



Status of the Pan-European Transport Corridors and Transport Areas



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Introduction

The Corridor concept is part of the Pan-European transport infrastructure concept, which has developed over the past 8 years along the three Pan-European Transport Conferences, 1991 at Prague, 1994 at Crete and 1997 at Helsinki. The Pan-European Transport Corridors have been selected for the benefit of the trade and social relations between the European Union and the countries in Central and Eastern Europe. Furthermore, in Central Europe the Corridors provide for a basic infrastructure development of international importance, which will eventually form part of the extended Trans-European Transport Network in the enlarged European Union.

The role of transport and its network for Europe's development as a whole can not be underestimated. The present and future enlarged European Union and in particular the trade relations to the New Independent States and the Mediterranean countries depend strongly on adequate transport connections. One of the tasks set out for the G24 transport working group is to review regularly the status of the development. The European Commission has therefore asked the TINA Secretariat in Vienna to collect information on development from the different working and steering groups working on the corridors and to compile this information into a draft report to be presented on the January 1999 session of the G24 transport working group in Brussels. The concept of the Pan European Transport Areas (PETrAs) is also covered by this document. The time span of the report should mainly cover the development up to 31. December 1998 giving emphasis to the year 1998.

Although this document covers the total extent of the ten Pan-European Corridors of Helsinki and the four Pan-European Transport Areas, the precise technical data focuses on the Helsinki Corridors on the territory of the ten acceding countries in Central Europe, subject to the TINA process (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia).

This report is based on the good collaboration of the countries' administrations, the European Commission and other sources like UN/ECE, TEM/TER, ECMT, UIC and the TINA Office.

The Transport Corridors and Areas

The Third Pan-European Transport Conference in Helsinki, June 1997, endorsed the concept of a Pan-European Transport Infrastructure Investment Partnership, as set out in the Commission's Communication on connecting the TENs to its neighbours (COM (97) 172 final). The TENs should be able to connect to the networks of the neighbouring countries and promote interoperability and access to these networks.

The Pan-European Transport Infrastructure Network has as its components:

- the Trans-European Transport Network on the territory of the Union (TEN)
- the ten Pan-European Transport Corridors in Central and Eastern Europe
- four Pan-European Transport Areas (PETrA)
- several Euro-Asian links, notably TRACECA

For each of the Corridors and Areas a Memorandum of Understanding (MoU) has been or will be concluded amongst the participating countries, at the level of Ministers of Transport, and in most cases, with the European Commission.

A Memorandum of Understanding is a voluntary commitment between the participants, and it has no legal binding character. Concluding a Memorandum of Understanding, however, indicates the intention of the concluding partners to undertake joint efforts and to accomplish the common task.

These Memoranda of Understanding recommend, among others, to establish a Steering Committee, which promotes and monitors the progress and stimulates the action needed. The Steering Committees furthermore may create working groups to deal with specific issues related to each Corridor.

In some cases additional Memoranda of Understanding have been signed between railway companies.

The establishment of Pan-European Transport Corridors and the elaboration of improved infrastructure schemes for the Pan-European Transport Areas is part of the actions, which form the Pan-European Transport Network Partnership endorsed at the Third Pan-European Transport Conference at Helsinki, June 1997. This Partnership has the aim to accomplish an infrastructure set up all over the European Continent, which allows transport services to follow the principle of sustainable mobility as set out in the Common Transport Policy of the European Union but also accepted at the ECMT (European Conference of the Ministers of Transport) Conferences.

The multi-modal Helsinki Corridors have a total length of about 48.000 km, of which 25.000 km stretch across the territory of the accession countries in Central Europe. Airports sea- and riverports and major terminals serve as nodes between the modes along these long distance interconnections between the Central and Eastern European countries.

Length and costs of the Corridors¹:

	Length in km	Cost in MECU
Corridor I: Total		6.140
Rail	1.710	1.720
Road	1.630	1.290
Corridor II: Total		4.618
Rail	2.500	1.840
Road	2.300	2.720
Corridor III: Total		4.680
Rail	1.650	1.770
Road	1.700	2.620
Corridor IV: Total		16.620
Rail	4.440	7.090
Road	3.740	8.370
Corridor V: Total		9.980
Rail	3.270	2.090
Road	2.850	7.680
Corridor VI: Total		12.555
Rail	1.800	5.710
Road	1.880	5.680
Corridor VII: Total	2.415	183
Corridor VIII: Total		1.950
Rail	1.270	820
Road	960	890
Corridor IX: Total		4.345
Rail	6.500	1.720
Road	5.820	1.930
Corridor X: Total		1.100
Rail	2.360	200
Road	2.150	900
Rail: Total	25.500	22.960
Road: Total	23.030	29.632
Total	48.530	62.171

¹ The total costs of the network include the costs for rail, road, inland waterways, airports, sea- and riverports. The figures for the costs are valid for TINA countries only.

Construction Cost of the Corridors

The construction costs for the Corridors have been estimated using the reports of the countries themselves. They are correlated to necessary investments, which were identified and briefly described by the countries.

While the countries have provided most of the necessary information on construction costs on their road and rail networks, the information received concerning costs of investments for airports, seaports and river ports is insufficient.

Based on projects already under way or ready for implementation, and possible investments identified by the proposing countries, cost estimates lead to a total investment volume up to 2015 of 66.227 MECU for the Corridors on the territory of the candidate countries for accession. For more information concerning the ten Helsinki Corridors in TINA countries (analysis by country, maps and diagrams, etc.) see the "First Progress Report" (June 1998) prepared by the TINA Secretariat, and endorsed by the TINA Senior Officials Group during their fourth meeting in Vienna, June 1998.

For projects and cost estimation of investments in the countries outside TINA there are no data available in the TINA Office yet. It will be among the tasks of the Office to collect information from various sources (e.g.: UN-ECE, including also its TEM/TER projects, UIC, ECMT) about ongoing and planned projects along the Corridors in all concerned countries and include this in the next annual report due for December 1999.

Traffic Flows on the Corridors

At the moment, there is no coherent forecast of traffic in the Central and Eastern European countries. Only national or regional forecasts exist, which are neither co-ordinated nor compatible. The need for detailed future traffic forecasts (based on common sources and assumptions) led the European Commission to launch a specific study for traffic forecasts on the TINA network. The study will be concluded in June 1999, and should cover the future planning needs sufficiently, while also providing basic information for project linked cost-benefit analysis purposes (reference: ToR of the PHARE Study "Traffic Forecast on the ten Pan-European Transport Corridors of Helsinki").

Corridor I

Alignment:

Corridor I is a multi-modal transport link, running in North - South direction. It starts in Helsinki (Finland) and connects Tallinn (Estonia), Riga (Latvia) and Kaunas (Lithuania) with Warsaw and Gdansk (Poland). In Kaunas Corridor I is crossed by Corridor IX which runs in East-West direction.

The Road Corridor (Via Baltica) runs from Tallinn along the Gulf of Riga to the Latvian capital Riga. There the Corridor is split into two branches. The main branch goes further via Kaunas (Lithuania), crossing the Lithuanian/Polish border at Kalvarija/Budzisko, to Warsaw.

The other branch (Corridor IA) crosses the Lithuanian/Russian border at Panemune running to Kaliningrad (Russia) and further to Gdansk (Poland).

The Rail Corridor (Rail Baltica) runs from Tallinn through Tartu (Estonia) to Riga (Latvia). It crosses the Latvian/Lithuanian Border at Meitene and continues to Jonaitiskiai (Lithuania) where it is split. The main branch continues to Kaunas, crosses the Lithuanian/Polish Border at Mockava/Trakiszkai, and continues to Warsaw.

