- refurbishment and modernization of networks

7. the maritime network

- Mediterranean VTS (Vessel Traffic System) installations
- port developments for combined transport and short sea shipping

8. the air transport network

- airport development, including aids to navigation and to intermodality
- integrated air traffic management system in pan-European airspace

9. traffic management system

Development, for all modes of transport, of command, control and information systems using new communications technology

10. links with Greece and Ireland

Strengthening all types of modal links within and with both these Member States."

4. The following is added at the end of Article 5(3):

", without prejudice to the special rules permitting the cumulation of support from the Community budget."

5. In Article 11 "31 December 1991" is replaced by "31 December each year".

6. A new Article 11a is added:

"Article 11a

National and other transport forecasting institutions and organizations and the Commission shall cooperate in the preparation of Community-wide forecasts."

7. The second paragraph of Article 12 is deleted.

Article 2

This Regulation shall enter into force on the seventh day following its publication in the Official Journal of the European Communities.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Council  
The President



5. CLASSIFICATION OF EXPENDITURE: Differentiated appropriations/  
non-compulsory expenditure

6. TYPE OF EXPENDITURE

6.1 100% grant: NO

6.2 Subsidy for joint financing with other sources in the public  
and/or private sector: YES

6.3 Interest rate subsidy: YES

6.4 Other: Loan guarantees, feasibility studies

6.5 Should the operation prove an economic success, is there provision  
for all or part of the Community contribution to be reimbursed? NO

6.6 Will the proposed operation cause any change in the level of  
revenue? If so, what sort of change and what type of revenue is  
involved? NO

7. FINANCIAL IMPACT

7.1 Method of calculating total cost of operation

The progress of projects of Community interest eligible for support is accelerated by the efforts at Community level of all concerned by a given transport network, such as high-speed rail, waterways, road, combined transport or VTS (Vessel Traffic System) and ATC (Air Traffic Control). These efforts have made it possible to calculate the sums needed for the construction of a network, and in particular for projects of Community interest.

Many studies will probably be needed next year to determine the feasibility of projects and their impact; some projects may already begin to be financed or benefit from grants, interest rate subsidies or loan guarantees.

Total annual investment in projects of Community interest is estimated at ECU 10 billion (out of a total annual investment of ECU 50-60 billion). When the planned aid of ECU 180 million is being allocated, priority must be given to projects of Community interest which would not otherwise be carried out, or at least not with the same degree of urgency. The rate of return on the projects to be financed will also determine whether or not aid is given.

There will be a particularly heavy involvement in preliminary studies, since, while vital for assessing a project's feasibility, they are always difficult to finance.

## 7.2 Breakdown of operation by component

BREAKDOWN	(ECU million)		
	1992 BUDGET	1993 PDB	% CHANGE
Grants to projects	81.8	p.m.	
Interest rate subsidies	20	100	
Studies	38.9	80	
Loan guarantees	-	p.m.	
	140.7	180	

## 7.2 Indicative schedule of commitment appropriations

Commitment appropriations	PAYMENTS (ECU million)					
	1993	1994	1995	1996	1997	subsequent years
93	180	70	30		40	40
94						
95						
96						
97						

## 8. What anti-fraud measures are planned in the proposal for the operation?

Article 10 of the present Regulation contains specific provisions. That Article remains unchanged.



**SECTION 2: ADMINISTRATIVE EXPENDITURE (part A of the budget)**

1. Will the proposed operation involve an increase in the number of Commission staff? If so, how many? YES, 9 (3 x A, 3 x B, 3 x C)
2. Administrative expenditure involved in the proposed operation

BREAKDOWN	1992 BUDGET	1993 PDB	% CHANGE
- Expenditure on temporary staff and other human resources	-	250 000	
- Expenditure on office space	N	60 000	
- Expenditure on publications and information	I	100 000	
- Computing	L	50 000	
- Other operating expenses	-	50 000	
TOTAL	0	510 000	
Man-years		4/5	

**SECTION 3: ELEMENTS OF COST-EFFECTIVENESS ANALYSIS**

**1. OBJECTIVES AND CONSISTENCY WITH FINANCIAL PROGRAMMING**

This operation directly concerns the construction of the trans-European networks, which the Treaty on European Union (Article 3 of the Treaty; Title XII) regards as a vital Community policy.

It relates primarily to transport infrastructure and the application to that infrastructure of information technology designed for traffic management.

This policy is explicitly included in the Delors II package set out in the Commission communication of 12 February 1992 (COM(92) 2000).

- 1.1 Is the operation incorporated in the financial programming of the DG for the years concerned? YES, a five-year action programme.
- 1.2 To which broader objective defined in the DG's financial programming does the objective of the proposed operation correspond?

Single market, economic and social cohesion, construction of trans-European transport networks, mobility, common transport policy.

**1.3 Main factors of uncertainty which could affect the specific results of the operation**

The Member States' national budgets; their priorities are, however, included in Community programming.

**2. GROUNDS FOR THE OPERATION**

A policy to promote Community transport infrastructure networks presupposes the availability of budget resources for that purpose.

While all forecasts suggest a steady growth in transport demand (at present 3.5% a year, compared with annual GDP growth of 2.3%), the expansion of transport infrastructure is slow and subject to delays for both environmental and financial reasons.

Networks are at present far from homogeneous and affected by "missing links", bottlenecks and relative obsolescence: this is particularly true near borders, in underdeveloped regions, at points where they cross major natural barriers or in non-member countries of transit.

Since 1986 several Commission communications have underlined both the need to resolve financing problems and the value of financial frameworks, which, supported by the Community budget, would help raise capital for investment in the sector. Besides grants, these frameworks include interest rate subsidies, budget guarantees, tax breaks and measures to enhance a project's ability to finance itself.

To ensure the effectiveness of the Community operation, the Commission's most recent communications highlight the value of multiannual budgeting and stress the importance of programming and focusing aid.

- 2.1 Cost:** Community aid averaging up to 15% of the total investment in the projects selected.
- 2.2 Spin-off effects (impact beyond the specific objective(s)):** Facilitation of economic activities; integration of isolated areas; mobility of goods and persons.
- 2.3 Multiplier effect (ability to raise capital from other sources):** Public and private capital in the Member States is unlocked by the Community operation; pooling the available resources is made easier.

**3. MONITORING AND EVALUATION OF THE OPERATION**

Implementation of the Treaty on European Union entails the ongoing monitoring and evaluation of the operation, inasmuch as it is governed by a framework previously approved by the Council in the form of a series of guidelines (Article 129c of the Treaty).

- 3.1 Performance indicators selected: transport costs, congestion costs, economic and social benefit, improved logistics**
- 3.2 Details and frequency of planned evaluation: the Transport Infrastructure Committee is responsible for monitoring. The Regulation provides for triennial reports.**

STATEMENT OF THE IMPACT ON SME AND EMPLOYMENT

Subject: Proposal for a Council Regulation amending Regulation (EEC) No 3359/90 for an action programme in the field of transport infrastructure

1. Administrative obligations arising from application of the proposed Regulation

None.

2. Advantages for small firms

The amendments to the regulation have no direct impact on SME and employment. But the execution of the different network masterplans and their constituent projects may, however, be assumed to be beneficial.

3. Disadvantages for small firms

None.

4. Disadvantages in terms of employment

None.

5. Have both sides of industry been consulted beforehand?

No.

6. Is there any alternative, less binding approach?

No.

REPORT

on the experience gained in the implementation of the transport infrastructure policy provided for in Article 11 of Regulation (EEC) No 3359/90 for an action programme in the field of transport infrastructure with a view to the completion of an integrated transport market in 1992

1. Since 1982 the Community has been conducting a financing policy with specific budget resources with a view to:

- stimulating investment and channelling it towards the modernization of networks of Community interest;
- unlocking other sources of financing.

In the period 1982-92, ECU 702.7 million was earmarked for the execution of this policy, contributing to an investment totalling ECU 11 billion. With a rate of contribution of 6.5%, this policy has proved particularly effective in the mobilization of financing (a factor of 16).

The type of financing breaks down as follows:

<u>TYPE</u>	<u>AMOUNT (ECU MILLION)</u>
- Projects	
* Grants	555.05
* Interest rate rebates	79.65
- Studies	68.00
	<hr/>
	TOTAL 702.70

The policy has proved no less effective in achieving priorities, particularly since the adoption of the action programme permitting budget resources to be allocated, programmed and concentrated on a multiannual basis.

2. As regards the chief priorities (see Table 1), mention should be made of the successful involvement in the Channel Tunnel, both in terms of the funding of preliminary studies - relating to technical and economic feasibility and the financing of the fixed link - and the construction of the associated infrastructure, the financing of which had previously blocked the entire project.

PRIORITIES	COST	HEADING 700
Channel Tunnel * (1)	700	36.7
TGV Nord * (2)	3 500	139.7
TGV Sud *	—	—
Brenner route * (3)	1 800	50.9
Pyrenean crossings (4)	125	29
Links with Iberian Peninsula (5)	1 460	49.5
Links with Ireland (6)	226	25.1
Scanlink * (7)	465	31.8
Links with Greece * (8)	521	94.2
Combined transport * (9)	950	53.2
Other:		
Border infrastructure	500	53.6
Inland waterways	82	8.2
Bypass roads (10)	528	51.7
Studies (11)	(**)	68
Other (12)	45	6.7
<b>TOTAL</b>	<b>11 167</b>	<b><u>702.7</u></b>

\* For planning see footnote (11)

(1) Additional infrastructure.

(2) B, NL, D, L.

(3) Existing line.

(4) Seaport tunnel.

(5) Investment in E, F, P.

(6) Dublin-Belfast (road/rail), A5/A55 North Wales Coast Road.

(7) Electrification of the railway network.

(8) Rail/road routes Idomeni/Evzoni-Thessaloniki-Athens-Patras.

(9) Tunnel widening and intermodal platforms.

(10) London, Dublin, Luxembourg, Madrid, Tordesillas inter alia.

(11) Planning: Channel Tunnel (0.5), TGV Nord (17.5), TGV Sud (14.3), Brenner tunnel (5.7), Scanlink (7.2), high-speed rail link with Eastern Germany (10), combined transport network (0.5), integration of Iberian rail networks (high-speed and combined) (1.5), links with Greece (2), European command and control system (9).

(12) Chavants tunnel, Dordrecht bridge, port of Ostende.

(\*\*) Cost: ECU 265 million. NB the strategic nature of the studies in the context of future investment. E.g. the Channel Tunnel Rail Link Route Evaluation (cost: ECU 3 849 million), the Hamburg-Copenhagen link (Fehmarn) (cost: ECU 4 000 million), the Lyon-Turin link (cost: ECU 4 246 million), the Brenner Tunnel (cost: ECU 10 000 million) connection to the Portuguese and Spanish high-speed rail network (cost: ECU 4 908 million).

In this way road projects such as the M 20, A 20, A 2070, E 40, A 26 or RN 28 in the United Kingdom, France and Belgium have been carried out with Community support from budget heading 700. Community support amounted to ECU 26.7 million of a total investment of ECU 400 million.

Heading 700 support for rail infrastructure directly connected with the Tunnel has focused on the London-Folkestone line (ECU 10 million out of a total of ECU 300 million).

Community aid for this operation totalled ECU 36.7 million. With a total investment of ECU 700 million, this gives an investment factor of 19.

High-speed rail link: Paris - London - Brussels - Amsterdam - Cologne, with particular regard to sections in:

#### Belgium

Community support has enabled this country to surmount the most severe obstacles to the execution of the project, namely environmental and financing problems. Heading 700 credits covered half the cost of the Belgian study into the environmental impact of the construction of this line, while the project's financial set-up includes a Community contribution of ECU 200 million over 10 years in order to capitalize on its self-financing potential.

Belgium has already received ECU 79.65 million in interest rate rebates for the execution of this project: when set against the total cost of the investment, some ECU 1 650 million, this gives an investment factor of 20.7. In ten years time this factor is expected to be 8.2.

#### The Netherlands

ECU 30 million has been granted for projected investment on the Antwerp-Amsterdam route, including the construction of a new high-speed railway line, which will branch off from the Schiphol-Leiden line towards Rotterdam and from Rotterdam to the Belgian border. The total cost of the investment is put at ECU 1 450 million. Over ten years the Community is expected to contribute ECU 172 million to this project. Today's investment factor of 48.8 is expected to be 8.5 in ten years time.

#### Germany

ECU 20 million has been granted for investment on the Aachen-Cologne line. Against a total investment of ECU 250 million, the investment factor 12.5.

#### United Kingdom

Support has been provided for the technical, economic and environmental assessment of the different options for the London-Tunnel line. Environmental problems have prevented the government

from finalizing the new route or deciding on how to finance it. The study is costing ECU 35 million, of which heading 700 is covering ECU 17 million. The construction work is costed at ECU 3 849 million.

#### Luxembourg

Support has been provided for the electrification of the Luxembourg-Liège line. The total cost of the work is ECU 178 million: ECU 84 million in Luxembourg and ECU 94 million in Belgium. ECU 10 million has been granted for investment in Luxembourg, an investment factor of 8.4.

In this operation, the Community has provided ECU 139.7 million (plus ECU 17.5 million for planning in the UK) of a total investment of ECU 3 500 million (plus ECU 3 849 million), representing a current investment factor of 25.

#### **The Seville-Madrid-Barcelona-Lyons-Turin-Milan-Venice-Tarvisio/Trieste high-speed rail line**

This involves the execution of preliminary studies for each section. A total of ECU 19.1 million has been granted for the planning of the TGV Sud:

- ECU 5.2 million for the France-Mediterranean-Spain-Portugal route (including Madrid's Atocha station),
- ECU 13.9 million on the France-Italy route.

The cost of the studies totals about ECU 95 million.

#### **The Brenner rail crossing**

The construction of a new base tunnel is being considered as an alternative to the expansion of trans-Alpine road traffic. The project is costed at ECU 10 billion. Heading 700 support totalling ECU 5.7 million has helped pay for the preliminary technical, economic and financial feasibility studies.

Heading 700 has also been used to increase throughput on the existing railway line, for the construction or widening of tunnels, for the introduction of two-way running and for track straightening. The support provided totals ECU 50.9 million out of a total of ECU 1 800 million, yielding an investment factor of 35.4.

#### **Pyrenean crossings**

Community support has focused on the Somport route (Bordeaux-Pau-Zaragoza-Valencia), and the construction of the tunnel in particular.

ECU 29 million of a total of ECU 125 million has been committed. This represents an investment factor of 4.3.



### Links with Ireland

With a view to improving links between Ireland and the rest of the Community, support from heading 700 has focused on:

- doubling the width of the A5/A55 North Wales Coast Road, an operation costing ECU 189 million (involving the Pen-Y-Clip and Rhwalit Hill bypass), of which the Community is providing ECU 16.1 million, an investment factor of 11.7;
- modernization of the Dublin-Belfast railway line at a total cost of ECU 70 million, of which heading 700 is providing ECU 9 million, an investment factor of 7.8.
- the North-South Dublin-Belfast road, including several bypasses (Dunleer, Wexford, Shankill-Bray), among them the Dublin ring road, at a cost of ECU 110 million, of which ECU 17.4 million came from heading 700, providing an investment ratio of 1:6.3.

Support totals ECU 42.4 million out of a total investment of ECU 389 million, an investment factor of 8.7.

### Scanlink

Heading 700 support has been focused mainly on:

- the preliminary studies and work required for the construction in Denmark of the Store-Belt, Oresund and Fehmarn fixed links at a total cost of ECU 6 000 million, of which heading 700 is providing ECU 7.2 million;
- the electrification of the railways, and in particular the Ringsted-Odense line, at a total cost of ECU 60 million, of which heading 700 is furnishing ECU 13.8 million;
- the Oresund fixed link (earthworks), costing ECU 400 million, ECU 8 million of which comes from heading 700.

The overall volume of these investments is ECU 465 million, ECU 57.2 million of which is accounted for by heading 700 support, representing an investment factor of 8.1.

### Links with Greece

Heading 700 support for improving access to Greece has focused on modernizing the North-South Idomeni(rail)/Evzoni(road)-Thessaloniki-Athens-Patras routes, in particular:

- the upgrading of the Idomeni-Thessaloniki-Athen-Patras rail line at a total cost of ECU 279.5 million, ECU 37.3 million of which was provided under heading 700;
- doubling the width of the Evzoni-Thessaloniki-Athens-Patras road at a total cost of ECU 241.5 million, ECU 56.9 million of which came from heading 700;

- feasibility studies concerning the new Igoumenitza-Volos road and two-way running on the Korinthos-Patras railway line.

The overall volume of these investments is ECU 521 million, ECU 94.2 million of which is accounted for by heading 700 support, an investment factor of 5.5.

#### Links with the Iberian Peninsular

Heading 700 support for this operation includes:

- work on road links in France: the RN 20 (ECU 9 million of a total of ECU 54.2 million);
- upgrading links in Spain: the N 1 road (ECU 8 million of a total of ECU 57.9 million), the Coslada-Alcala and Zaragoza-Barcelona railway lines and Madrid's Atocha station (ECU 20 million towards a total cost of ECU 1 068 million);
- upgrading links in Portugal: the Paredes-Penafiel road (ECU 1.5 million out of ECU 10 million), the Beira-Alta and Northern rail lines (ECU 11 million of a total of ECU 205 million).

(Investment in the Iberian Peninsular has also been financed under the headings of "bypass roads", "combined transport", "TGV-Sud", "Pyrenees". Such projects include the M 40, the Valencia-Barcelona line, the Lisbon Intermodal terminal, the Tordesillas ring road and Somport. Of a total cost of ECU 440 million, ECU 49.6 has been covered by heading 700.)

In principle, heading 700 support accounts for ECU 49.5 million of a total cost of ECU 1 385 million, representing an investment factor of 28. (In fact, heading 700 is providing ECU 99.1 million of a total of ECU 1 835 million, an investment factor of 18.5.

3. Heading 700 support for the studies needed for planning the various operations is particularly significant (see Table 2). Funding for studies covers ECU 68 million of a total cost of ECU 265 million. The total investment required for the execution of works amounts to about ECU 40 billion.

TABLE 2

#### STUDIES (ECU million)

PROJECT	HEADING 700	INVESTMENT INVOLVED
TGV Nord	17.5	3 500
TGV Sud	14.5	15 000
Brenner route	5.7	10 000
Scanlink	7.2	6 000
Links with Greece	2.0	2 410*
Other	21.3	
Total	68	about 40 000

\* Plus Igoumenitza-Volos road.

4. The breakdown of the sums by country was as follows:

HEADING 700 - BREAKDOWN BY COUNTRY (ECU MILLION)

Belgium	91.85		(13.07%)
Denmark	37.00		( 5.27%)
Germany	47.30		( 6.73%)
Greece	97.00		(13.80%)
Spain	58.90		( 8.38%)
France	67.80		( 9.65%)
Ireland	26.60		( 3.79%)
Italy	91.30		(12.99%)
Luxembourg	19.00		( 2.70%)
Netherlands		48.45	( 6.90%)
Portugal	22.20		( 3.16%)
United Kingdom	85.50		(12.17%)
EEC	9.80		( 1.39%)
TOTAL	702.70		(100%)

COMMISSION COMMUNICATION

on the creation of a Trans-European Road Network

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1. FRAMEWORK OF WORK TO BE CARRIED OUT BY THE COMMUNITY

1. Following the European Council of Maastricht, the Commission indicated in its programme for 1992<sup>1</sup> that it intended to submit concrete proposals to the Council concerning the trans-European networks.

The present communication meets this objective as far as the road network is concerned, this being an exceptionally important network for enabling the movement of people and goods within the frontier-free area and the internal market, strengthening the economic and social cohesion of the Community and creating an environment favourable for European competition.

This communication also falls within the framework of the proposal for a Regulation amending Council Regulation No 3359/90 of 20 November 1990 on the second multiannual action programme 1990-1992 on transport infrastructure<sup>2</sup>, presented at the same time by the Commission<sup>3</sup>.

At the same time the Commission meets the express request of the Council of Ministers in charge of Transport which in its meeting of 16 and 17 December 1991 had asked it for concrete proposals concerning the Trans-European Road Network.

2. In drawing up its proposals, the Commission particularly took into consideration the recommendations adopted by a group of national and international experts, the Motorway Working Group<sup>4</sup>, specially set up for the purpose within the Transport Infrastructure Committee which met on six occasions between January 1991 and February 1992.

The Commission moreover informed the Council of the initial conclusions of the Group in November 1991<sup>5</sup>.

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1 COM(92) 2000: The Commission's programme for 1992.

2 Regulation (EEC) No 3359/90 for an action programme in the field of transport infrastructure with a view to the completion of an integrated transport market in 1992.

3 COM(92) ...: Draft amendment to Regulation (EEC) No 3359/90.

4 Made up of the Commission, the 12 Member States; the ECMT, the UN-ECE, the EIB and the following organizations: the IRF, the PIARC, the SECAP, the ERT, the ACEA, the IRU and the ITA.

5 SEC(91) 2274 "Transport Infrastructure Networks".

Since then the Working Group has reached a broad consensus on an approach to the road network as a whole within the European transport system.

The report drawn up by the Motorway Working Group titled "Trans-European networks: towards an outline plan for the road network and road traffic"<sup>1</sup> deserves special attention from the Community institutions. Indeed, a coherent approach with a view to drawing up a Community policy on roads, while adhering to the principle of subsidiarity, would seem to be especially necessary and urgent for all the Member States, as well as for the international organizations, the operators, industrialists and users represented.

This report is itself being sent at the same time to the Council as a Commission working document.

3. On the basis of the work carried out by the Group and taking its recommendations into account, it is now possible to take a certain number of important decisions in planning the Trans-European Road Network and implementing a Community policy on roads, particularly in terms of

- an outline plan for the trans-European network,
- a road traffic policy,
- internalizing external factors,
- financing.

This is the object of the present communication.

4. This policy must also be developed in coherence with the principle of subsidiarity.

When applied to the trans-European transport networks, there are a number of aspects of this principle to be considered in terms of the extent of Community action.

The principle objectives of the networks are to ensure the efficiency of the internal market, by improving the mobility of people and goods, and to reinforce economic and social cohesion.

To achieve these objectives, Community action is needed on:

- the visibility of the overall development needs of the transport networks in the Community as a whole and beyond, in a multimodal perspective which ensures that the capacities and inherent problems of each mode are taken into account (drawing up master plans);
- the conditions of interconnection (completing the missing links) and interoperability of existing national links (e.g. ensuring technical harmonization) in order to ensure their total efficiency at Community level;

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<sup>1</sup> SEC(92) ... Trans-European Networks: towards an outline plan for the road network and road traffic.

- the development, consistent with existing networks, of new networks where their absence causes isolation (integrating isolated, island or isolated regions) or hampers the development of part of the Community's territory (participation in the internal market);

The task of definition should be carried out at Community level but it is for the Member States to determine the precise details, the timing and the pace of completion of the infrastructure required to achieve the network defined. The indicative nature of the plans defined at Community level allows Member States the freedom to act or not to act, but their actions must follow the guidelines which they have accepted at Community level.

The incentives at the Community's disposal must allow it to help reduce certain constraints at national level and convince a Member State, if necessary, to carry out a project which is within its field of competence and is in the general interest. It is in this spirit that Community financing will favour measures on support or incentives.

## II. CONCLUSIONS OF THE WORKING GROUP

### 1. The status of the road network of interest to Europe in the run-up to 1993

1.1 The socio-economic importance of roads for the entire Community is constantly increasing.

In terms of overland transport, roads carry more than 90% of transport users (in traveller km) and more than 70% (in tonne km) of goods transported. As regards international mobility, they carry 70% of travellers and 60% of goods traffic.

This international traffic is concentrated mainly on:

- the motorway network, which appears essential from an economic point of view and is particularly well-suited to a frontier-free area
- the centre of the Community, geographically.

1.2 In the run-up to 1993, the European network still appears to be ill-equipped and its smooth operation to be under threat.

The network is incomplete particularly in those countries on the periphery of the Community. The motorway or expressway network is still in an embryonic state in Ireland, Greece and Portugal and is expanding significantly in Spain. There are still missing links in other Member States, such as the United Kingdom, France or Germany in its new Länder.

The interoperability of the network could be improved, particularly with regard to the standards of the infrastructure and road signs and signals.

At the same time, the network is threatened by the heavy increase in traffic, particularly international traffic which is growing more rapidly than domestic traffic. Delays are becoming increasingly frequent in the Benelux countries, the Ruhr, around London, the Ile de France, Northern Italy and on the North-South corridors.

1.3 Forecasts of growth in mobility suggest that the Community is in danger of being faced in the medium term with even more serious traffic problems if no large-scale action is taken to combat the congestion.

### 2. Modernization of the network

In order to create a truly trans-European Road Network, the Working Group is well aware of the need to construct the missing links and even missing networks in the countries on the periphery of the Community. In most cases these infrastructures have already been planned by the Member States. It is because of this national planning that it has been possible to put forward an outline plan for the network up to 2002. Nonetheless, in certain countries (Germany, Greece, Spain, France and Ireland) with longer-term plans, some 5 000 km of links for the trans-European network will not be completed until after 2002.

The plan for the network consists of approximately 37 000 km of links of motorway or near-motorway standard, of which approximately 12 000 km are motorways or high quality roads to be constructed in the next 10 years, with approximately 40% being sited in the outlying countries of the Community.

Stress is laid on the development of motorways in the four peripheral countries (E, P, GR, IRL) currently with a low density of motorways. The increase will be of the order of 70% and the length of roads will increase from about 7 000 km to 12 000 km in total.

Execution of the outline plan will enable the Community area to be structured, particularly in the outlying regions of the Community, and will facilitate international trade, personal mobility and regional access to the major international routes.

Particular attention should be paid to by-passing large European conurbations, to improving inter-connections with other forms of transport, particularly with multimodal terminals, as well as to the development of the network across the continent in order to guarantee transit of Community goods, and links to Scandinavia and the countries of Central and Eastern Europe.

Standardization of the technical characteristics of the major road infrastructures would appear to be worthwhile. A special study will be set up to encourage the development of a typology of inter-urban routes.

Finally, the compatibility of road equipment, particularly that incorporating the new technologies, must be increased in order to be able to provide a uniform standard of comfort throughout the trans-European network, and work on standardization should be actively continued.

### 3. The need for a road traffic policy

3.1 In view of increasing congestion, the Community has to adopt a proper strategy in order to optimize road mobility.

To this end, action must in particular be taken to

- rationalize existing traffic,
- encourage the use of other complementary forms of transport (particularly for the movement of goods)
- pass on the actual direct and indirect costs of using the network directly to the users<sup>1</sup>.

It would appear that a structural measure on the costs of using the road infrastructure is appropriate to regulate traffic effectively and maximize initiatives for combating congestion. Whatever the possible solutions (raising taxes, collecting tolls), concerted consideration will actively be given to this subject.

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<sup>1</sup> In accordance with the Commission proposal: COM(90) 540, Proposal for a Council Directive on the charging of infrastructure costs to heavy goods vehicles.



Given the interfaces between the urban and trans-European networks, the Working Group is of the opinion that the Community could play a significant role in defining a frame of reference for regulating traffic (for example with regard to the development of systems using the new technologies) in and around towns, where traffic problems are even more serious than on the European network.

3.2 Furthermore, in the trans-European network it will be necessary to develop the quality of the services offered to the user who, within a frontier-free area, is becoming more and more European. This means that particular attention will have to be paid to the requirements of road safety, to the development of road information and to traffic management as well as to optimizing travel time.

As for road safety, the choice of standards has a powerful influence and those applying to motorways would bring considerable advantages in this area. Tightening international regulations relating to road signs, signals and markings must be looked into. The Working Group underlined the importance of the proposals drawn up within the framework of the High-Level Group on Road Safety<sup>1</sup>.

Road information and traffic management are currently undergoing a technological revolution which should permit a considerable increase in traffic fluidity. The "intelligent" road and "intelligent" vehicles, which have emerged from European research programmes such as Drive and Prometheus, should actively aid the development of a truly innovative traffic concept. However, a certain number of clarifications of a political nature will have to be made rapidly in order not to delay the introduction of equipment for integrated traffic management. It seems that a concerted European plan for the introduction of this equipment and its standardization would be particularly useful.

The Community will have a major role in introducing effective management of international traffic on the trans-European corridors.

Finally, optimizing travel time will in turn help to optimize the network: rest areas, service areas for professional travellers as well as intermodal transfer complexes will enable the use of the road network within the transport system to be rationalized.

#### 4. Taking external factors into account

The creation of the Trans-European Road Network will require a better understanding of the effects which it will produce, whether they are negative (for the environment, for example), or positive (for spatial development).

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1 Report of the High-Level Group on Road Safety.

4.1 The effects of the Trans-European Road Network on the environment will have to be analyzed specifically. In this respect, it does, however, appear that:

- It will be necessary to limit the physical impact of the new road links which are to be constructed and to reduce the impact of the existing links.
- roads must play an important role in the Community strategy on controlling CO<sub>2</sub> emissions and the implications for the greenhouse effect. This consideration demonstrates the advisability of optimizing mobility on the roads.

The Green Paper<sup>1</sup> on the impact of transport on the environment: A Community strategy for sustainable mobility further emphasizes these two points.

4.2 The effects of the Trans-European Road Network on spatial development should be felt:

- both at local level, where many regions should benefit from better access to the international network;
- and globally, where the balance and the cohesion of the Community will be strengthened by the creation of a network serving the whole of the Community and non-member countries, providing the entire population and economic agents with a high and comparable level of service wherever they may be.

## 5. Financing

The cost of turning the master plan for the network into reality is estimated at around ECU 120 billion, based on available information.

In view of the restrictions which have affected investment in infrastructures and of the need to look for greater mobilization of financing capacities, particularly from the financial markets, and of the trend towards internalizing the external costs and regulating road traffic mobility, it is probable that there will be a concerted overhaul of the financing of road infrastructure.

Toll-levying motorways are an excellent example of successful financing of transport infrastructure without recourse to budget capacities.

## 6. Final recommendations of the Working Group

At its meeting of 27 February 1992, the Working Group adopted the following recommendations addressed to the Commission:

"To enable the Community to contribute to the establishment and development of a trans-European road network, the group recommends that the Commission present appropriate proposals to the Council in order to:

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1 Green Paper on the impact of transport on the environment: A Community strategy for sustainable mobility.

1. reach the objective of providing the territory of the Community with a high quality road network, i.e. a network of motorways and expressways, which will:
  - provide for the interconnection of national networks, by means of the construction of missing stretches of road and the improvement of existing ones if necessary, so that they are fully accessible and coherent across the Community;
  - bring the interoperability of the network up to standard, in particular by means of the standardization of road design and the adoption of a policy of traffic management.
2. declare the projects listed below to be of common interest on the grounds of their socio-economic impact, and establish a list of priorities of Community intervention in accordance with the following criteria:
  - contribution to the creation of trans-European axes;
  - elimination of bottlenecks;
  - integration of landlocked or peripheral regions;
  - facilitation and safeguarding of international trade, including transit, in cooperation with any third country concerned;
  - improvement of links on land/sea routes;
  - provision of high quality links between major conurbations.

These projects are the following:

- (a) The completion of links as depicted on the annexed map and upgrading of links on the existing network.
  - (b) The introduction of advanced telematics systems in road transport and the application of road management measures in the trans-European network.
3. promote, where appropriate and within the framework set out above, the following lines of action in order to ensure the homogeneous, balanced and sustainable development of the trans-European road network:
    - definition of a European standard of service;
    - implementation of measures needed to improve road safety;
    - establishment of a European strategy for road traffic management and for optimizing mobility on major trans-European routes, taking regional and multimodal aspects into account;
    - adoption of a concerted plan for road telematics;
    - implementation of measures needed to reduce the impact of the road schemes on the environment;
    - drafting of proposals for financing infrastructure needed for road transport."

### III. COMMISSION PROPOSALS

1. The Commission takes due note of the progress of the work and of the recommendations made by the Working Group

These recommendations are in line particularly with the guidelines defined within the framework of the policy on transport infrastructure networks drawn up by the Commission in the document COM(92).... Transport Infrastructure.

These recommendations are in accordance with the proposals already sent to the Council on trans-European networks<sup>1</sup> and introduced in the Treaty on political union.

Execution of the plan of the Trans-European Road Network as it will look in 2002 and the various types of action proposed to ensure its interoperability will contribute towards guaranteeing the competitiveness of the European economy.

The construction of the missing links, or even of the missing networks, will significantly strengthen the economic and social cohesion of the Community, at the same time as the action taken directly within the framework of the Community's regional policy. Ultimately, according to the needs in the area of spatial development evaluated by the Commission<sup>2</sup>, the territorial balance of the Community will be strengthened by it.

The network plan is also an important step forward in stressing the need to develop a traffic policy at Community level. Such a policy is a priority in view of the congestion on the roads, mobility trends and environmental prerogatives. It should, in particular, address the challenge of the estimated 35% increase in the number of vehicles within the Community by 2010.