The other branch (Corridor IA) goes on to Kaliningrad, crossing the Lithuanian/Russian Border at Pagegiai, and terminates in Gdansk.

General development:

The Ministries of Transport of Finland, Poland, Estonia, Latvia, Lithuania and the Russian Federation as well as the European Commission signed a framework Memorandum of Understanding on the 3 July 1996. In this memorandum the Corridor has been divided into three separate components (road: Via Baltica; rail: Rail Baltica; road/rail connection Riga – Kaliningrad – Gdansk).

For the Via Baltica there exists a separate Memorandum of Understanding signed on 1st December 1995 by the Transport Ministers of Finland, Poland, Estonia, Latvia and Lithuania as well as by Commissioner Kinnock for the European Commission. The memorandum set up a "Via Baltica Monitoring Committee", which is composed of Estonia, Latvia, Lithuania and Poland and with the participation of the European Commission. The Committee is chaired by Sweden, and the secretarial functions are ensured by Finland. It reports to the Steering Committee set up in relation to the general Memorandum of Understanding on Corridor I.

Via Baltica has made major progress in developing the road corridor. The five-year Via Baltica Investment Programme from 1996-2000 includes 445 km of road improvements (nearly one half of the route length). The Via Baltica Phase II will start in 2000. The programmed projects are now under discussion.

A Steering Committee, which monitors the railway co-operation, rail Baltica, is based on a Protocol Agreement signed in June 1997 by the railway companies, and chaired by the UIC. A fifth meeting of the Steering Committee is planned to take place in March 1999 in Vilnius, Lithuania. This meeting will notably deal with the restructuring process of the railways to make them comply with EU-legislation.

The road/rail connection, Riga-Kaliningrad-Gdansk, has had little development compared to Via Baltica. However, the Ministry of Transport of the Russian Federation has suggested to

host a First Steering Committee meeting on 5 March 1999 in Kaliningrad to discuss the state of transport infrastructure, problems and perspectives on developing the corridor branch.

At the Helsinki conference additional East-West road and rail branches were proposed to the originally approved network to take into consideration the important transit traffic from the ports on the Baltic Sea towards the Russian Federation and other NIS countries.

A deciding factor on the development of the rail link is how border-crossing problems can be solved. Border crossings involve both administrative proceedings (legal aspects in relation to way bills, customs and internal procedures of the railways) and technical barriers between Poland and the Baltic States as well as between Poland and the Russian Federation (change of track gauge and different braking and coupling systems).

The monitoring of the Corridor has so far been subject to the constraints related to the separation between PHARE and TACIS areas. To strengthen the integration of the Kaliningrad transport infrastructure in Corridor I and in Corridor IXB the Kaliningrad enclave ought to be closer coordinated with the Corridors under the PHARE programme, taking into account the results of the recent TACIS project on transport development in the Kaliningrad region.

Technical features of Corridor I:

Concerned countries	Finland, Estonia, Latvia, Lithuania, Poland, Russian Federation
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	1710 km
Roads	1630 km
Inland waterways	n.a.
Number of Airports	5
Number of Sea- and Riverports	2
Alignment:	<i>Tallinn – Riga – Kaunas - Warsaw</i>
Railway	Tallinn – Tapa – Tartu – Valga – Valmiera – Riga – Jelgava – Meitene – Siauliai – Jonaitiskiai – Kaunas – Kazlu Rūda – Mockava – Trakiszki – Bialystok – Warsaw
Road	Tallinn – Parnü – Ikla – Vitrupe – Riga – Kekava – Grenctale – Salociai – Panevezys – Kaunas – Marijampole – Kalvarija – Bialystok – Warsaw
Railway	<i>Branch to Kaliningrad - Gdansk</i> Jonaitiskiai – Pagegiai – Kaliningrad – Gronowo – Malbork – Gdansk
Road	Riga – Dalbe – Kalivai – Siauliai – Taurage – Panemune – Kaliningrad – Grzechotki – Elblag – Gdansk
Investments foreseen up to 2015:	6140 MECU
Railways	1720 MECU
Roads	1290 MECU
Inland waterways	n.a.
Airports	2800 MECU
Sea- and Riverports	330 MECU

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

ESTONIA

Rail: Rail Baltica

Tallinn – Tapa - Narva Link:

The rail section from Tallinn to Tapa is part of Corridor I. The Tallinn – Narva railway section is an additional link of Helsinki Corridor I towards Corridor IX. The railway line was partially rehabilitated in 1997-1998 with new rails. Further increase of the passage capacity of the railway station in the border town Narva and the reconstruction of the Tallinn-Narva-track is supported by EBRD loans. The LSIF facility will also allocate some grants to the modernization of this link.

Tallinn – Aegviidu – Tapa:

The Tallinn – Aegviidu stretch is double track and electrified, from there it continues not electrified. The reconstruction of the railway stations Tallinn-Kopli, Ülemiste, Maardu ja Muuga, and Tapa started in 1997 and shall be finished in 2000.

Tapa - Tartu – (Valga) Estonian/Latvian Border:

The current state of the railway line is single track and not electrified. The renovation of the line will start in 1999 and should be finished by 2002.

Road: Via Baltica

Tallinn – Narva Link:

The Tallinn – Narva link is an additional road section from Corridor I towards Corridor IX. The construction of by-passes (Johvi, Sillamäe and Narva) and highway maintenance projects are planned.

Tallinn – Pärnu – (Ikla) Estonian/Latvian Border:

The rehabilitation of the road stretch has so far included the recycling of pavement on 21 km. Due to lack of financing not more than half the planned works on the remaining stretch are possible, which amounts to less than 20 km of recycling. The upgrading of the section near Uulu in southern Estonia, the Pärnu bypass and the rehabilitation of the Päärdu bridge are included in the projects within the framework of Corridor I until the year 2002.

The construction of the Ikla border station has been completed.

LATVIA

Rail: Rail Baltica

Latvian/Estonian Border (Valka) - Valmiera – Ieriki - Riga:

The current state of the railway line is single track and not electrified. The reconstruction of the railway line is in consideration but no date was reported.

Riga – Jelgava – (Meitene) Latvian/Lithuanian Border:

The current state of the railway line is double track and electrified. The reconstruction of the railway line is in consideration but no date was reported.

Road: Via Baltica

Latvian/ Estonian Border (Ainazi) - Svetciems – Vitrupe – Baltezers – Riga:

The improvement works include the rehabilitation of roads over a length of 45 km and the rehabilitation of the Baltezers bridge.

Riga – Kekava – (Grenztale) Latvian/Lithuanian Border:

The improvement works include the rehabilitation of the pavement and the reconstruction of the Memele bridge and the Iecava bridge.

Branch Riga - Kaliningrad - Gdansk:**Road:****Riga – Dalbe – (Kalivai) Latvian/Lithuanian Border:**

The improvement works include the rehabilitation of the pavement.

LITHUANIA**Rail: Rail Baltica****Lithuanian/Latvian Border (Meitene) – Siauliai:**

The above section of Corridor I is not electrified, single track (double track totals only 7 km). Taking into account the current traffic intensity, track condition is reasonable. A capital reconstruction of the tracks as well as upgrading of signaling, telecommunication and communication lines is envisaged beyond 2005.

Siaulia – Radviliskis - Gaiziunai:

This section is non-electrified, double track, on particular sub-sections single track. The whole section is also part of Corridor IXB. In 1997-1998 the communication line on the section Kaisiadorys – Radviliskis (part of Corridor IXB) was upgraded with a loan granted by the government of Denmark.

Upon discharge of the EIB loan the signaling installations on the section Radviliskis – Gaiziunai will be upgraded. The begin of works is expected in 1999 and completion in 2001. On the section Siauliai – Radviliskis a telecommunication network will be installed in 2000. In 1997-1998 track materials were purchased with an EBRD loan, the materials were used for repair of 49.5 km track. Doubling of the track, where it is lacking, is envisaged after 2005.

Gaiziunai - Kaunas:

The section is non-electrified and double track. Capital repair of the tracks is planned before 2005 as well as replacement of signaling and telecommunication systems.

Kaunas – Kazlu Rūda – (Mockava) Lithuanian/Polish Border:

The line is non-electrified and double track up to Kazlu Ruda, and continues single track. The section Kaunas – Kazlu Ruda is also part of Corridor IXB. In 1998 at the border crossing Mockava a building for discharge of customs and border-crossing procedures was constructed. Within the period 1997-1998 the repair of the existing European gauge line (22 km) from the Lithuanian/Polish border to Sestokai has been completed. This enabled a speed increase to 80 km/h. In 1999 the telecommunication facilities for the section Kazlu Ruda – Sestokai - Lithuanian/Polish border will be upgraded, i.e. laying of optical cable and installation of digital transmission facilities.

To improve the regularity and turn-over of freight flow an installation of an automatic axlewheel gauge changing system is planned at the Mockava border crossing, with the support of German, Polish and Finish railways and their respective Ministries of Transport. This equipment is to be installed and piloted in June 1999.

In order to integrate the Lithuanian transport system in the European transport network the Lithuanian Government has issued a decree on construction of the European gauge railway

line from the Lithuanian/Polish border to Kaunas. At present all mandatory documents for signing are under preparation and revision, namely, the documents on territorial outline, such as special alignment scheme, justification of construction, summary of designing conditions, terms of reference and the documents for international tender. The international tender on preparation of the final design is due to be launched in 1999.

Road: Via Baltica

In 1996 the Lithuanian Government signed the following loan agreements for the construction of the highway "Via Baltica":

- EIB credit – 20 M€
- EBRD and Japanese EXIM bank – 19.3 M€
- NIB – 5.7 M€.

The share of the Lithuanian Road Administration in this project amounts to 15 M€ (from the Road Fund). In addition up to 5.4 M€ were allocated under the PHARE programme for construction works as well as for conducting and implementing measures for traffic safety, such as median barriers and pedestrian paths and crosswalks. The whole scope of the activities of the project are being performed in accordance with a defined schedule and it is anticipated to finalize them in due time (in 2000).

From the beginning of implementation of above project, starting from 1996, almost 22 M€ or 34% of the total amount were invested. 6.4 km of new road were constructed, reconstruction took place on 37.5 km and pavement strengthening on 29.5 km.

Lithuanian/Latvian Border (Salociai) – Panevezys – Kedainiai – Paneveziukas – Kaunas:

The reconstruction and strengthening of the pavement is progressing and the construction of the Panevezys bypass is under way. A new road between Kaunas and Kedainiai including the Kedainiai bypass is a main project and will be finished by 2000.

Kaunas – Garliava – Marijampole – (Kalvarija) Lithuanian/Polish Border:

The construction of the Garliava – Maruciai and Puskelniai – Marijampole road sections started in 1997 and is completed. The construction of a new road between Maruciai and Puskelniai will be finished in 2000. In 1997 a project for modernization of infrastructure at the Kalvarija border crossing (Lithuanian/Polish Border) with a capacity of 500 vehicles per day was finished.

The width of the asphalt-concrete cover will be extended to 9 m to comply with the requirements of international road traffic. The construction of the Marijampole bypass should start in 1999.

Branch Riga - Kaliningrad – Gdansk

Rail:

Jonaitiskiai – (Pagegiai) Lithuanian/Russian Border:

The current state of the railway line is non-electrified and single track. Existing traffic intensity is low, upgrading of the tracks, signaling and telecommunications is planned for 2005-2010.

Road:

Lithuanian/Latvian Border (Kalivai) – Siauliai – Kryzkalnis – (Panemune) Lithuanian/Russian Border:

The construction of by-passes and the strengthening of road pavement on some parts of the section are under way but there is no sufficient financing.

Construction of the Joniskis by-pass (3.0 km) and the Siauliai southern by-pass (8.2 km) as well as rehabilitation of the road section Siauliai – Bubiai (7.8 km) is planned for 2001-2005. Beyond the year 2005 construction of the Taurage bypass, including two bridges, is planned.

RUSSIAN FEDERATION

Branch Riga - Kaliningrad - Gdansk

Rail:

The regional railways have both the European narrow gauge and the Russian broad gauge.

Russian/Lithuanian Border (Sovjetsk) – Kaliningrad:

Kaliningrad – (Gronowo) Russian/Polish Border:

The railway section is single track.

Road:

The total length of Branch IA in the Russian Federation amounts to 164 km.

Russian/Lithuanian Border (Sovjetsk) – Talpaki - Kaliningrad:

The road section Sovjetsk – Talpaki (62 km) currently complies with road category two. A feasibility study to upgrade the road section to category one (two lanes in each direction) is under way. The Talpaki – Kaliningrad section (53 km) is under going reconstruction according to the technical parameters for road category one. The by-pass around Kaliningrad has a length of 9 km.

Kaliningrad – (Grzechotki) Russian/Polish Border:

The road section from Kaliningrad to the Russian/Polish border (40 km) is being modernized according to standards for road category one. In 1997 reconstruction works on the bridges started. The project is being studied in the framework of the TACIS programme and with inclusion of foreign investors.

POLAND

Rail: Rail Baltica

Polish/Lithuanian Border (Trakiszki) – Sokolka - Bialystok:

This section of the railway line is single track and only partly electrified. It will be upgraded to allow a speed up to 160 km/h and a second track will be added where necessary. However no date has yet been fixed for achievement of this project.

Modernization work at the Trakiszki border crossing has been completed; customs clearance for container cargo will start when the container terminal on the Lithuanian side is completed.

Bialystok – Malkinia - Warsaw:

The current state of this railway section is double track and electrified. It is envisaged to upgrade the section to a speed of 250 km/h.

Road: Via Baltica

The Polish government has already committed 18 MECU for major bypass and street rehabilitation projects on Via Baltica, partly through IBRD loans. Negotiations have been carried out with the EIB and NIB for arranging further loans. If these negotiations end favourably, it is conceivable that all the financing needed for implementing the Via Baltica Investment Programme in Poland will be secured.

Polish/Lithuanian Border (Budzisko) – Augustow - Bialystok:

The future work concentrates on the 146 km section between the Lithuanian Border and the city of Bialystok. The major projects are the rehabilitation of the Szypliszki-Suwalki (17 km) stretch and the Augustow bypass. The latter will be a new road (17 km) for which a conceptual plan in the northern part (11 km) has been approved. Detailed design and contract documents will be prepared in 1999 and the construction will start in 2000. The southern part of the bypass (6 km) is more complicated and costly. There are no approved plans presently for this section.

Bialystok – Ostrow Mazowiecki - Warsaw:

In 1998 the construction of the 8 km long two carriageway Radzymin by-pass (North-East of Warsaw) financed with a World Bank loan (13,95 MECU) and the construction of the Bialystok north bypass (7 km) also financed by the World Bank loan (5,02 MECU) were completed. Other improvement works planned for the years 2000-2002 include the Ostrow Mazowiecki bypass (8,8 km - 16 MECU).