The setting up of urban and interurban systems using new technologies for managing traffic, drawing on the results of the Drive and Eureka research programmes (Prometheus in particular), will be significant in this respect. It should, moreover, be pointed out that the standardization of this new equipment for traffic management will have a considerable industrial impact, since European industry will meet with serious competition in this market from American and Japanese industries.

Similarly, the introduction of a multimodal transport network, particularly for the transportation of goods, should be made easier by the development of interconnections between the Trans-European Road Network and the large multimodal centres. The reallocation of long-distance traffic to the combined transport network and to the inland waterway network would be increased by developing systems for charging for the use of infrastructures, further integrating the external costs of transportation in terms of time lost, congestion and pollution.

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1 COM(90) 585 "Towards trans-European networks - For a Community action programme".  
2 COM(91) 452 "Europe 2000 - Outlook for the development of the Community's territory".

In accordance with the Green Paper on the impact of transport on the environment which it has recently adopted<sup>1</sup>, the Commission stresses that it is particularly necessary that road traffic contributes towards limiting air pollution, particularly in a multimodal framework, while not putting at risk the economic efficiency of the transport system and the freedom of choice of the users.

The part played by the Trans-European Road Network should be evaluated with this in mind.

2. The Commission proposes that the Council adopt the proposal for a Decision annexed hereto.

3. Continuing the work

In order to promote the development and smooth running of the Trans-European Road Network, it is necessary to continue the work started in the following way<sup>2</sup>:

- Monitor the development of traffic flows, particularly international flows, on the major European corridors. Evaluate any action taken, in terms of the creation of new road infrastructures, traffic management and transfers to other forms of transport.
- Define a Community strategy for developing standards for the user services in terms of information, safety and optimization of travel time.
- Examine the consequences of cost internalization policies for road users and for the transport system.
- Continue work on a European plan for developing equipment for traffic management, drawing on the European research programmes on telematics, particularly Drive.
- Evaluate the impact of the trans-European network on the environment, so that it does not adversely affect the economic efficiency of the transport system and the freedom of choice of the users.
- Evaluate the impact of the trans-European network on the spatial development and economic and social cohesion of the Community.
- study initiatives to encourage the private financing of the road infrastructures.

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1 Green Paper on the impact of transport on the environment: A Community strategy for sustainable mobility.

2 These points largely emerged from the report of the Motorway Working Group: SEC(92) ... Trans-European networks: Towards a master plan for the road network and road traffic.

- evaluate the implications for the multimodal urban transport system of policies to combat road congestion in and around towns.
- examine the interrelations between the Trans-European Road Network and logistics systems for the transportation of goods.

**Proposal for a  
COUNCIL DECISION**

**on the creation of a Trans-European Road Network**

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**THE COUNCIL OF THE EUROPEAN COMMUNITIES.**

**Having regard to the Treaty establishing the European Economic Community, and in particular Article 75 thereof,**

**Having regard to the proposal from the Commission<sup>(1)</sup>,**

**Having regard to the opinion of the European Parliament<sup>(2)</sup>,**

**Having regard to the opinion of the Economic and Social Committee<sup>(3)</sup>,**

**Whereas it is essential for the proper functioning of the internal market to improve the efficiency of the transport infrastructure networks between the regions of the Community,**

**Whereas road infrastructure plays a fundamental economic and social role in the transport of goods and persons throughout the Community as well as to and from third countries,**

**Whereas the interconnection of national road networks needs to be completed by constructing the links that are missing and making the necessary improvements to existing links in order to improve regional accessibility and to reinforce economic and social cohesion throughout the whole Community area,**

**Whereas road infrastructure are needed to provide intermodal connections,**

**Whereas environmental impact assessments for road projects must be taken into account,**

**Whereas there is a need to guarantee the inter-operability of the network to a satisfactory level, in particular through road standards and equipment and through traffic management policies,**

**Whereas the development of a Trans-European Road Network requires the formulation of a plan delimiting the priority operations to be undertaken,**

**Whereas the outline plans of transport infrastructure networks are of an indicative and evolutionary nature and tend progressively towards a multi-modal transport system,**

---

(1)

(2)

(3)

HAS ADOPTED THIS DECISION:

Article 1

The plan for a Trans-European Road Network by the year 2002, as shown on the attached maps in the Annex, shall be composed of motorways and high-quality roads.

The completion and functioning of the network shall be ensured by:

- construction of the missing links and upgrading of existing links, where necessary, and
- implementation of advanced road computerized information systems and development of traffic management measures.

Article 2

Priority measures shall be taken within the appropriate framework for the following projects:

- (a) Missing links, in particular those situated on cross-border intra-Community axes and those of interest to peripheral and isolated regions;
- (b) Third country-Community links
  - \* Scandinavian link
  - \* Links with Central and Eastern European countries;
- (c) Intermodal connections, in particular with a view to combined transport axes;
- (d) Bypasses around the main urban centres on the trans-European network;
- (e) Traffic management projects, including demonstration projects.

Article 3

The completion and functioning of the Trans-European Road Network shall involve:

- a common methodology for assessing the environmental impact of road projects;
- a unified European system for road classification and signs;
- a harmonized set of standards to ensure full compatibility with a view to traffic management systems and computerized information systems;
- a traffic policy for the trans-European axes.



Article 4

The plan for a Trans-European Road Network by the year 2002 shall be indicative in nature, being intended to promote action by the Member States and, where appropriate, by the Community with a view to carrying out projects relating to the networks. This Decision shall not entail any financial commitment on the part of the Member States or the Community.

Article 5

This Decision is addressed to the Member States.

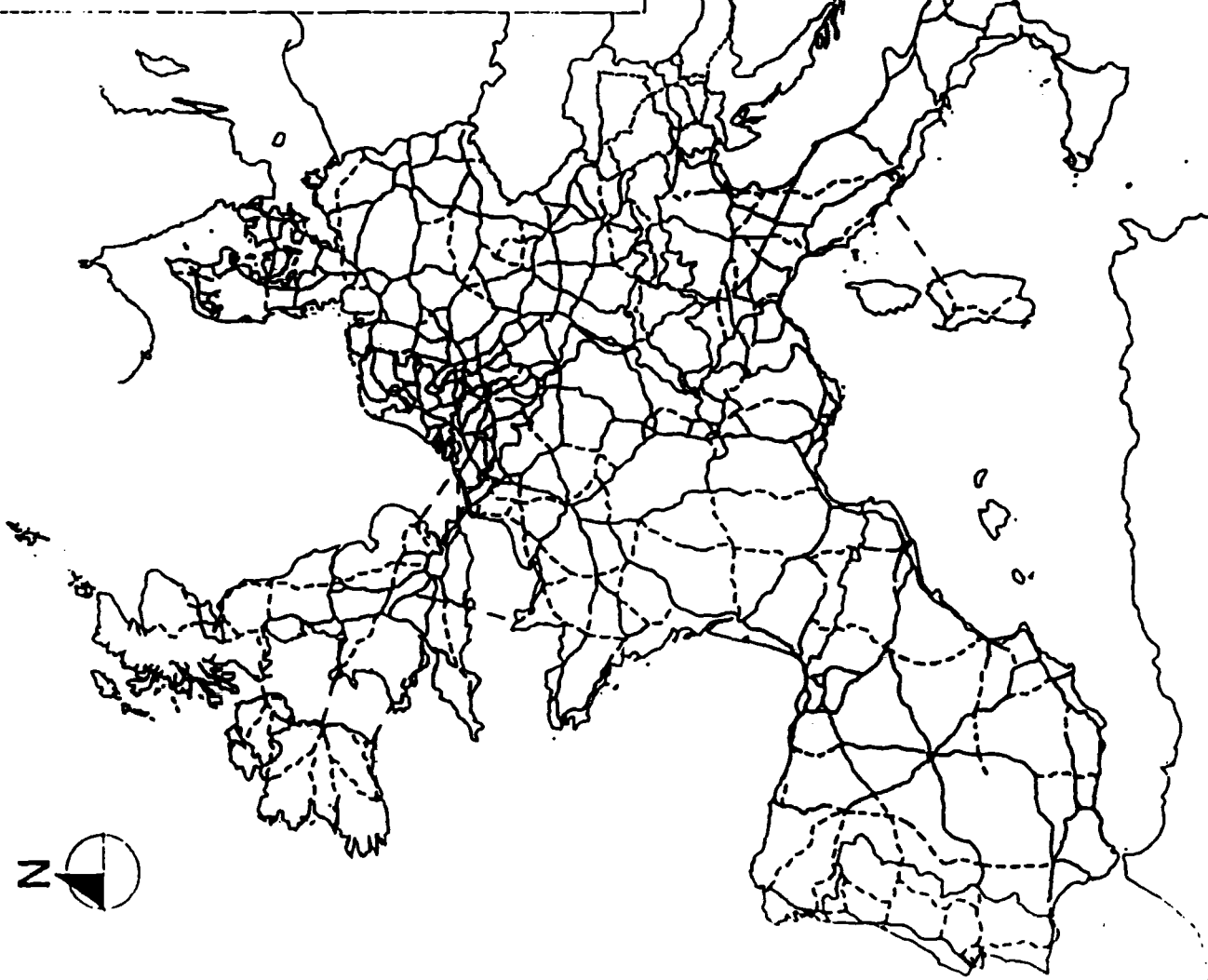
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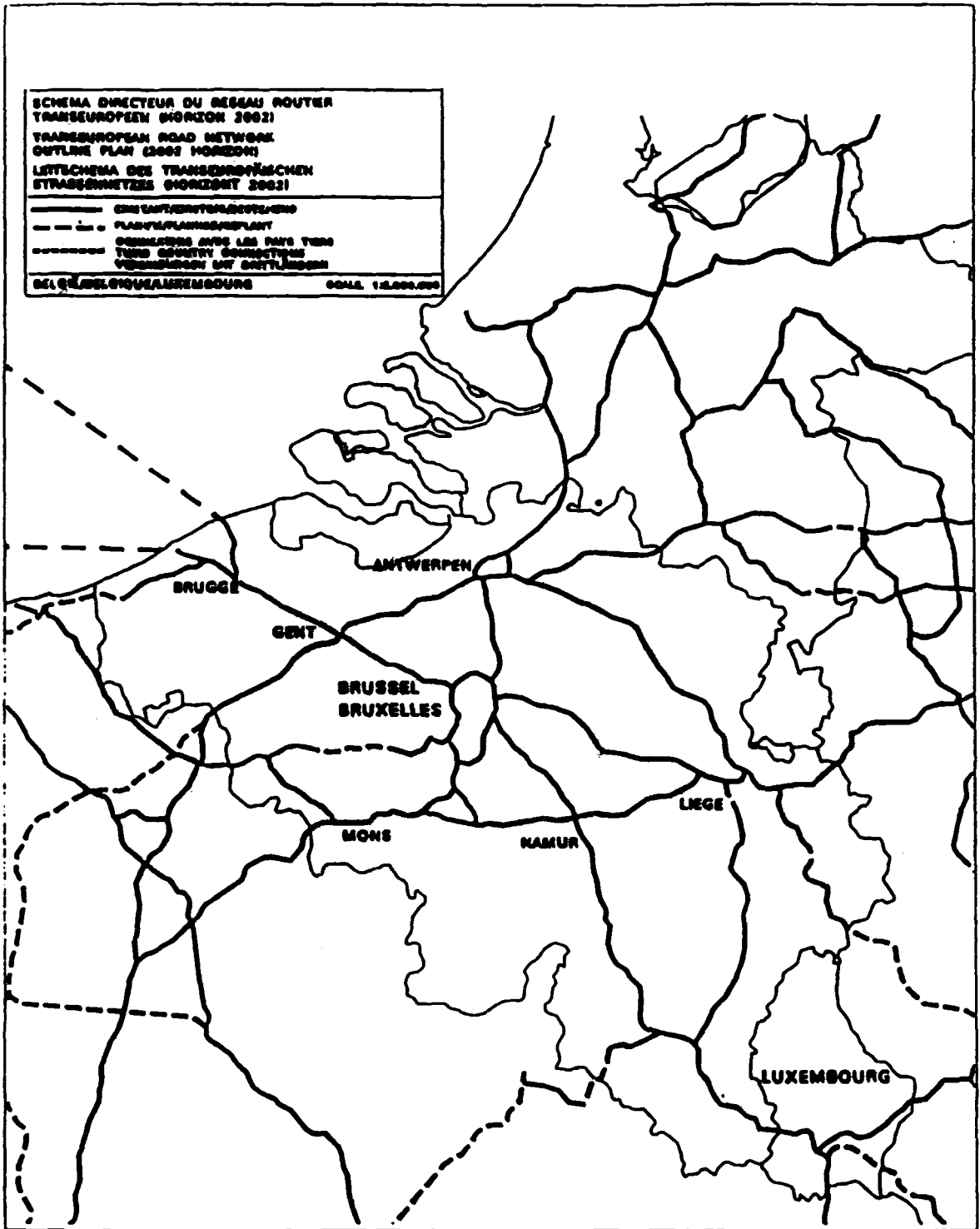
For the Council  
The President

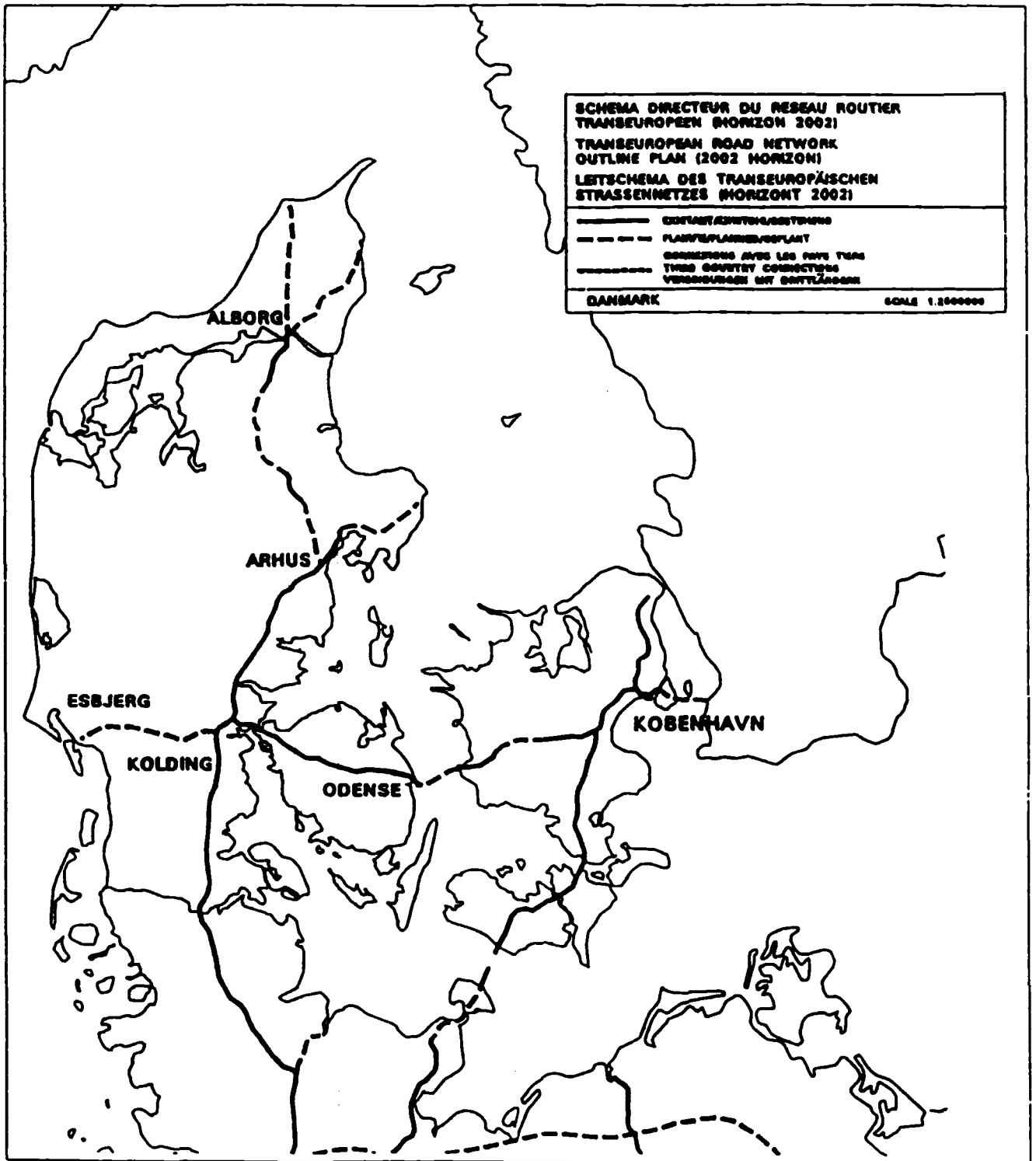
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TRANSEUROPEAN ROAD NETWORK  
OUTLINE PLAN (2002 HORIZON)  
LEITSCHHEMA DES TRANSEUROPAISCHEN  
STRASSENNETZES HORIZONT 2002