Branch Riga - Kaliningrad – Gdansk**Rail:****Polish/Russian Border (Gronowo) – Braniewo – Bogaczewo – Elblag - Malbork – Gdansk:**

The railway section is double track and electrified between Bogaczewo and Gdansk. The section from the border shall be electrified and upgraded to a speed of 120 km/h. Negotiations with the Russian Railways started in 1996 with a view to modernizing the Braniewo - Mamonowo border station and development of the Gdansk-Kaliningrad link.

Road:**Polish/Russian Border (Grzechotki) – Elblag – Gdansk:**

The road section between Grzechotki and Elblag will be upgraded into a two-lane expressway starting with the reconstruction of bridges. Between Elblag and Gdansk the existing road will be reconstructed into a four-lane expressway.

Corridor II

Alignment:

Corridor II is a multi-modal East – West link connecting Berlin (Germany) with Nizhny Novgorod (Russia), via Warsaw (Poland), Minsk and Moscow.

The extension of Corridor II to Nizhny Novgorod was decided upon at the Helsinki Conference. This extension gives the Corridor further access to the Trans-Siberian rail trunk line and to the inland waterways in the Russian Federation, along the Volga River to the Caspian Sea and via the Volga/Don Canal to the Sea of Azov and the Black Sea.

General development:

A Memorandum of Understanding on the development of the Corridor was signed on 23 January 1995 by the Ministers of Transport of Germany, Poland, Belarus, the Russian Federation and the Railway Minister of the Russian Federation as well as by the European Commission. A Steering Committee, co-chaired by DG VII, has since monitored the work of several working groups and the development of the Corridor. One of the working groups is the working group for railways, which is chaired by the German Railways (DB). At the Third Steering Committee meeting of Corridor II, which took place in Nizhny Novgorod on February 20, 1998, it was decided to prepare an addendum to the Memorandum of Understanding on Corridor II, to include the extension of the Corridor to the Volga region (Nizhny Novgorod).

Following a suggestion of the German Ministry of Transport, the participants agreed to explore the establishment of a permanent Secretariat for Corridor II. This issue was again raised at the fourth Steering Committee meeting on November 17, 1998, in Berlin.

The next meeting of the Steering Committee will take place in Warsaw on May 19, 1999 in the margin of the ECMT meeting.

The border crossing problems have become particularly acute at the Polish/Belarusian border, Malaszewicze/Brest, where the transshipment of goods takes place. Considerable delays due to customs procedures, sanitary controls and rail gauge change are major constraints for the flow of goods along this route. Another problem, which arises, is the two different legal codes for rail freight traffic between Western Europe and the NIS countries. The "East Wind" container freight line service takes five to six days to deliver goods between Berlin and Moscow.

The Second EU/Russia Industrialist Round Table meeting in May 1998 in Brussels took an initiative to overcome infrastructure and operational problems, with the involvement of public and private institutions. For example, a German proposal was to launch a rail freight freeway concept between Berlin and Moscow, monitored by one single infrastructure manager, acting as a One-Stop-Shop. To promote this idea an ad hoc working group, composed by representatives from the railway industry, the railway operators and the European Commission was set up. The basic idea is to launch a private-public-partnership (PPP) scheme concept to ensure sufficient capital input to satisfy the needs of upgrading infrastructure.

During *a step one* the working group will prepare documents on the new railway concept in view of convincing the parties of the advantage of improving the competitiveness of rail

services on the Corridor. The new initiative is based on a PPP scheme to ensure financing of the necessary infrastructure.

End of February 1999 the working group will decide whether the initiative should be continued as *step two*.

The Working Party on Transport Trends and Economics (WP 5) of the UN-ECE is currently working on the identification and appraisal of projects on Corridor II as far as transport infrastructures in the NIS are concerned.

Technical features of Corridor II:

Concerned countries	Belarus, Germany, Poland, Russian Federation
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	2500 km
Roads	2300 km
Inland waterways	n.a.
Number of Airports	4
Number of Sea- and Riverports	2 (in Russia).
Alignment:	<i>Berlin – Warsaw – Minsk – Moscow – Nizhny Novgorod</i>
Railway	Berlin – Kunowice - Rzepin – Poznan – Konin – Lowicz – Warsaw – Lukow – Terespol – Brest – Baranavicy – Minsk – Orsa – Smolensk – Moscow – Vladimir – Nizhny Novgorod
Road	Berlin – Swiecko - Rzepin – Poznan – Konin – Kutno – Warsaw – Siedlce – Terespol – Brest – Baranavicy – Minsk – Orsa – Smolensk – Moscow – Vladimir – Nizhny Novgorod
Investments foreseen up to 2015:	4618 MECU
Railways	1840 MECU
Roads	2720 MECU
Inland waterways	n.a.
Airports	58 MECU
Sea- and Riverports	n.a.

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

GERMANY

Rail:

Berlin – (Frankfurt/Oder) German/Polish Border:

The current railway line is designed as a high-speed line allowing speeds of 160 km/h.

Road:

Berlin – (Frankfurt/Oder) German/Polish Border:

Roads comply with standards of the Trans-European Network. The border bridge in Swiecko was opened to traffic in 1998.

POLAND

Rail:

Polish/German Border (Kunowice) – Rzepin – Poznan – Konin – Lowicz - Warsaw:

The current railway line is double track and electrified. The line is being upgraded to a design speed of 160 km/h, completion is expected by the year 2000. Also a new modern terminal in Poznan is being planned, talks with city authorities are under way.

Warsaw – Lukow – (Terespól) Polish/Belarussian Border:

The modernization of the section Warsaw - Terespól was started in 1996. Currently, the section from Warsaw to Minsk Mazowiecki is being modernized from EIB, PHARE and the Polish Government funds. The Polish State Railways (PKP) plan to complete the modernization of the Warsaw - Terespól section (cost estimate - 400 MECU) in the years 2000-2003. The modernization of the Warsaw by-pass as a second alignment from Lowicz to Lukow for freight traffic (cost estimate - 360 MECU) will probably start after 2005.

The railway border crossing in Terespól was modernized in 1998.

Road:

Polish/German Border (Swiecko) – Rzepin - Poznan – Konin – Kutno - Warsaw:

The concession for construction and operation of the A2 section Swiecko - Strykow/Lódz, divided into three segments including the existing motorway section Wrzesnia - Konin (48 km) constructed in the 70's and 80's was awarded to the Autostrada Wielkopolska S.A (Polish-Foreign concessionaire) in 1997. However the Financial Closing Agreement is not signed and construction works have not started yet.

A by-pass around Poznan is being constructed as a non-toll motorway and should be completed by 2001. The tender process for the A2 section Strykow/Lódz - Kukuryki (Polish/Belarussian boarder) is stopped because of no decision concerning the location of the Warsaw by-pass. The relevant study aiming to propose the possible layout of a future by-pass is under realization.

ABiEA plan the following scenario for motorway construction:

- 1998-2001, section Konin - Krzesiny (87 km) in BOT system,
- 1998-2001, section Komorniki-Krzesiny (13 km Poznan bypass) financed by state budget, PHARE, EIB loan).