----- L'EXISTANT (EXISTING ROAD NETWORK)  
- - - - - Plan principal (main plan)  
- - - - - COMPLEMENT AVEC LES PAYS TERS  
VANDS (COMPLEMENT WITH THIRD COUNTRIES)  
- - - - - VANDS (COMPLEMENT WITH THIRD COUNTRIES)

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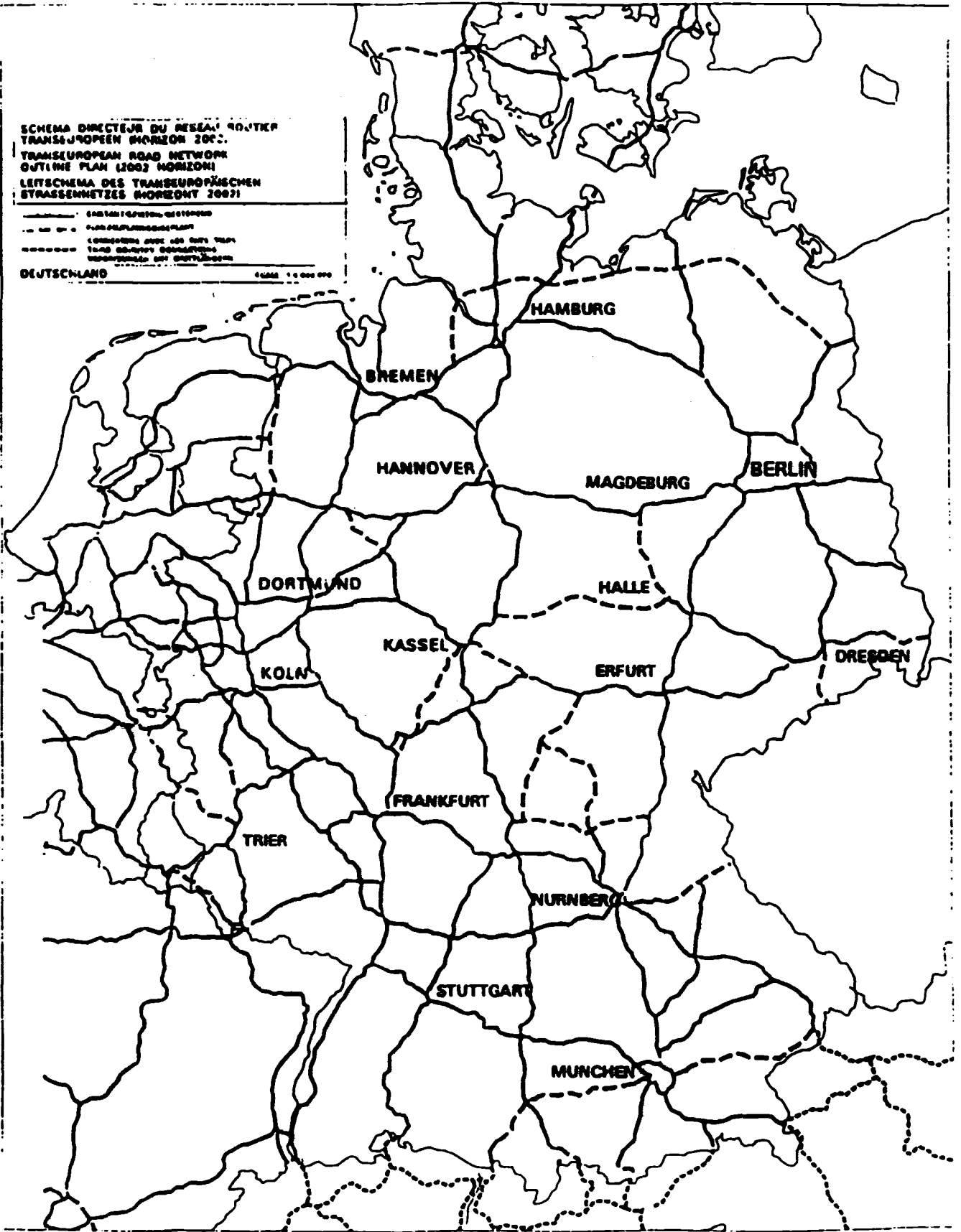


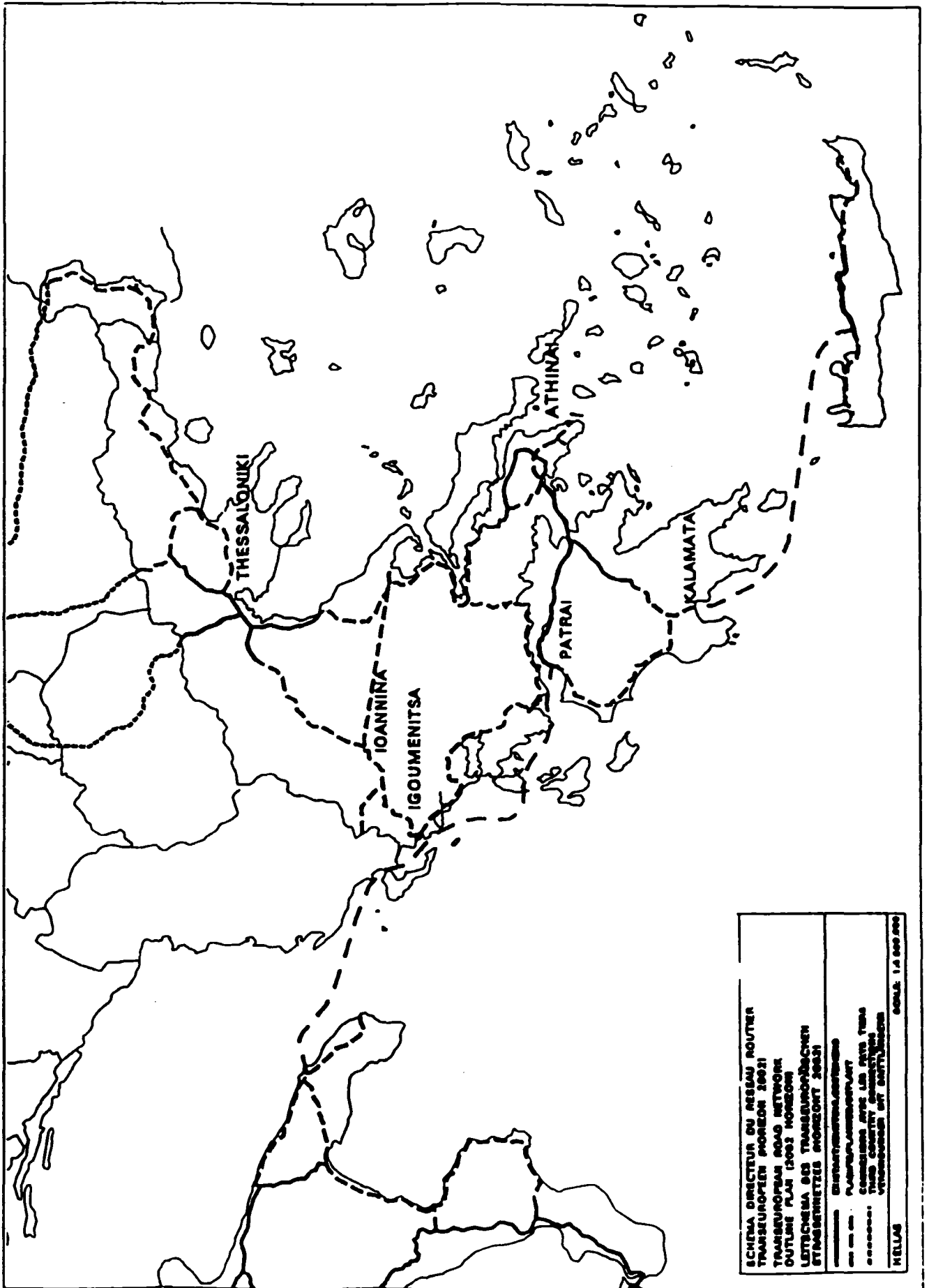


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TRANSEUROPEAN ROAD NETWORK  
OUTLINE PLAN (2002 HORIZON)  
LEITSCHHEMA DES TRANSEUROPAISCHEN  
STRASSENNETZES (HORIZONT 2002)

----- GABRIELI FÜRSTEN, GESTERN  
- - - - - FÜR DIE FÜRSTEN  
- - - - - LÖSUNG DER 1000 TAGE  
- - - - - 1000 TAGE DER 1000 TAGE  
DEUTSCHLAND

SCALE 1 : 1 000 000





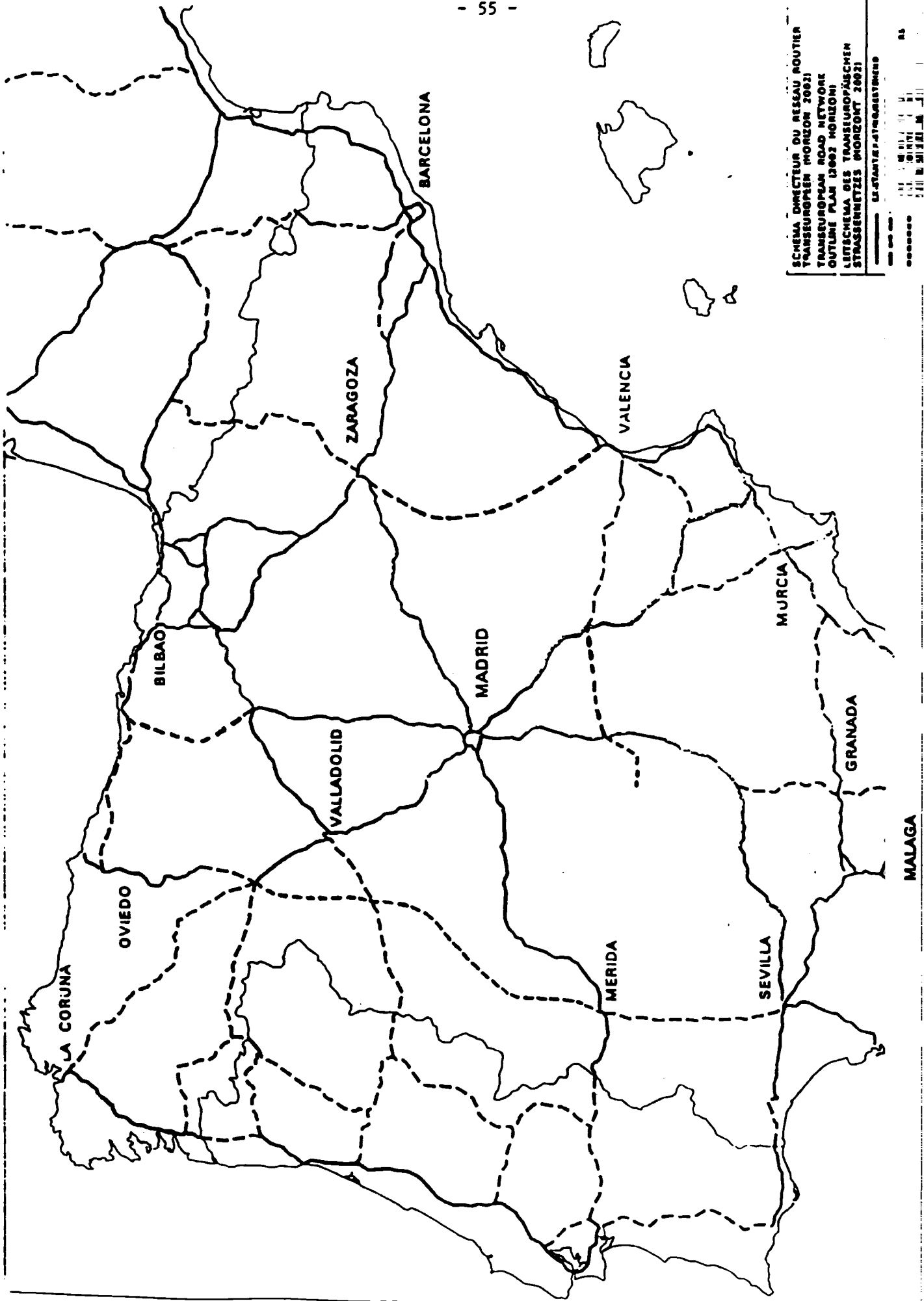
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— — — — — : Réseau existant  
- - - - - : Réseau proposé  
..... : Réseau spécifique

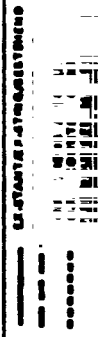
COMMISSION DES COMMUNES EUROPEENNES  
TRANS-EUROPEAN ROAD NETWORK  
HORIZON 2001

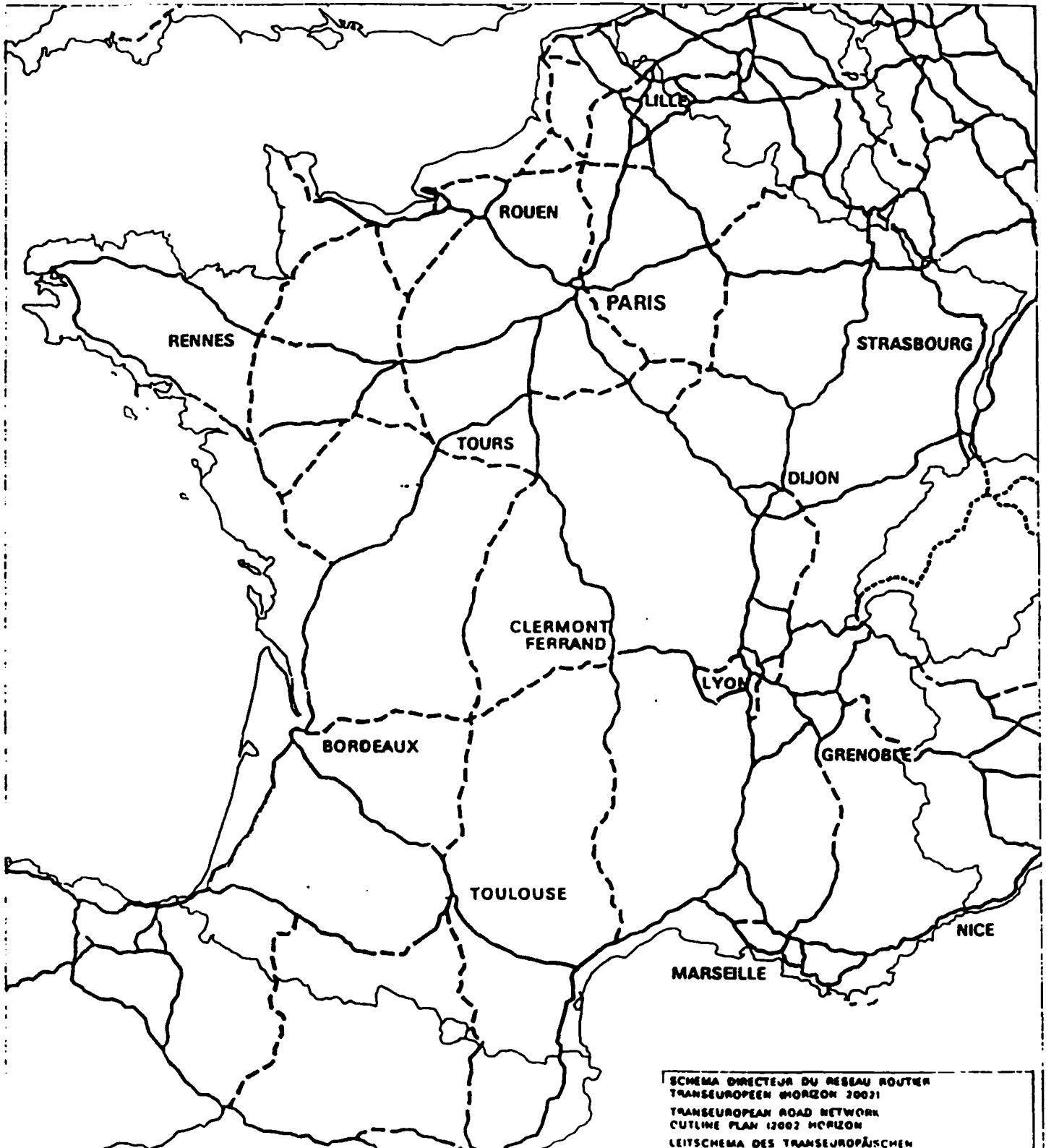
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SCHEMA DIRECTEUR DU RESEAU ROUTIER  
TRANSEUROPEEN HORIZON 2002!  
TRANSEUROPEAN ROAD NETWORK  
OUTLINE PLAN 2002 HORIZON!  
LEITSCHEMA DES TRANSEUROPAISCHEN  
STRASSENNETZES HORIZONT 2002!



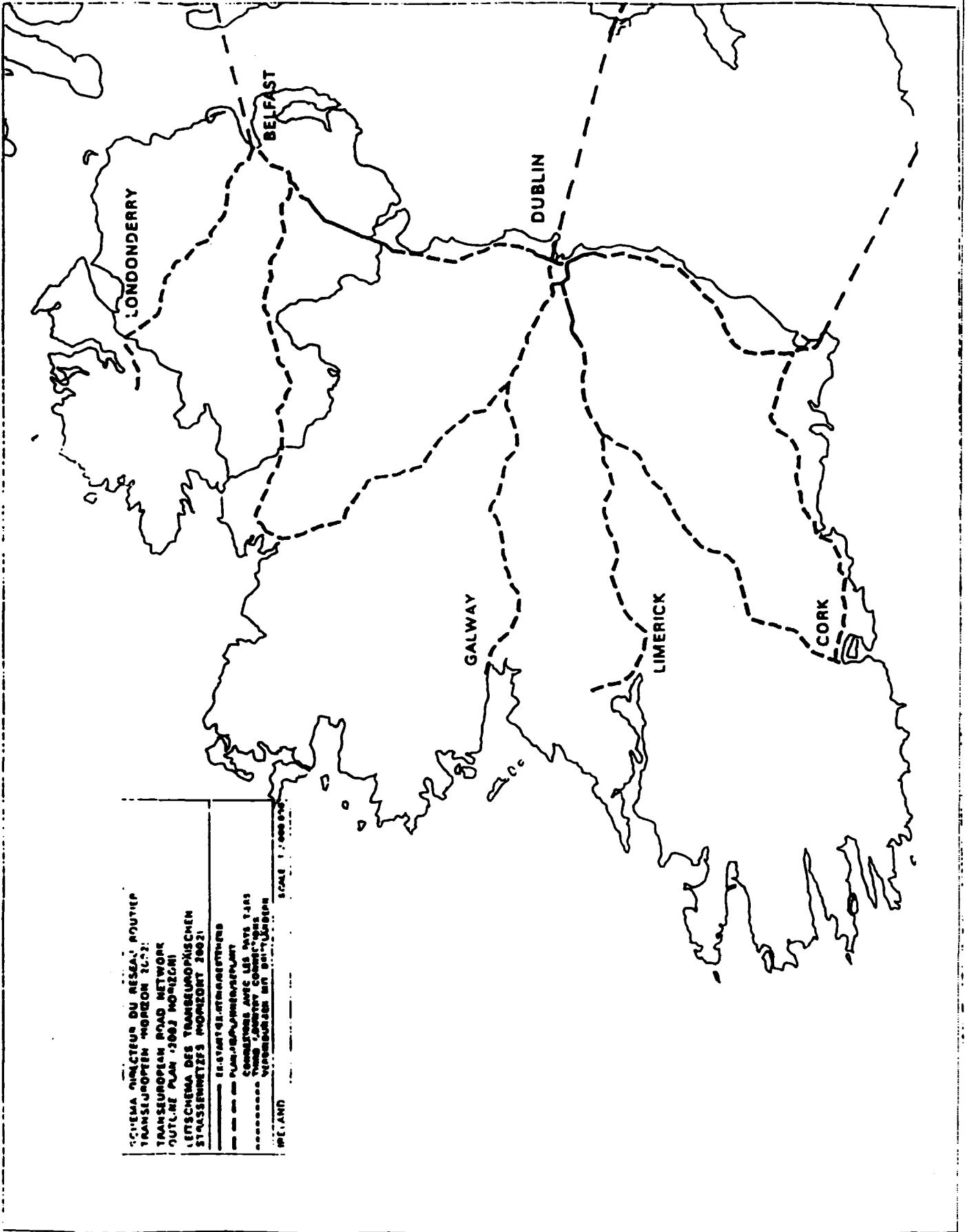


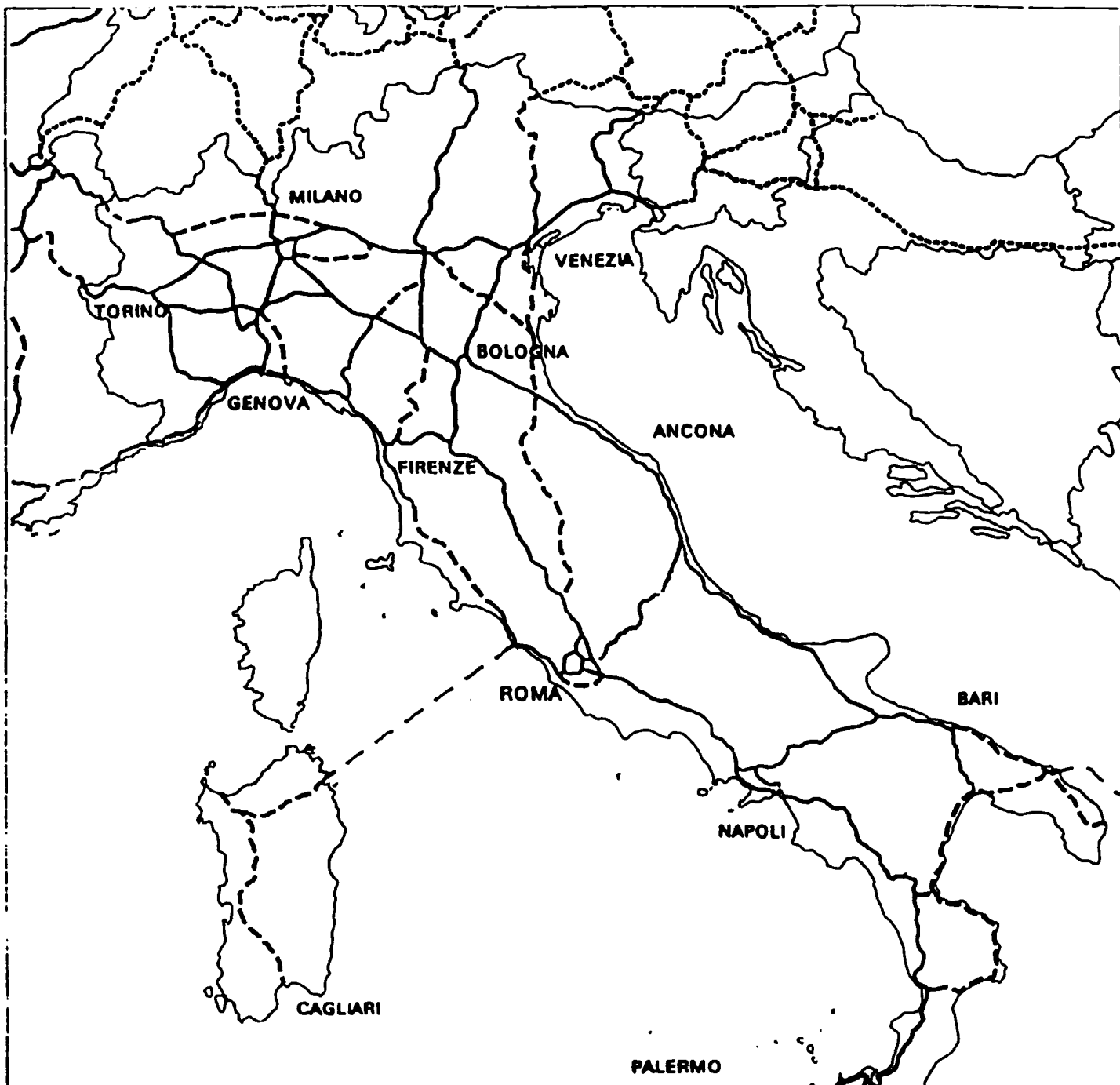
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TRANSEUROPEAN ROAD NETWORK  
OUTLINE PLAN (2002 HORIZON)  
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STRASSENNETZES HORIZONT 2002

————— EXISTANT/EXISTIERENDE  
- - - - - PLANNE/PLANNED/GEPLANT  
..... CONNEXIONS AVEC LES PAYS TERS  
VERBINDUNGEN MIT DRETTLANDERN

FRANCE SCALE: 1:5.000.000







**SCHEMA DIRECTEUR DU RESEAU ROUTIER  
TRANSEUROPEEN (HORIZON 2002)  
TRANSEUROPEAN ROAD NETWORK  
OUTLINE PLAN (2002 HORIZON)  
LEITSHEMA DES TRANSEUROPAISCHEN  
STRASSENNETZES (HORIZONT 2002)**

- EXISTANT/EXISTING/BESTEHEND
- - - - - PLANIFIE/PLANNED/GEPLANT
- ..... CONNEXIONS AVEC LES PAYS TIERS
- ..... THIRD COUNTRY CONNECTIONS
- ..... VERBINDUNGEN MIT DRITTLANDERN

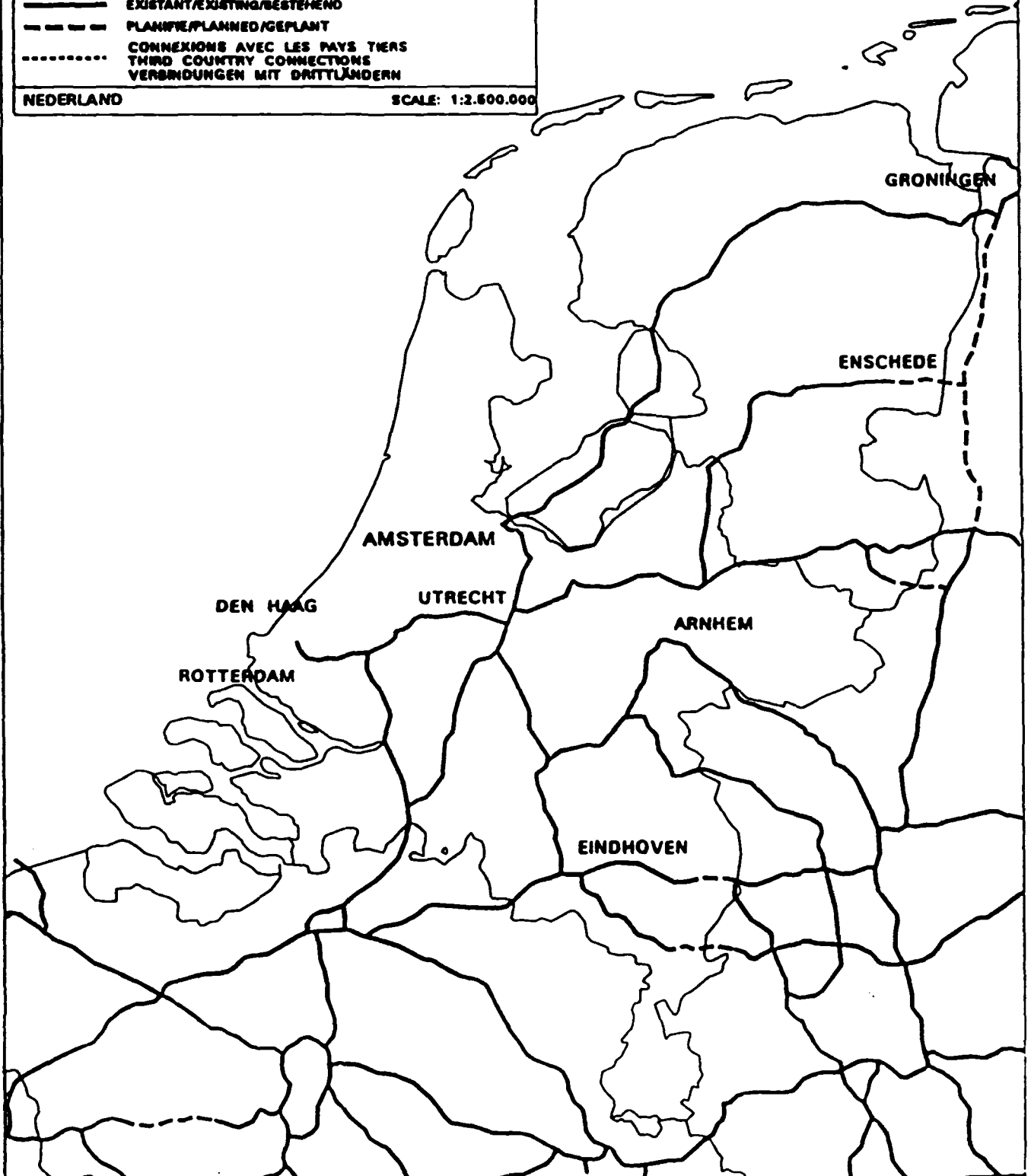
ITALIA SCALE 1 : 5 000 000

**SCHEMA DIRECTEUR DU RESEAU ROUTIER  
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TRANSEUROPEAN ROAD NETWORK  
OUTLINE PLAN (2002 HORIZON)  
LEITSHEMA DES TRANSEUROPAISCHEN  
STRASSENNETZES (HORIZONT 2002)**

- EXISTANT/EXISTING/BESTEHEND
- - - - - PLANIFIE/PLANNED/GEPLANT
- ..... CONNEXIONS AVEC LES PAYS TIERS  
THIRD COUNTRY CONNECTIONS  
VERBINDUNGEN MIT DAITTLÄNDERN