The possible alignment for the rest of route is following:

- 2002-2005, Nowy Tomyśl-Komorniki (51 km),

- 2006-2010, Swiecko-Nowy Tomyśl (105 km), Konin-Stryków/Łódź – 105 km, Warsaw – Siedlce – (Terespol) Polish/Belarusian Border:
The Warsaw by-pass (Konotopa-Konik; 40km) will not be constructed before 2011-2015. From Konik the road continues to Kukuryki to the Polish/Belarusian Border, whereas no reconstruction date was fixed yet.

BELARUS

Rail:

The transport infrastructure on the rail routes allows the pass of the required number of trains with a permissible speed of 90-120 km/h for freight and passenger trains respectively. A slight reconstruction of railway equipment may lead to an increase of speed up to 110-160 km/h.

Concern is caused by the state of the railway border crossings, where considerable time is lost for customs and border control procedures.

Belarusian/Polish Border (Brest) - Minsk:

The current state of the railway line is double track and electrified.

Minsk – Orsa - (Krasnoie) Belarusian/Russian Border:

The current state of the railway line is double track and electrified.

Road:

At present the "Roads of Belarus" State Programme which aims at developing the international arterial roads as one of the priority projects has been approved of in the Republic. The programme for the development of border infrastructure will be completed by the end of 1998.

Belarusian/Polish Border (Brest) - Minsk:

This motorway section complies with the standards of the European International Road Agreement. The modernization of the road has been completed. A feasibility study has been elaborated for the Brest – Terespol border crossing.

Minsk – Orsa - (Krasnoie) Belarusian/Russian Border:

The upgrading of the M-30 highway to the Russian Border between km 375-km 605 will be completed in 2005. This includes the repair of road surface and structures, and the emplacement of road safety installations.

RUSSIAN FEDERATION

Rail:

Russian/Belarusian Border (Krasnoie) - Smolensk – Vyazma - Moscow:

The railway link (491 km) is double track and electrified. The maximum speed for passenger trains is 120 km/h and for freight trains 80 km/h. In 1994 a feasibility study in terms of modernization and reconstruction, also for high speed passenger traffic, was elaborated.

Moscow – Vladimir – Nizhny Novgorod:

The rail link is 396 km long, double track and electrified.

Road:

Russian/Belarussian Border (Krasnoie) - Moscow:

This road section is 448 km long, has 64 bridges and the number of lanes varies from 2-6. The proposed measures for upgrading include the increase to 8 lanes from km 16-20 from Moscow, the increase to six lanes from km 20-64 and the construction of a new road with four lanes near the Vop river.

Moscow – Nizhny Novgorod:

This road section is 411 km long, has 50 bridges and the number of lanes varies from 2-6. The road will be raised to first class level. The planned measures include the construction of Belashiha, Vladimir and Nizhny Novgorod detours.

Corridor III

Alignment:

Corridor III is a multi-modal East – West transport link running from Dresden (Germany) via Wroclaw and Katowice (Poland), thus linking important industrial areas in Germany and Poland, to Kiev via Lviv (Ukraine). An additional branch for road mode starts in Berlin and connects to the Corridor in Krzywa (Poland).

General development:

In spite of the fact that a Memorandum of Understanding was signed by the Ministers of Transport on October 3, 1996, future work will focus on several issues identified in the Memorandum and will be pursued by sectional Sub-Committees and working groups. One of these working groups is the working group for railways, which is chaired by the Polish Railways (PKP).

In relation to the Corridor III alignment, the Polish authorities have proposed to link the Baltic Sea, the port of Gdansk, with the southern part of Corridor IX and the Black Sea. A feasibility study financed by the PHARE Multi-Country Transport Programme will examine which routing may be the most attractive for the customers.

Two alternative routes are proposed:

- Gdansk – Warsaw – Lublin – Dorohusk – Kovel – Tarnopol – Cernauti – Viscani – Bacau – Buzau – Ploiesti – Bucharest – Giurgiu/Rousse – Gorna Oriahovitsa – Stara Zagora – Dimitrovgrad – Podkova – Alexandroupolis and/or
- Gdansk – Warsaw – Krakow – Muszyna – Kosice – Cop – Halmeu – Satu Mare – Oradea – Cluj – Brasov – Bucharest – Giurgiu/Rousse – Gorna Oriahovitsa – Stara Zagora – Dimitrovgrad – Podkova – Alexandroupolis.

A specific problem linked to Corridor III is the rail gauge change at the Polish/Ukrainian border at Medyka/Shegini and long waiting times.

Technical features of Corridor III:

Concerned countries	Germany, Poland, Ukraine
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	1650 km
Roads	1700 km
Inland waterways	n.a.
Number of Airports	4
Number of Sea- and Riverports	n.a.
Alignment:	<i>Dresden – Wrocław – Lviv - Kiev</i>
Railway	Dresden - Zgorzelec – Legnica – Krzywa - Wrocław – Opole – Katowice – Krakow – Tarnow – Rzeszow – Przemysl – Medyka – Lviv – Kiev
Road	Dresden – Zgorzelec – Krzywa – Wrocław – Opole – Gliwice – Katowice – Krakow – Tarnow – Rzeszow – Przemysl – Medyka – Lviv – Kiev
Road	<i>Branch from Berlin</i> Berlin – Cottbus – Forst – Olszyna – Golnice – Krzywa
Investments foreseen up to 2015:	4680 MECU
Railways	1770 MECU
Roads	2620 MECU
Inland waterways	n.a.
Airports	290 MECU
Sea- and Riverports	n.a.

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

GERMANY

Rail:

Dresden – (Görlitz) German/Polish Border:

The German railway sections are practically completed. The current railway line is double track.

Road:

Dresden – (Görlitz) German/Polish Border:

The German road sections are practically completed.

Branch from Berlin:

Road:

Berlin – (Forst) German/Polish Border:

The existing road complies with TEN standards.

POLAND

Rail:

There is a double-track electrified rail link from the southern industrial zones of Poland to Lviv and Kiev in which the difference in gauge between Poland and Ukraine causes problems.

Polish/German Border (Zgorzelec) – Legnica - Wrocław:

The feasibility study on the E-30 railway section Zgorzelec - Wrocław was completed in 1997. The study has been later renewed for the section Legnica – Wrocław - Opole due to flood damages that changed the results of the previous study. This led to a request for PHARE grant for this section. The existing track will be upgraded to a design speed of 160 km/h and a second track added between Zgorzelec and Wegliniec; construction works will begin in 1999.

Wrocław – Opole – Gliwice - Katowice:

Between Wrocław, Opole and Gliwice run two parallel alignments for freight and passenger traffic. The northern alignment shall be upgraded to the design speed of 160 km/h and the southern route via Jelcz will be upgraded to the speed of 120 km/h. A study for the latter alignment shall start in 1999.

Katowice – Krakow – Tarnow – Przemyśl – (Medyka) Polish/Ukrainian Border:

Poland is planning to upgrade the existing link E-30 from 120 km/h to 160 km/h after the year 2000. The section Przemyśl - Ukrainian border is planned to be upgraded to allow 120 km/h. A study on modernization of cargo terminals at Przemyśl - Medyka is being carried out. The modernization of the railway border crossing in Przemyśl is underway; completion of this project is scheduled for 2000.

Road:

25 % of the road Corridor already meets international standard requirements. The A4 road is an important part of the National Road Programme.

Polish/German Border (Zgorzelec) – Krzywa:

The existing section of A4 motorway Jędrzychowice – Zgorzelec (2 km) should be adapted to the standards of a toll road. Currently the road connection is a two lane main road. A by-pass around Boleslawiec is being constructed to relieve the traffic flow in the town. The motorway construction Zgorzelec – Krzyzowa is planned for 2011-2015.