NEDERLAND

SCALE: 1:2.600.000

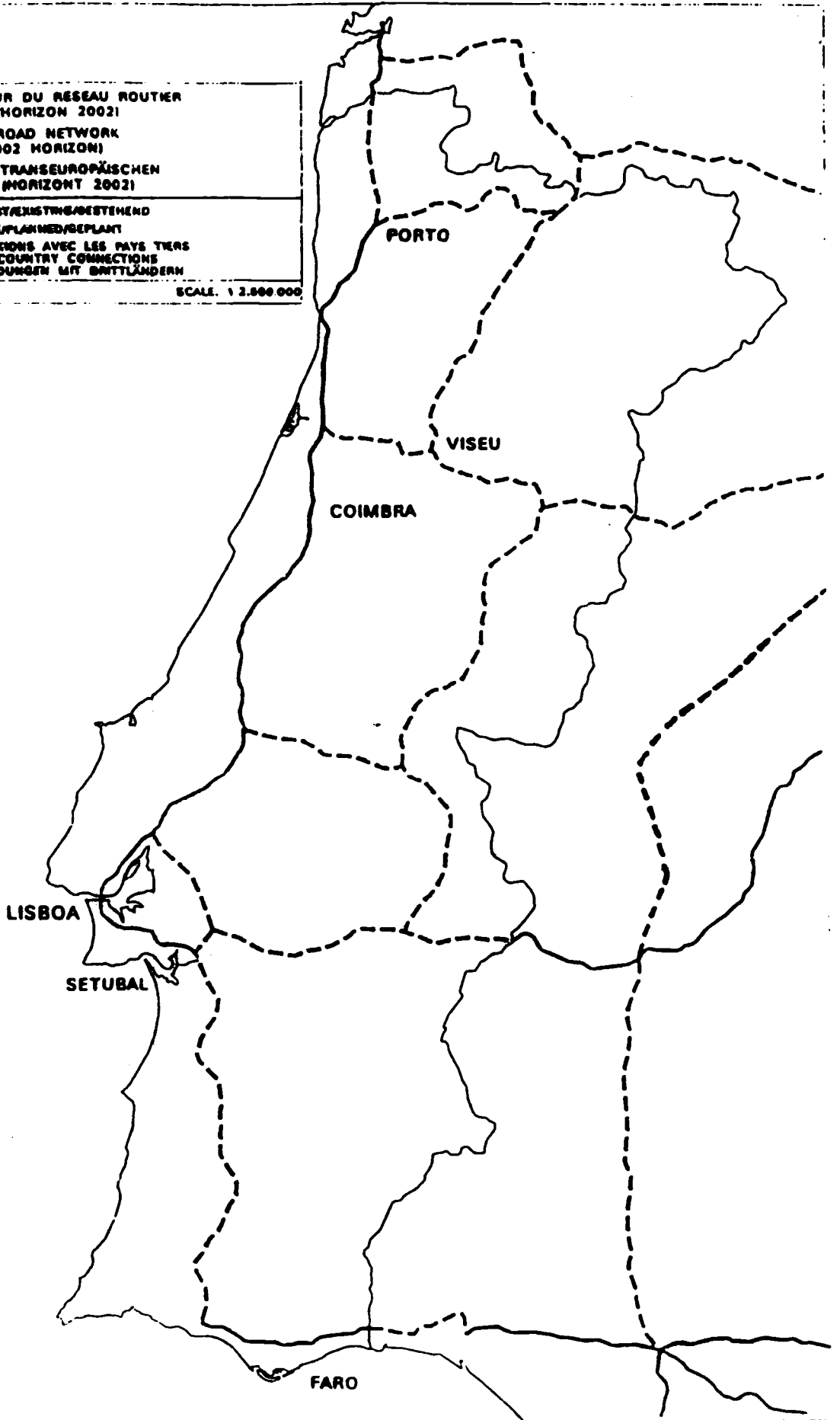


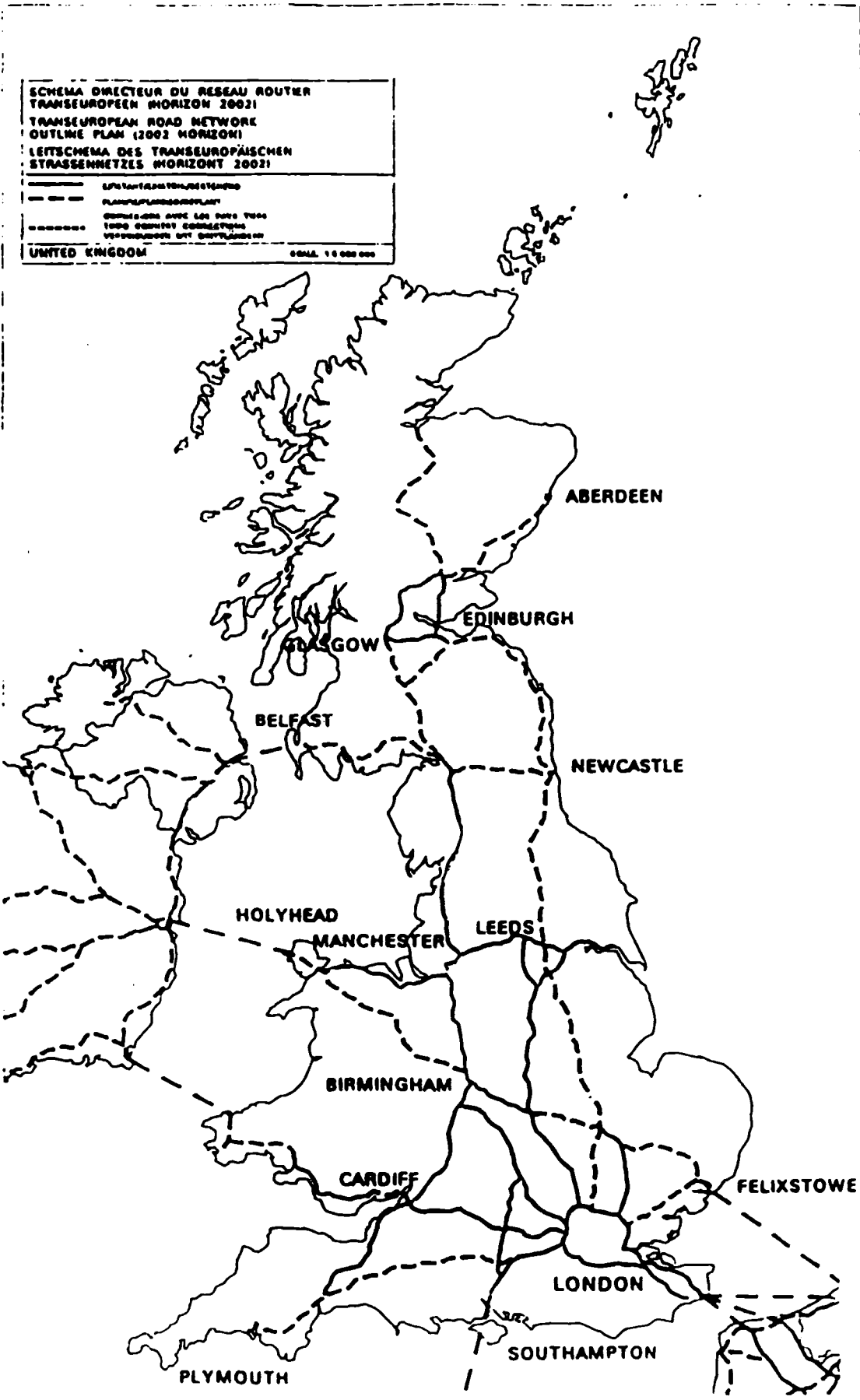
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TRANSEUROPEAN ROAD NETWORK  
OUTLINE PLAN (2002 HORIZON)  
LEITSCHHEMA DES TRANSEUROPAISCHEN  
STRASSENNETZES (HORIZONT 2002)**

- EXISTANT/EXISTING/BESTEHEND
- - - - - PLANIFIE/PLANNED/GEPLANT
- · - · - CONNEXIONS AVEC LES PAYS TERS  
THIRD COUNTRY CONNECTIONS  
VERBINDUNGEN MIT BRITTLÄNDERN

PORTUGAL

SCALE: 1:2.000.000





STATEMENT OF THE IMPACT ON SME AND EMPLOYMENT

Subject: Proposal for a Council Decision on the creation of a Trans-European Road Network

1. Administrative obligations arising from application of the proposed Regulation

None.

2. Advantages for small firms

The main advantages for small firms are:

- the development of a speed network for the whole Community territory,
- the implementation of a policy for combating congestion and economic wastes which it involves.

3. Disadvantages for small firms

None.

4. Disadvantages in terms of employment

None.

5. Have both sides of industry been consulted beforehand?

No.

6. Is there any alternative, less binding approach?

No.

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1. Introduction
  - 1.1 The importance of inland waterways
  - 1.2 Work already undertaken
  - 1.3 Main conclusions
  - 1.4 The Commission's proposals
  
2. Inland waterways in Europe
  - 2.1 Classification of inland waterways
  - 2.2 Inland waterway links
  - 2.3 Traffic flows
  - 2.4 Conclusions
  
3. Towards a European inland waterway network
  - 3.1 Criteria used to draw up the master plan
  - 3.2 Short and medium-term priorities for the Community
  - 3.3 Other projects in the Community
  - 3.4 Waterways of regional importance
  - 3.5 Short and medium-term priorities in Eastern Europe
  - 3.6 Long-term projects in Eastern Europe
  
4. Other possibilities for improvements
  - 4.1 Combined transport
  - 4.2 Information systems
  
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## COMMISSION COMMUNICATION

### on the creation of a European inland waterway network

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#### 1. INTRODUCTION

##### 1.1 The importance of inland waterway

A sound infrastructure is one of the factors on which the development of a single internal market and economic growth throughout Europe depend. Together with road and rail inland waterways form one of the three so-called modes of surface transport.

As such it forms part within Europe of a very diversified network of differing capacity. Its role is, however, not simply confined to that of transport, it has other contributions to make to the economy.

As the 2000 Plus Report and predictions by various economic study institutes have underlined, road and even rail infrastructure have now reached saturation in many places.

It is unlikely that the problem can be solved by simply developing or improving road transport or building new rail links. Clearly there will have to be an attempt to develop inland waterway transport which is cheap, non-polluting, consumes little energy and has spare infrastructure and vessel capacity. Inland waterways have a very special role to play in Community transport infrastructure policy as they can link up national networks and operate in conjunction with other modes of transport.

##### 1.2 Work already undertaken

At its informal meeting in Rotterdam on 5 and 6 July last year at which it discussed transport policy, the Council underlined the importance of a well developed infrastructure for an effective transport and traffic policy in Europe.

The Commission was asked to collaborate with national experts in drawing up a project to define inland waterway networks. This was seen as a continuation of the work already undertaken on the high-speed train, combined transport and road infrastructure networks.

In the course of these discussions attention was drawn to the need to eliminate bottlenecks and weaknesses in the links to and from Central and Eastern Europe.



The Commission accordingly convened for 30 September last year a meeting of a Group composed of government representatives from Member States and organizations representing inland waterway operators and users. Representatives of the UN Economic Commission for Europe, the European Conference of Ministers of Transport and the Central Commission for Navigation of the Rhine were also invited to attend as observers.

The Group has been asked by the Commission to consider the following aspects:

- (a) a plan of waterway infrastructure in the Member States;
- (b) identification of priority projects;
- (c) establishment of a master plan for inland waterways of Community interest.

At its meeting on 3 February this year the Group adopted a report after the inclusion of a number of amendments; this was forwarded to the Transport Infrastructure Committee<sup>1</sup> for discussion on 11 and 12 March. This report, which forms the basis for future action, contains a number of conclusions based on available information and a proposed master plan for inland waterways of Community interest.

### 1.3 Main conclusions

- 1.3.1 Inland waterways offer a real alternative to road and rail transport which, on some major routes in Europe, are becoming congested and whose growing use can only have a deleterious impact both on the environment and transport costs.
- 1.3.2 If inland waterway transport is to be made more attractive and more economic, a more integrated European network must be created. This can be done by completing the links which are missing and eliminating the main bottlenecks which exist at present.
- 1.3.3 In order to promote its integration with other modes of transport, the opportunities offered by combined transport<sup>2</sup>, especially for the initial and final stages of freight operations, need to be taken into account and certain inland ports need to be carefully developed as intermodal logistics centres for this type of transport.
- 1.3.4 These objectives need to be given practical expression in a master plan of inland waterways of Community interest. Such a plan should be based on the present and anticipated pattern of interregional traffic flows and take account of opportunities for transfer from other modes of transport. The technical specifications of the projects to be undertaken under the plan are sufficiently broad-based.

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1 Council Decision 78/174/EEC of 20 February 1978.

2 See the Commission Communication concerning the creation of a European combined transport network (COM(92) 230/4).

1.3.5 This policy must also be developed in coherence with the principle of subsidiarity.

When applied to the trans-European transport networks, there are a number of aspects of this principle to be considered in terms of the extent of Community action.

The principle objectives of the networks are to ensure the efficiency of the internal market, by improving the mobility of people and goods, and to reinforce economic and social cohesion.

To achieve these objectives, Community action is needed on:

- the visibility of the overall development needs of the transport networks in the Community as a whole and beyond, in a multimodal perspective which ensures that the capacities and inherent problems of each mode are taken into account (drawing up master plans);
- the conditions of interconnection (completing the missing links) and interoperability of existing national links (e.g. ensuring technical harmonization) in order to ensure their total efficiency at Community level;
- the development, consistent with existing networks, of new networks where their absence causes isolation (integrating landlocked, island or isolated regions) or hampers the development of part of the Community's territory (participation in the internal market);

The task of definition should be carried out at Community level but it is for the Member States to determine the precise details, the timing and the pace of completion of the infrastructure required to achieve the network defined. The indicative nature of the plans defined at Community level allows Member States the freedom to act or not to act, but their actions must follow the guidelines which they have accepted at Community level.

The incentives at the Community's disposal must allow it to help reduce certain constraints at national level and convince a Member State, if necessary, to carry out a project which is within its field of competence and is in the general interest. It is in this spirit that Community financing will favour measures on support or incentives.

1.4 The Commission's proposals

The Commission suggests that the Council, in accordance with the appended proposal:

- (a) approve the master plan drawn up on the basis of available data;
- (b) approve the following list of missing links and bottlenecks to be given priority within an appropriate framework:
  - (i) upgrading of the Mittellandkanal and construction of the aqueduct over the Elbe at Magdeburg;
  - (ii) upgrading of the links between the Elbe and the Oder;
  - (iii) linking the Twentekanaal and the Mittellandkanal;
  - (iv) linking the Seine and Scheldt in France and Belgium;
  - (v) upgrading the Scheldt-Rhine link in Belgium (southern section and Charleroi-Brussels Canal);
  - (vi) upgrading the eastern section of the north-south link via the Meuse and the Lanaye and Juliana Canals to the Rhine;
  - (vii) linking the Rhine and Rhône;
  - (viii) upgrading the Elbe between Magdeburg and the Czechoslovak border;
  - (ix) linking the Main and Danube and upgrading the Main and Danube between Straubing and Vilshofen;
  - (x) upgrading the Danube between Vienna and Budapest (non-Community project);
- (c) take note of its intention to examine further appropriate measures with the Member States to build the links which are missing and eliminate the bottlenecks identified in the master plan.

It should be pointed out that the Commission has included the first four projects listed above in its proposal for a Council Regulation on the implementation of a second transport infrastructure programme.

## 2. INLAND WATERWAYS IN EUROPE

### 2.1 Classification of inland waterways

The European inland waterway network is very diverse in terms of its technical characteristics.

In 1961 the European Conference of Ministers of Transport adopted Resolution No 8 on the classification of inland waterways and standard vessel and infrastructure dimensions. This is illustrated in the following table which also includes the ECE's classification which is based on vessels' deadweight capacity.

TABLE

Class	Length (m)	Beam (m)	Draught (m)	Headroom (m)	Deadweight capacity (tonnes)
0					<250
I	38.50	5.00	2.20	3.55	250-400
II	50.00	6.60	2.50	3.95	400-650
III	67.50	8.20	2.50	4.20	650-1000
IV	80.00	9.50	2.50	4.40	1000-1500
V	95.00	11.50	2.70	6.70	1500-3000
VI					< 3000

With the development of pusher craft and, to a lesser degree, container transport the 1961 classification no longer fully corresponds to reality, especially on certain international routes where these two techniques have taken off.

For all these reasons the ECMT and ECE embarked last year upon a study of a new single classification.

This will probably be adopted by the ECMT at the meeting of Ministers of Transport in June and by the ECE at the annual meeting of its main Working Party on Inland Waterway Transport in October.

## 2.2 Inland waterway links

There are four major links - in the broadest sense of the term:

2.2.1 The Rhine link connecting the main Dutch and Belgian seaports (Rotterdam, Antwerp, Amsterdam, Ghent) with Germany (the Ruhr, industrial zones of Frankfurt, Mannheim and Stuttgart) with Strasbourg and the Metz-Nancy industrial region in France and with the north of Switzerland (Basle). The main waterways are the Rhine and its tributaries (Moselle, Main and Neckar), to which should be added the Weser-Dattekanal and the Rhein-Hernekanal which connect the Rhine and the waterways of northern Germany.

2.2.2 The east-west link connecting certain northern and eastern areas of Germany, in particular the new Länder of the former GDR, with the western part of Germany, the Netherlands and Belgium. The most important waterways are the Elbe (Hamburg), the Weser (Bremen) and the Ems, plus the Dortmund-Ems Canal, the Elbe-Seitenkanal and the Elbe-Lübeck Canal. The Mittellandkanal and, to a lesser extent, the Küstenkanal provide the structure of the east-west route on to which are grafted the waterways mentioned above.

2.2.3 The north-south link connecting the Netherlands, Belgium and France via waterways other than the Rhine. Two rivers, the Meuse and the Scheldt, link the Dutch and Belgian seaports, as well as Dunkirk, with the interior of the Benelux countries and the industrial regions around Lille in the north of France. The main waterways are the Scheldt, the Meuse, the Lys, the Sambre, the Albert Canal, the Charleroi-Brussels Canal, the canal linking Brussels with the Scheldt, the Ghent-Terneuzen Canal and the series of canals linking Dunkirk with Lille.

The Seine basin and the Dunkirk-Lille link are sometimes considered as forming part of this link. It must be pointed out, however, that the Canal du Nord, the main waterway linking the Seine and the Scheldt, can only take vessels with a maximum capacity of 700 to 800 tonnes provided their beam is less than 6 m. Consequently there is a lack of continuity in this link between the northern France, the Seine which connects the seaport of Le Havre with Paris and the Oise, an important tributary flowing from the north.

2.2.4 The south-east link, including navigation in the countries through which the Danube flows. As a result of the liberalization policies embarked upon by the countries of central and eastern Europe this river has taken on a new importance for the Community. The Danube flows from southern Germany to the Black Sea, through Austria, Czechoslovakia, Hungary, Yugoslavia, Bulgaria, Romania and the former USSR.

In addition to these four main links there is the Rhône-Saône link which connects the seaport of Marseille with the Lyons and Dijon regions. There are also a number of small waterways which connect various points along several of these links. In France, for example, the Canal de l'Est connects the Moselle with the Belgian network and the Rhine-Rhône Canal links the Saône near Dijon with the Rhine near Basle; both waterways are restricted to vessels of 350 dwt. Finally, between the waterways of northern Germany and those of Poland a whole network of canals links the Mittellandkanal and the Elbe with the Oder and Vistula in Poland, thus extending the east-west link.

### 2.3 Traffic flows

According to forecasts by various institutes for economic studies, the anticipated changes in transport demand and logistics needs will lead to an increase in the volume of traffic on the Rhine from 297.5 million tonnes in 1989 to 309.9 million tonnes in the year 2000.

On the east-west link around six million tonnes were carried in 1988 between the FRG and the former GDR, to and from Berlin or to and from other regions of the GDR. Inland waterway transport demand between the Federal Republic and the countries of eastern Europe (including the new German Länder) is expected to rise to around 19.4 million tonnes.

Although traffic on the north-south link as a whole increased by some 8% between 1982 and 1987, it is important to note that all the flows to and from France and Belgium and the Netherlands registered a decline during this period. According to estimates, traffic could be expected to grow by 1.78 million tonnes in the year 2000, providing freight regulations on the north-south market are liberalized.

In 1988 only 2.5 million tonnes of south-east traffic were recorded between the FRG and the countries through which the Danube flows. Experts predict the volume of traffic will rise in the future to between 5 and 7 million tonnes. If trade between Germany and other Danube states is taken into account, total transport demand on the south-east link could reach between 8 and 10 million tonnes.

Table: Traffic flows on the main European waterway links (million tonnes)

	Rhine link	East-west link	North-south link	South-east link
1989 traffic	297.5	8.3 <sup>1</sup>	47.3 <sup>2</sup>	2-7
Forecast 2000	309.9	19.4	49.1	8-10
Variation (%)	+ 4.2	+133.8	+3.8	+200-300

Source : NEA/PLANCO

1 1988 figure.

2 1987 figure.

#### 2.4. Conclusions

A certain amount of information can be gleaned from the present state of the network.

2.4.1. The situation on the waterway links between western Germany (the Ruhr, Hamburg, Bremen, Frankfurt, Stuttgart, Mannheim), eastern France (Strasbourg) the Netherlands, Belgium, Luxembourg and northern Switzerland (Basle) is in general satisfactory. Nonetheless, there are certain weak points in the network.

2.4.2. In due course an increase in the flow of goods between western and eastern Europe can be expected, beginning with those regions whose economies are more developed, that is to say: the five new German Länder, Czechoslovakia, Hungary and Poland. Existing waterway links are not capable of coping with this increase.

2.4.3. Inland waterways play an insignificant role in transport between the countries of north-western Europe and those to the south. This is in part due to the state of the French waterway network but also to the fact that neither Italy, Spain nor Portugal can be linked into this form of transport. Nevertheless, as an element of combined transport inland waterways could be used for the initial and final road sections of combined freight operations to those countries, for example via the Rhône. Combined sea/inland waterway transport is another possibility in this respect.

2.4.4. The above comments apply also to transport between north-western Europe and Scandinavia and the British Isles.

2.4.5. With the opening of the Main-Danube Canal this year there will be a new direct 3 000 km link via the Rhine basin from the North Sea to the Black Sea through southern Germany, Austria, Czechoslovakia, Hungary, Yugoslavia, Bulgaria, Romania and the former USSR.

### 3. TOWARDS A EUROPEAN INLAND WATERWAY NETWORK

#### 3.1 Criteria used to draw up the master plan

- 3.1.1 The present and future importance of the waterway in question for international intra-Community transport, transit traffic and trade with non-Community countries: in most cases the waterway will be situated on one of the main traffic arteries connecting seaports with major industrial centres or conurbations;
- 3.1.2 opportunities for transferring traffic from other modes of surface transport to the waterways to relieve road and rail congestion; intermodal logistics centres using combined transport techniques would have to be available alongside the waterway or neighbouring waterways;
- 3.1.3 the project's contribution to the integration of the overall network: newly constructed or upgraded waterways must be able to carry container traffic on sections where it can be developed;
- 3.1.4 although there is no time to discuss this aspect in any detail here, emphasis should be put on the economic benefit of any construction or upgrading project for a particular waterway: the benefits deriving from its use must be greater than the sum of the costs of its upkeep, maintenance and operation (cost/benefit ratio greater than 1).

#### 3.2 Short- and medium-term priorities for the Community

On this basis the following links of Community interest have been identified on which the following projects can be undertaken:

- (a) east-west link: improvement of the connections via the Mittellandkanal with extensions to the east towards the Polish frontier and the west towards the Twentekanal; improvements to the Elbe between Lauenburg/Elbe-Seitenkanal and the Czechoslovak border;
- (b) north-south link: improvement of the links between the Benelux seaports and Dunkirk and central and eastern Belgium, the Paris basin, the Moselle and, eventually, the Rhône;
- (c) south-east link: completion of the Rhine-Main-Danube link and elimination of the bottlenecks created by insufficient depth of water at certain points, by certain bridges on the Main and Main-Danube Canal and by certain sections of the Danube (Regensburg to Passau).



### 3.2.1 East-west link

The north German and east European waterway networks are linked by the Elbe and the Mittellandkanal. Navigability on the latter is hampered by the water levels of the Elbe, which is not canalized in the area of Magdeburg. For a large part of the year the Elbe is not accessible to large vessels. The water levels fluctuate but the average annual draught, especially up river from Magdeburg, (11) is below the 2.5 m required for classes II and III. At low water the east German inland ports (Berlin and Magdeburg) are accessible only to shallow-draught vessels and the industrial regions of Halle and Dresden, Czechoslovakia and Poland cannot be reached. Nor does the Elbe downstream of Magdeburg in the direction of Hamburg (10)<sup>1</sup> offer a suitable link at low water, but the Mittellandkanal and the Elbe-Seltenkanal serve as a reasonable alternative.

In view of the expected increase in traffic in these regions, the shallow depth of the Elbe (1.3 m at low water) is a major obstacle. The section of the Elbe in Czechoslovakia has already been canalized. In Germany some upgrading is being considered.

If further regulation work is undertaken, it would be economically feasible to increase the draught from 0.2 to 0.3 m on most sections of the Elbe. This would enable some rail traffic to be transferred to the waterways.

However, no solution has yet been found to the problem of how to improve the poor navigability on certain sections of the Elbe caused by the hard bedrock and steep gradients, particularly in the Magdeburg region. Similarly, it is not economically feasible to canalize the Elbe to raise the draught to 2.5 m or more all the year round because of the very high cost of the considerable infrastructure work this would involve and consequently, there is little prospect of this being undertaken. This also applies to any idea of building lateral canals with fewer locks with lifts.

The construction of an aqueduct has also been considered where the Mittellandkanal crosses the Elbe (7). The building of a dam on the Elbe to enable vessels to use the river throughout the year is technically feasible and is being considered as an alternative solution.

The Mittellandkanal is at present accessible only to class III vessels with a draught of 2 m. The German Government has drawn up a plan for two-barge pushed trains and large self-propelled craft (11.4 m beam and 2.8 m draught) to operate on the Mittellandkanal, the Elbe-Havel Canal, the Havel as far as Berlin and the link to the Magdeburg ports. Upgrading of the western section of the Mittellandkanal has been under way since 1965 and has been completed on most sections of the canal (8). Since it has been possible to raise headroom under bridges to only 5.25 m, containers can be carried in two stacks only.

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1 The figures in brackets correspond with those on the map attached to the master plan of inland waterways of Community interest.

Economic ways must be found of extending the east-west link towards the Polish border to establish "attractive" waterway links with the port of Stettin, Warsaw (Oder-Havel Canal) and the Industrial region of Silesia (Oder-Spree-Canal) (9). At present the maximum draught is only 1.85 m on the two canals which link up with the Oder. The southern route is the Oder-Spree Canal which can be used only by vessels with a maximum capacity of 600 tonnes.

In the Netherlands it is planned, in the west, to connect the Mittellandkanal and the Twentekanaal by building a new 50 km long canal (6) linking the Rhine estuary ports and the Mittellandkanal. This will provide a much shorter route than the present one between the Dutch and Belgian seaports, via the Wesel-Dattel/Rhein-Hernekanal, and eastern Europe. A pre-feasibility study carried out by the Dutch does not consider that the feasibility of such a project has yet been demonstrated. The Germans will also be carrying out an economic feasibility study.

### 3.2.2 North-south link

A north-south artery could be established by improving links between the coastal ports from Amsterdam to Dunkirk and the Meuse and Scheldt industrial hinterland and with the Paris and Lyons regions. At present only small vessels can reach these regions via this route.

In France the Scheldt-Seine, Seine-Moselle and, eventually, the Moselle-Saône links would have to be upgraded.

The Scheldt-Seine link (14) will have to be improved if inland waterway transport is to be developed. The Canal du Nord, which is at present the main link between the Belgian network and the Seine and Oise, is navigable only by self-propelled craft or 700 to 800 tonne barge trains. The proposed upgrading of this north-south link to 4 500 tonnes would involve re-routing via the Saint Quentin Canal. This project is being studied by the relevant French authorities.

In a second phase, a new link between the Seine and Moselle (15), which would be extended in the longer term to link the Moselle and Saône (16), will provide a waterway link to France's major industrial centres. Given the considerable volume of traffic between the Benelux and Paris and Lyons, such a waterway would be of direct benefit to a number of European countries including southern Europe (via the Moselle-Seine link connecting with the Rhône).

In addition to the construction of these missing links, creation of a north-south waterway route of Community importance involves eliminating a certain number of bottlenecks. Modernization of the links between France and Belgium has already led to the upgrading of the Scheldt. From now on work must be concentrated on improving the links with Dunkirk by upgrading to class IV the Lys, by increasing headroom at the Courtrai bridge (19), completing the work of upgrading to class IV the Canal du Centre between Mons and La Louvière (20) (constructing a lift at Strépy-Thieu, a canal bridge at Houdeng and completion of the Strépy-Thieu section), upgrading the Nimy-Biaton section of the Nimy-Biaton-Péromes Canal to class IV and widening the lock at Evergem sur le Ringwaart near Ghent (21).

Several other improvements could usefully contribute over time to the development of navigation on the north-south route. In the Netherlands the widening of the Zuid Beveland Canal to take four-barge trains, doing away with the locks at Wemeldinge in 1993 and renovating those at Hansweert, would allow the Rotterdam-Vlissingen-Ghent/Antwerp link to be upgraded.

In Belgium most of the network's main waterways have been upgraded to take 1 350 tonne vessels. Once the lock at Wijnegem is completed by the end of this year/beginning of next year, the Albert Canal between Antwerp and Liège will be navigable for 9 000 tonne barge trains between Wijnegem and Liège (although navigation will continue to be limited on the Antwerp-Wijnegem section to 4 500 tonne vessels). Further south, completion of a fourth lock at Lanaye on the Lanaye Canal which connects the Albert Canal to the stretch of the Meuse in the Netherlands would reduce waiting time and improve navigational safety in the event of a breakdown of the present lock system. Upgrading of the Meuse in southern Belgium and replacement of old barrages by modern infrastructure to improve water control will help develop navigation on the eastern section of the north-south link (23). Finally, mention should also be made of the lock at Hingene which is virtually completed. This will link the Scheldt to the Brussels Maritime Canal. A major drainage and dredging project is under way to enable the Charleroi-Brussels Canal to again carry 2.5 m draught vessels.

### 3.2.3 South-east link

The main gap in the inland waterway network between north-west and central Europe should be plugged this year when the Main-Danube Canal is completed (24). This will be navigable for two-barge pushed trains. The Main itself is navigable for articulated trains only on special authorization. It will not be accessible to two-barge pushed trains until the mid 1990s. There are, however, a number of other projects planned for this waterway: the deepening of the river downstream from Aschaffenburg to bring the draught up to 3.1 m and between Aschaffenburg and Bamberg upstream from Freudenberg to provide a draught of 2.9 m.

Work is being carried out on the German section of the Danube downstream from Regensburg and in Austria to bring it up to the same gauge as the Main-Danube Canal. In the long term it is hoped to make the Danube downstream from Regensburg navigable by four-barge pushed trains. Finally, the problem of headroom under the bridges over the Main and the Main-Danube Canal must be taken into consideration; this constitutes a major impediment to the expansion of container traffic on this route (25).

## 2.4 Rhine-Rhône link

The proposed Rhine-Rhône link will provide access from northern and eastern Europe to the Mediterranean and vice versa through a wide-gauge inland waterway network incorporating the Rhine, the Rhine-Main-Danube link and the Rhône.

The Rhine-Main-Danube link, which will come into service this year, will link up the inland waterways of north-west Europe, the major Benelux ports and eastern Europe.

The Rhine-Rhône link will improve communications between the Mediterranean countries and eastern and northern Europe and provide a link between the Black Sea and the Mediterranean.

Problems will be encountered on the north-south link in the years ahead. At present the only route is through the Alps or the Rhoden Corridor. However, with the introduction of restrictions on road traffic in Austria, where there is a night-time ban on heavy goods vehicle between 2200 and 0600 hours, and in Switzerland, which is considering tax measures, traffic will switch to the Rhône valley.

Consequently rational use will have to be made of existing infrastructure and national networks will have to be linked up in order to develop complementary means of transport. The completion of the Rhine-Rhône link creating a wide-gauge inland waterway network will provide increased freight capacity by: inland waterway and sea, combined transport, container transport and maritime cabotage services from Spain to Sète or Marseille from where goods can be shipped by inland waterway to northern Europe.

## 3. Other projects in the Community

### 3.1 The Rhine link

The Rhine basin and Scheidt-Meuse network of waterways are connected to the Netherlands downstream only by the Waal-Meuse Canal. A navigable link from the Rhine near Neuss, Germany, via Aachen to the Meuse in Belgium, in the area of Liège, was designed but never got off the drawing-board. Such a new canal would offer an additional route through a heavily industrialized region (1). Germany does, however, not consider such a project to be economically feasible.

As far as the elimination of the existing bottlenecks on the Rhine and its tributaries is concerned, mention should be made of the project to upgrade the locks near Kembs on the Rhine lateral canal (2) and the deepening of the Rhine in its central course upstream from Koblenz (3). On the Waal, deepening of the channel and improvements on the bends at Erlecom, Hulhuizen and Haalderen above Nijmegen are proposed to allow the passage of six-barge trains (4). On the Amsterdam-Rhine Canal it is proposed to eliminate certain difficult points, especially near Zeeburg; at present four-barge pushed trains cannot be loaded to their maximum draught.

The aim of ensuring a draught at low water of 2.1 m, equivalent to a draught of 3 m at mean water, on the Rhine has virtually been achieved. Control operations to improve navigation on the Rhine should also enable erosion of the river bed to be measured and appropriate action to be taken to reduce it. Flood water control and management of water resources is also proposed for the upper reaches of the Rhine.

On the Moselle (5) the rapid growth in the volume of traffic necessitates modernization work to increase the draught from 2.7 m to 3 m; this will make waterway transport more cost-effective. Initially the capacity of a number of overloaded locks, beginning with Fankel and Zeitlingen, which are the busiest, needs to be increased. Upstream from Thionville work will be undertaken to canalize, upgrade and deepen the Moselle.

### 3.3.2 East-west link

A certain amount of work, especially deepening of the Dortmund-Emskanal between Datteln and Bergeshövede (12), will have to be undertaken to improve the waterway network linking the North Sea with the Rhine in western Germany.

### 3.3.3 North-south link

The absence of an adequate link between Zeebrugge and the Scheldt-Meuse basin (17) excludes the possibility of transporting containers and bulk cargoes by water to the Belgian interior and the industrialized regions of north-west Europe. Although the port of Zeebrugge is witnessing rapid growth and extension of its installations, there are no real plans for a waterway link with its hinterland. The canal linking the two important seaports of Ghent and Zeebrugge needs upgrading to at least class VI.

Construction of the Caberg Canal would create a direct link between the Juliana and Albert Canals by eliminating the need for vessels to make the present detour via Maastricht and Lanaye (18). In the Netherlands improvements on the Meuse, the Lisse-Buggenum lateral canal and the Juliana Canal (22) are proposed to permit the passage of two-barge pushed trains. On the Meuse it is proposed to build an additional lock at Lith.