Wroclaw – Wrzoski (Opole) – Gliwice – Katowice:

At present the motorway section Wroclaw – Katowice is under construction. New bridges and interchanges are to be constructed by 1999. The roadworks were started in the summer 1998 and the following motorway construction scenario is planned:

- 1998-2001, section Wrocław-Nogawczyce (126 km), financed by the state budget, PHARE and EIB,
- 2002-2005, section Nogawczyce-Murckowska/Katowice (62 km), Kraków by-pass (8 km), Wrocław by-pass (35 km).

Katowice – Krakow - Tarnow – Przemysl – (Medyka) – Polish/Ukrainian Border:

There are preparatory works aiming to construct the Krakow bypass: Opatkowice-Wieliczka (8 km) as a non-toll motorway. The road works are expected to start in 1999. The construction of the section Kraków-Tarnów (77 km) is planned but no date has yet been fixed.

Branch from Berlin:**Road:**Polish/German Border (Olszyna) – Golnice - Krzywa – Wrocław:

An 8 km road segment was reconstructed together with a border freight terminal in 1998. The existing motorway section Krzywa - Wrocław (92 km) was constructed before the II World War and requires rehabilitation. 38 km of this section (Legnica-Wrocław north carriageway) was modernized in the year 1995 utilizing the World Bank loan.

UKRAINE**Rail:**

The whole Ukrainian section of Corridor III has been electrified. However the Ukrainian Railways cannot obtain enough funding to cover maintenance costs. Freight rail traffic on the Ukrainian network has decreased by 66% over the period 1990 to 1997, and passenger rail traffic has decreased by 55% between 1990 to 1997. An increase in traffic for both modes is expected for 1998. The railway traffic's share on freight traffic is relatively stable at about 15%, but is vulnerable to competition from a liberalized road transport industry.

Ukrainian/Polish Border (Shegini) – Mostyska – Lviv:

The length of the section from Mostyska to Lviv is 78.2 km, the section is double track and electrified.

Lviv – Zdolbunov – Sepetovka – Berdicev - Fastiv - Kiev:

The section Lviv – Kiev will benefit from an EBRD loan to modernize the rail line.

Road:

Road traffic data in the Ukraine are currently scarce and unreliable. Apart from a few special project related studies, few traffic surveys are carried out as a result of economic constraints. Road traffic has been reckoned to be only 50 percent of the 1989 levels, the estimated average traffic increase for 1997-2000 is considered to be too high. The exception to this last point may be on some transit routes.

Ukrainian/Polish Border (Shegini) – Mostyska – Lviv:
Lviv – Rivne - Zytomyr - Kiev:

Corridor IV

Alignment:

Corridor IV is a multi-modal Northwest - Southeast transport link running from Dresden/Nürnberg (Germany), via Praha (Czech Republic), to Vienna (Austria)/ Bratislava (Slovakia), Budapest (Hungary) and to Romania. In Romania Corridor IV divides into two branches. The northern branch runs from Arad via Bucharest to Constanta at the Black Sea, the southern branch from Arad via Craiova to Sofia (Bulgaria) and divides again. One branch running further to Thessaloniki (Greece) and the other to Istanbul (Turkey).

The Romanian authorities prefer to give priority to the northern branch to Constanta, as the financial resources for rehabilitation of the infrastructure are limited. However, the idea of setting up a PPP concession to finance the entire rehabilitation and maintenance of the sections of Corridor IV in Romania may help the government to consider the rehabilitation of the southern section via the link Calafat (RO)/Vidin (BG) (ferry link or new bridge) to Sofia as well.

Turkey has developed a Bosphorus Tube Tunnel Project, which incorporates present and planned mass transportation initiatives. With the realization of this tunnel, the Corridor would be connected to Asia also by rail and road mode.

General development:

The German Ministry of Transport took the initiative to draft a Memorandum of Understanding, which was discussed at the first meeting of the Steering Committee in Leipzig, Germany on May 7 and 8, 1998. The second meeting of the Steering Committee took place in Antalya, Turkey, on October 23, 1998. There the participating countries agreed on a common text for the MoU, which was initialed and right away distributed for signing by the Ministers of Transport. The next meeting of the Steering Committee shall take place in Potsdam, Germany, on June 30, 1999.

The chairmanship of the Steering Committee is taken by Germany, the vice-chairmanship is taken by Turkey. This mandate lasts for two years and must be approved of by the Steering Committee in case of extension or change. A permanent secretariat will be set up by the Ministry of Transport in Saxony, Germany.

A Working Group for railways has been established and is chaired by the German Railways (DB). An agreement between the Ministries of Transport of Austria, Germany and the Czech Republic was signed in June 1995 to establish a cooperation in developing the Berlin - Prague - Vienna railway link.

Technical features of the Corridor IV:

Concerned countries	Austria, Bulgaria, Czech Republic, Germany, Greece, Hungary, Romania, Slovakia, Turkey
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	4440 km
Roads	3740 km
Inland waterways	n.a.
Number of Airports	14
Number of Sea- and Riverports	10
Alignment:	<i>Berlin – Praha – Bratislava/Vienna – Budapest – Arad</i> Berlin – Dresden – Decin – Praha – Kolin – Pardubice – Ceska Trebova – Brno – Breclav (link to Vienna, Austria) – Kutý – Bratislava/Vienna – Rajka – Hegyeshalom (link to Vienna, Austria) – Győr – Tatabánya – Budapest - (second alignment: Bratislava – Nove Zamky – Sturovo – Szob – Vac – Budapest) – Cegléd – Szolnok – Bekescsaba – Curtici – Arad
Railway	Berlin – Dresden – Decin – Praha – Kolin – Pardubice – Ceska Trebova – Brno – Breclav (link to Vienna, Austria) – Kutý – Bratislava/Vienna – Rajka – Hegyeshalom (link to Vienna, Austria) – Győr – Tatabánya – Budapest - (second alignment: Bratislava – Nove Zamky – Sturovo – Szob – Vac – Budapest) – Cegléd – Szolnok – Bekescsaba – Curtici – Arad
Road	Berlin – Dresden – Cinovec – Nova Ves – Praha – Brno – Lanzhot – Bratislava/Vienna – Cunovo – Rajka – Hegyeshalom (link to Vienna, Austria) – Győr – Tatabánya – Budapest – Szeged – Nadlac – Arad – Timisoara – Lugoj
Railway	<i>Branch from Nürnberg</i> Nürnberg – Cheb – Plzen – Praha
Road	Nürnberg – Rozvadov – Plzen – Praha
Railway	<i>Branch to Constanta</i> Arad – Simeria – Alba Iulia – Copsa Mica – Brasov – Ploiesti – Bucuresti – Constanta
Road	Lugoj – Deva – Sibiu – Pitesti – Bucuresti – Constanta
Railway	<i>Branch to Istanbul</i> Arad – Timisoara – Lugoj – Craiova – Calafat – Vidin – Vraca – Sofija – Plovdiv – Dimitrovgrad – Svilengrad – Kap. Andreevo – Edirne – Istanbul
Road	Lugoj – Caransebes – Craiova – Calafat – Vidin – Vraca – Botevgrad – Sofija – Plovdiv – Orizovo – Haskovo – Svilengrad – Kap. Andreevo – Edirne – Istanbul
Railway	<i>Branch to Thessaloniki</i> Sofija – Radomir – Dupnica – Kulata – Kilis – Thessaloniki
Road	Sofija – Pernik – Kulata – Seres – Thessaloniki
Investments foreseen up to 2015:	16620 MECU
Railways	7090 MECU
Roads	8370 MECU
Inland waterways	270 MECU
Airports	890 MECU
Sea- and Riverports	n.a.