### 3.4. Waterways of regional importance

There are certain areas in the Community where inland waterways are of greater regional importance and are often not linked up to the main European network. This chiefly concerns the Po (Italy), the Douro (Portugal) and Tagus (Spain and Portugal) basins. Some of these regions are already industrialized and suffer from road traffic congestion. Others will be able to develop their industrial fabric. Consequently, the development of inland waterways will provide enormous opportunities for them all. The Po network, in particular, is of interest to transit traffic passing through Austria and Switzerland, which give it a certain Community interest.

Under Italy's general transport plan construction work is to be carried out on the Po and Venice waterway network (28), where the volume of traffic is considerable (67% of freight in Italy is concentrated in the four regions of Piedmont, Lombardy, Emilia-Romana and Venice). It is hoped that some of this traffic, which at present operates solely by road, will be transferred to the inland waterways.

The study carried out on the proposed waterway linking the Adriatic and the Danube (29), forms part of a project which involves six countries ("iniziativa esagonale").

An application has been made (to the G24) on the Community's side for funding for a feasibility study.

### 3.5. Short and medium-term priorities in Eastern Europe

Once the Main-Danube link is open and on completion of some improvements on the south-east route, around 1995, there will be a direct link from Rotterdam to the Black Sea for two-barge pushed trains. The canal itself may be open this year, permitting the carriage of goods by water to and from Austria, Hungary, southern Czechoslovakia and the other eastern European countries through which the Danube flows.

The main difficulty encountered on this route is the draught on the Danube between Bratislava and Budapest (1.6 m), which makes navigation risky (26).

Three dams had been planned for the Vienna-Budapest section of the Danube where it was uneconomic to maintain the draught of 2.5 m on navigable sections recommended by the Danube Commission along the whole section. The Hainburg and Nagymaros barrages have not been built for environmental reasons but the Gabčíkovo barrage is going ahead.

In the medium and long term the upper section of the Danube will continue to be a bottleneck as the main traffic flows culminate here (10 days' voyage from the point of loading). High construction standards have to be used because of the draught of vessels and the problems connected with low water. More modest projects than those originally planned are now being considered. It should, however, prove possible to eliminate the bottleneck downstream from Passau by means of appropriate measures owing to good hydraulicity.

### 3.6. Long-term projects in Eastern Europe

In the coming years the need to expand the inland waterway network and in particular the usefulness of a link between the waterways of the east-west route and the Danube basin (13) may well show itself in central Europe. Construction of canals between the Elbe, Oder and Danube is a project on an even greater scale than the Rhine-Main-Danube link. It would link up east European, German and Polish waterways with the Danube countries.

In 1959 the UN Economic Commission for Europe set up a group of experts to study the feasibility of the project. In 1982 their study was published and at the present time efforts are being made to encourage the countries concerned to plan, design and finance the project.

#### 4. Other possibilities for improvement

##### 4.1. Combined transport

While road and rail transport are approaching the limits of their capacity on the principal routes, the spare capacity of the inland waterway fleet could advantageously be utilized, especially in the form of combined transport. Container transport and, to a lesser extent, roll-on roll-off (Ro/Ro) transport on the Rhine and Danube is growing apace; container transport on the Rhine rose from 40 000 TEU in 1977 to 450 000 TEU in 1990.

In order to build on the assets of combined transport using inland waterways it is essential to target minimum technical demands for vessels, waterways and trans-shipment points (ports/terminale). To provide cost-effective combined transport services vessels must be able to carry containers in stacks of at least 4 wide and 3 high; this necessitates a minimum height under bridges of 7 m (including a safety margin). Ro/Ro services are operated mainly by vessels in class V or above.

If the minimum infrastructure requirements (draught, headroom) are taken into account, the following waterways are well suited to container transport:

- (a) the Rhine: from Basle to the North Sea;
- (b) north-south route: linking canals between Amsterdam, Antwerp, Ghent and between Brussels and the Rhine; the Meuse up to Namur, and the Juliana and Albert Canals;
- (c) south-east route: the entire section of the Danube downstream from Deggendorf would be suitable for 4 wide x 3 high stacked container transport provided navigability upstream from Budapest is guaranteed.

The following waterways are suitable to some extent (i.e. for 3 wide x 2 high stacked containers):

- (a) Rhine basin: Moselle up to Nancy, the canalized Sarre, the Neckar;
- (b) east-west route: the Elbe-Seitenkanal, (upgrading of the Mittellandkanal is proposed);
- (c) north-south route: Scheidt, Seine as far as Paris;
- (d) south-east route: Main-Danube;
- (e) the Rhône and Saône up to Chalon.

This network has been defined<sup>1</sup> by a high-level Working Party set up under the Council Resolution of 30 December 1990. It is based on an economic and technical analysis of inland waterways' ability to provide an efficient service for container and swap body transport. The present network is not very large but requires investment if it is to be extended. This could be provided through the projects forming part of the inland waterway master plan.

#### 4.2 Information systems

Rapidly evolving information technology provides an opportunity to improve traffic guidance and control. Communication between the operator of a vessel and an on-shore control centre can lead to greater efficiency in the use of the waterway and greater transport speed and safety.

The Commission is considering a proposal concerning potential IT applications for inland waterway transport under the R&D programme European Nervous System (ENS). This will require a massive research programme into the definition and use of standard European messages for the operation of locks and traffic control centres along waterways. One of the main objectives of such research is the creation of a harmonized information technology network between the relevant national authorities; this will make inland waterways an important component of the logistics chain with greater use of inland waterway vessels in an integrated multimodal transport system.

#### 5. Follow-up

Although some significant conclusions have already been drawn, it is impossible at this stage to formulate an overall strategy. Consequently, the work embarked upon by the Group needs to be continued.

Future work should concentrate on:

- 5.1 forward studies into traffic flows and cost/benefit analyses which are essential to an economic assessment of the master plan's projects;
- 5.2 the (primarily environmental) potential of the new links given the pollution which a growth in traffic in other inland modes might cause without an inland waterway infrastructure;
- 5.3 an analysis of techniques enabling inland waterways to be used for the initial and final stages of freight operations involving coastal or short-sea transport;

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1 See the Commission Communication concerning the creation of a European combined transport network (COM (92) 230/4)



- 5.4 the use of harmonized information systems for inland waterways and information technology which will make a significant contribution to traffic safety and rationalization and will, thereby, increase infrastructure capacity through more efficient operation of the existing network;
- 5.5 a study of (public or private) financing techniques for inland waterway infrastructure;
- 5.6 a more sustained policy to promote the use of inland waterways in tandem with infrastructure measures to ensure more effective investment in network upgrading.

On this basis an overall strategy can be mapped out in the light of scientific and policy data and the relevant conclusions and recommendations can be put before the Council. The Commission will undertake the requisite work.

Proposal for a  
**COUNCIL DECISION**

on the creation of a European inland waterway network

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**THE COUNCIL OF THE EUROPEAN COMMUNITIES,**

Having regard to the Treaty establishing the European Economic Community, and in particular Article 75 thereof,

Having regard to the proposal from the Commission<sup>1</sup>,

Having regard to the Opinion of the European Parliament<sup>2</sup>,

Having regard to the Opinion of the Economic and Social Committee<sup>3</sup>,

Whereas it is essential for the proper functioning of the internal market that the Community's transport infrastructure between major seaports and the industrialized regions of the European hinterland be improved and made more efficient through the development of an inland waterway freight transport network;

Whereas inland waterways can play a greater role in trade, since they offer a less expensive, less-polluting and low energy-consuming mode of transport;

Whereas there is considerable spare vessel and infrastructure capacity in this sector and it is a mode which lends itself to use with other modes of transport;

Whereas a master plan must be drawn up to ensure technical consistency between waterways and to define the priority measures to be taken in order to develop a European inland waterway network;

Whereas action should focus on the links which carry most freight traffic in the Community;

Whereas the outline plans of transport infrastructure networks are of an indicative and evolutionary nature and tend progressively towards a multi-modal transport system,

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2

3

HAS ADOPTED THIS DECISION:

Article 1

The European inland waterway network shall incorporate existing river basins and a number of major traffic arteries using rivers and canals and the branches and links which connect them. It shall serve industrial regions and major conurbations and link up the major seaports. The minimum technical specifications adopted for the network's waterways shall correspond to class IV and permit in a satisfactory way the passage of vessels used for combined transport. The network shall be developed over a period of at least ten years as specified in the master plan in the Annex.

Article 2

Priority measures shall be taken within the appropriate framework to create the links which are missing and eliminate the following bottlenecks:

- upgrading of the Mittellandkanal and construction of the aqueduct over the Elbe at Magdeburg;
- upgrading of the links between the Elbe and Oder;
- linking the Twentekanaal and the Mittellandkanal;
- linking the Seine and Scheldt in France and Belgium;
- upgrading the Scheldt-Rhine link in Belgium (southern section and Charleroi-Brussels Canal);
- upgrading the eastern section of the north-south link via the Meuse and the Lanaye and Juliana Canals to the Rhine;
- linking the Rhine and Rhône;
- upgrading the Elbe between Magdeburg and the Czechoslovak frontier;
- linking the Main and the Danube and upgrading the Main and Danube between Straubing and Vilshofen;
- upgrading the Danube between Vienna and the Black Sea (non-Community project).

Article 3

This plan shall be indicative in nature, being intended to promote action by the Member States and, where appropriate, by the Community with a view to carrying out projects relating to the networks. This Decision shall not entail any financial commitment on the part of the Member States or the Community .

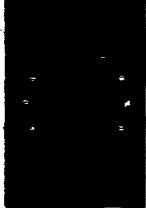
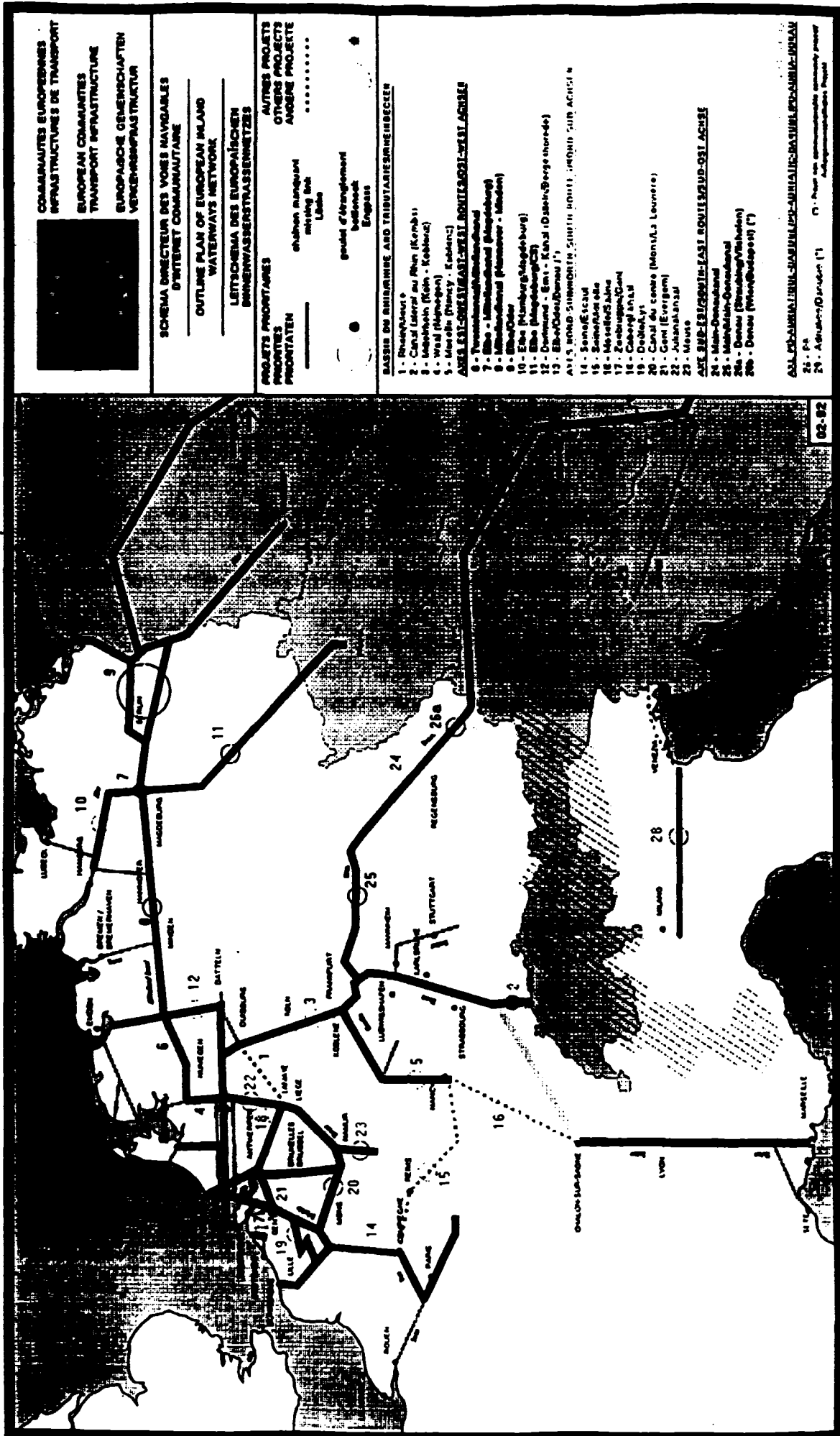
Article 4

This Decision is addressed to the Member States.

Done at Brussels,

For the Council

The President



COMMUNITES EUROPEENNES  
INFRASTRUCTURES DE TRANSPORT  
EUROPEAN COMMUNITIES  
TRANSPORT INFRASTRUCTURE  
EUROPAISCHE GEMEINSCHAFTEN  
VERKEHRSPFRAKTUR

SCHEMA DIRECTEUR DES VOIES NAVIGABLES  
D'INTERET COMMUNAUTAIRE

OUTLINE PLAN OF EUROPEAN INLAND  
WATERWAYS NETWORK

LEITSCHEMA DES EUROPÄISCHEN  
INNENWASSERSTRASSENNETZES

PROJETS PRIORITAIRES

PRIORITÄTEN

shaded rectangle  
priority link

● point of interconnection  
● subproject  
● Engpass

AUTRES PROJETS  
OTHERS PROJECTS  
ANDERE PROJEKTE

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BASEIS OM BIRIMINISE AND TAIRUTARIESHEINBECKER

- 1 - Rhein/Alber
- 2 - Canal Latéral au Rhin (Koblenz)
- 3 - Moselle (Köln - Koblenz)
- 4 - Wesel (Paderborn)
- 5 - Moselle (Trier - Koblenz)

ANEXI-ORIENTAL-EST-RONIE-ROSI-EST-ACRIE

- 6 - Prorogon/Alber/Alber
- 7 - Elbe - Mitteldeutscher (Magdeburg)
- 8 - Mitteldeutscher (Manscher - Minden)
- 9 - Elbe/Alber
- 10 - Elbe (Manscher/Magdeburg)
- 11 - Elbe (Magdeburg/CS)
- 12 - Dortmund - Ems - Kanal (Dortmunder/Scheide)
- 13 - Ems/Oder/Danube (\*)

ANEXI-ORIENTAL-EST-RONIE-ROSI-EST-ACRIE

- 14 - Soudet/Alber
- 15 - Soudet/Alber
- 16 - Moselle/Luxemburg
- 17 - Zeebrugge/Gent
- 18 - Cabourg/Alber
- 19 - Dordrecht
- 20 - Canal du centre (Montluçon/La Roche)
- 21 - Canal (Evergem)
- 22 - Jambou/Alber
- 23 - Moselle

ANEXI-ORIENTAL-EST-RONIE-ROSI-EST-ACRIE

- 24 - Main-Danube/Kanal
- 25 - Main/Alber-Danube/Kanal
- 26a - Danube (Bratislava/Vienna)
- 26b - Danube (Wien/Budapest) (\*)

ALL-ORIENTAL-EST-RONIE-ROSI-EST-ACRIE

24 - P  
25 - P  
26 - A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P/Q/R/S/T/U/V/W/X/Y/Z

02-82

STATEMENT OF THE IMPACT ON SME AND EMPLOYMENT

Subject: Proposal for a Council Decision on the creation of a European inland waterway network

1. Administrative obligations arising from application of the proposed Regulation

None.

2. Advantages for small firms

The development of a European inland waterway network will benefit small businesses in general by improving transport conditions, and especially small businesses which use semi-finished products in particular.

3. Disadvantages for small firms

None.

4. Disadvantages in terms of employment

None.

5. Have both sides of industry been consulted beforehand?

No.

6. Is there any alternative, less binding approach?

No.

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# DOCUMENTS

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