Remark:

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- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

GERMANY

Rail:

Dresden – (Bad Schandau) German/Czech Border:

This line is part of the European link from Scandinavia to the Balkans. It was therefore included as an international project in the Federal Transport Infrastructure Plan '92. Studies have shown that the complete or partial construction of a new high-speed line is not economical and thus out of question at present. In order to improve services in the medium term tilting trains are to be used and the permanent way is to be improved for this purpose. The upgrading of the line will allow a maximum speed of 160 km/h.

Road:

Dresden – (Bad Schandau) German/Czech Border:

This road (A 17) is part of the basic German motorway network and the E 55 European long-distance link. It is contained in the Federal Transport Infrastructure Plan '92 and rated as "priority project". The route determination procedure required by German planning law has been concluded. Construction permission has been given for the northernmost 3.6 km long section from the junction with the A4 motorway to the B 173 federal highway. The plan approval procedure is currently ongoing for the subsequent 8.9 km long section from the B 173 federal highway to the B 170 federal highway. Federal funds amounting to 200 million DM have been budgeted for these two sections for the period up to the year 2000.

For the other sections the plan approval procedures required for construction permission are to be initiated in 1999. The entire German portion of the A 17 should be open by 2003.

A feasibility study is currently being conducted to explore the possibility of private sector funding within the framework of the operator model on the basis of the Private-Sector Funding of Trunk Road Construction Act. At this point, it is not yet possible to definitely assess the feasibility of private sector funding. This still requires coordination in a German-Czech working party, which was established for this purpose. A final result will probably not be available before 1999.

Branch from Nürnberg:

Rail:

Nürnberg – (Schirnding) German/Czech Border:

This line is part of the link from the North Sea ports to South-Eastern Europe. It was included as an international project in the Federal Transport Infrastructure Plan '92. In addition the Nürnberg – Marktredwitz section was rated a "priority requirement" as a component of the Trans-European Transport Network. Studies have shown that the complete or partial construction of a new high-speed line is not economical and thus out of question at present. In order to improve services in the medium term tilting trains are to be used and the permanent way is to be improved for this purpose, this includes the electrification of the line and tunnel widening. The electrification of the line is not likely to commence until 2002. Traffic forecasts assume a traffic volume increase on both lines, which is relatively greatest in border traffic.

Road:Nürnberg – Amberg – (Waidhaus) German/Czech Border:

This road is part of the basic German motorway network (A 6) and the European long-distance link from Paris via Nürnberg to Prague (E 50). It is contained in the Federal Transport Infrastructure Plan '92 and rated as "priority project". The section between Nürnberg and Amberg was constructed as a four-lane federal motorway between 1970 and 1991 and has since been open to traffic. The new section between Amberg and the German/Czech border will likewise be constructed as a four-lane federal motorway.

The constraints on budgetary resources mean that final completion of the motorway link will not be possible until after the year 2000, even under favourable planning conditions. The Waidhaus bypass was opened to traffic on 10 November 1997 at the same time as the joint passport control and customs clearance facility on Czech territory.

CZECH REPUBLIC**Rail:**

Rail was the mode worst hit by the economic changes, as can be seen from the 52% decline in volume transported over the period 1989-1995. However freight traffic volumes seem to have stabilized from the end of 1993.

The upgrading work on the Corridor should be finished in 2007.

Czech/German Border (Decin) – Usti nad Labem – Praha:

The current electrified double track line shall be upgraded to a design speed of 100-160 km/h. Completion is scheduled for 2002.

Praha – Kolin – Brno – (Breclav) Czech/Slovakian Border:

Part of the railway line Ceska Trebova – Brno was electrified and put into service. The railway line Brno – Vranovice is being upgraded. This includes the total modernization of the Vranovice railway station. The renewal and upgrading to a speed of 100-160 km/h of the total railway section is part of an agreement with AGC and AGCT. Completion is scheduled for 2002.

Road:

From 1989-1995 the total volume transported by road declined by 25%. However traffic volumes picked up again after 1993. This is a result of road services, which have won a share in markets that were previously the preserve of rail transport.

The priority for the Czech road network modernization policy is to complete the country's motorway and dual carriageway network by 2007. The main planning criteria is density.

Czech/German Border (Cinovec) – Usti nad Labem - Nova Ves – Praha:

The construction of a new highway is under way and should be brought to service in 2002. The highway Praha – Usti nad Labem is approximately 90 km long. Of this length 36.5 km are in operation, namely the section Praha/Zdiby – Nova Ves, Doksany – Lovosice and the section Rehlovice – Trmice. The Nova Ves – Doksany section (14.6 km) is under development. Sections Lovosice – Rehlovice and Trmice - Czech/German Border are in preparation process, their total length being 36.7 km. An international treaty approved by government of the Czech Republic in 1997 was prepared to connect the Czech D8 highway with the continuing German A17 highway by the development of a cross-border bridge.

The Praha by-pass is 80 km long. About 11 km is in operation. A section in the western sector of Praha between Trebonice and Ruzyne (3.4 km) is under development. The section between Repy and Ruzyne (2.5 km) is being prepared for development.

Praha – Brno – (Lanzhot) Czech/Slovakian Border:

The stretch is constructed as a six-lane motorway from Praha to Brno (197 km) and continues with four lanes (59 km).

Branch from Nürnberg:

Rail:

Czech/German Border (Cheb) – Plzen – Praha:

The current railway line is double track and electrified. The Cheb border station and an adjacent 5.1 km railway section are being modernized between 1995-1999. The total railway section shall be renewed; this includes the adjustment of block equipment and speed increase.

Road:

Czech/German Border (Rozvadov) – Plzen – Praha:

The Praha – Plzen – Rozvadov highway is 150 km long. Apart from the Plzen by-pass (21.5 km) the whole highway is in operation. A 3.4 km access road has been rehabilitated on the Czech/German border crossing Rozvadov.

SLOVAK REPUBLIC

Rail:

Railway on this corridor is the best quality track on the Slovakian railway network.

Slovakian/Czech Border (Lanzhot) - Kutý – Malacky – Devinska Nova Ves - Bratislava:

The rail link Kutý - Bratislava is being reconstructed to enable a track speed up to 160 km/h (see table 1). The section V. Levice - Malacky was reconstructed in 1997-1998 to the track speed of 160 km/h, but the present automated track control equipment enables the operational speed max. 140 km/h only. The railway border crossing station in Kutý is in complex reconstruction, including a joint clearance building, tracks and platforms. The preparation of reconstruction has begun in 1997 and reconstruction will be completed in 2004.

Bratislava - (Rajka) Slovakian/Hungarian Border:

The railway line is double track to Petržalka and continues from there as single track, the total section is electrified and in good condition. The link to the Hungary is in operation.

(second alignment): Bratislava – Galanta – Nove Zamky – (Sturovo) Slovakian/Hungarian Border:

The second alignment of rail corridor IV Bratislava - Sturovo is being continuously reconstructed according to the financial possibilities of the ZSR (Slovak Railway Corporation) and national budget.

Link to Austria:**Bratislava – Petržalka – (Kittsee) Czech/Austrian Border:**

The railway line is double track to Petržalka and continues single track to the border, the total section is electrified. The new central railway station in Petržalka was completed in 1998. The link to Austria will be put in operation in January 1999.

Corridor IV - Rail

Table 1

Alignment	Distance in km	Proposed track speed km/h	Present track speed km/h	Estimation of cost (MECU)	Note
border CZ/SK - Kuty	7	160	80 - 120	22.300	
Kuty - Malacky	26	160	100 - 140	53.500	1*
Malacky - D.N.Ves	25	160	100 - 120	56.500	
D.N.Ves - Bratislava Mociar	18	120	80 - 120	3*	2*
Bratislava Mociar - Galanta	44	160	80 - 140	85.200	
Galanta - Nove Zamky	42	160	100 - 120	128.000	
Nove Zamky - Sturovo	45	160	60 - 120	97.300	
Sturovo - border H	14	160	100 - 120	38.600	

Note: 1* section V.Levare - Malacky enables 160 km/h speed

2* Bratislava railway station (30-40 km/h)

3* according to the individual infrastructure establishment

Combined transport:

There are two existing CTT - Central Loading station/UNS and port Bratislava - Palenisko. The preparation for good's centre construction for freight transport was finalized and will be equipped by the logistics control centre. The CTT in Nove Zamky was completed and from 2. November 1998 is in operation by OZON (SK) together with national operator Ö-Kombi (A/SK). The Ro-La train operate daily connecting Nove Zamky (SK) - Wels (A) according to the SK/A Agreement.

The combi - train TATRAN Express between Bratislava (SK) and Rotterdam (NL) is again in operation from February 1998 by the CS Eurotrans and INTRANS (NL).

Another line is operating between Sturovo (SK) and Bologna (I) by KLEVITRANS.

At present the negotiations between KLEVITRANS and Ö-Kombi regarding the new combi line Marchegg/Kittsee - Zilina - Plavec - Orlow (PL) - Moscow (RUS) have finished.

Road:

The motorway D2, which has a length of 80 km, presents the branch of corridor IV on the Slovakian territory.

Slovakian/Czech Border (Kuty) - Bratislava:

The motorway border crossing Kuty - Breclav has partially been put into operation on 16. November 1998 (loading of trucks). The section for passenger cars and a forwarder block for trucks have to be constructed and completion is expected in the year 2000. The motorway from the border to Bratislava is in operation in full profile.

Bratislava – (Kittsee) Slovakian/Austrian Border – (Rajka) Slovakian/Hungarian Border:

The stretch Bratislava City - crossroad Kittsee (A) is in full profile (2x2) and the rest to the SK/H border is in half profile (2x1). The last 2,9 km section crossroad D2/I2 - Mlynska dolina is in preparation and will be put to construction as the financial situation allows (see table 2).

Corridor IV - Road/Motorway

Table 2

Road category	E Classification	Stretch	Distance in km	Alignment in km	Financed in 1998 MECU	Note
D2	E65	border CZ/SK - Bratislava cross.I/2	58,40	0,00-58,40	0	1*
I/2	E65	cross.D2/c I/2 - Mlynska dolina	2,90	61,30	0,03	
D2	E65	Mlynska dolina - Viedenska str.	3,50	64,80	0	1*
D2	E65	Viedenska str. - border SK/H	14,90	79,70	7,65	2*
Corridor IV TOTAL			79,70		7,68	

Note: ¹* in operation in full profile

² full profile to cross. Kittsee (Austria) and the half profile the rest

AUSTRIA**Links to Austria:****Rail:****Austrian/Hungarian Border (Hegyeshalom) - Vienna:**

In 1991 it was agreed upon to reduce the journey time to approximately 2 hours on the Vienna – Budapest stretch. The measures include the increase of the carrying capacity of the line as well as the increase of the permissible line-speed.

The upgrading of the infrastructure became effective in the summer of 1998. It is expected that the whole project will be completed in the year 2000.

Austrian/Slovakian Border (Kittsee) - Vienna:

The existing link between Vienna and Bratislava is the railway line via Marchegg/Devinska Nova Ves, the journey time is approximately one hour.

In April 1995 the Slovak and Austrian Transport Ministers concluded an agreement on the preferential development of the railway connections between Vienna and Bratislava. It was agreed to develop the new railway link Parndorf – Kittsee as a high performance line according to international standards. Provisional rail services will be introduced in January 1999. The completion of the project is expected during the year 1999.

Austrian/Czech Border (Breclav) - Vienna:

The rail link between Vienna and the Czech Border is 84 km long and being upgraded to higher speeds. The ÖBB is examining possibilities of further development. Further investments will be decided depending on the results.

Road:**Austrian/Hungarian Border (Hegyeshalom) - Vienna:**

The existing road between Vienna and Budapest is the A 4 motorway which runs from Vienna to the Hungarian Border near Hegyeshalom.

Austrian/Slovakian Border (Kittsee) - Vienna:

A new road is in planning stage to establish a direct connection between the A 4 and the new border station Jarovce/Kittsee between Austria and the Slovak Republic. Thus a high standard road connection between Vienna and Bratislava can be achieved.

HUNGARY**Rail:****Hungarian/Slovakian Border (Rajka) – (Hegyeshalom) Hungarian/Austrian Border:**

This link is 10 km long, single track and electrified. It is adapted to a speed of 100 km/h and is not considered for development until 2010.

Hegyeshalom – Győr – Komárom - Budapest:

The 180 km long stretch was upgraded to 160 km/h respectively 140 km/h speed. The operation of these speeds was inaugurated in July 1997. A new system of electronic signaling facility for traffic management was installed in 1998 at three stations for a pilot operation, which then can be applied to all Europe.

An intermodal waterway port will be constructed in the near future at the Danube in Gönyü (near Győr). It will be financed partly from the state budget and from PHARE aid.

In Budapest an International Logistics Center is to be build up by 2000 located at the meeting point of the Budapest-Belgrade railway main line and the Budapest circular motorway M0 and financed in a Public/Private Partnership construction. The center will include a terminal, a Rolling Road station and a joint logistics center with 100.000 TEU handling capacity per year in its final extension.

(second alignment): Hungarian/Slovakian Border (Szob) – Budapest:

This is the main line leading from Budapest to the Slovakian Border. It is 60 km long, double track and electrified. By 2002 it is to be rehabilitated to its original design speed of 120 km/h.

Budapest – Cegled – Szolnok:

The railway section is double track and electrified. The safety equipment and electric feed equipment are being reconstructed.

The Hungarian Ministry of Transport proposed to add the stretch Budapest – Ujszasz – Szolnok, which is an additional component, also to Corridor IV. The section is 100 km long, double track and electrified. It should be rehabilitated to its original design speed of 120 km/h by 2001.

Szolnok – Szajol – Bekescsabo - (Lököshaze) Hungarian/Romanian Border:

The section is electrified in full length. The renewal of certain parts of the line has been implemented in earlier years. The rehabilitation of the remaining 64 km track and construction of a lacking second track are in the programme until 2007.

Road:**Hungarian/Slovakian Border (Rajka) - Hegyeshalom - Mosonmagyaróvár – Győr - Budapest:**

The total stretch (M1) has been completed as a four lane motorway and is in operation (between Mosonmagyaróvár and Rajka M15 a two-lane half motorway). The south sector of the M0 expressway (around Budapest) between M1 and M5 is completed and in operation.

Budapest – Kiskunfélegyháza – Szeged – (Nagylak) Hungarian/Romanian Border:

The Budapest – Kiskunfélegyháza section of the M5 motorway has been completed and is in operation. The preparations for the establishment of a concession scheme for the funding and construction of the Kiskunfélegyháza – Szeged section, M5 motorway, are in progress. The negotiations between the concession company and the Ministry have started in 1998. The concession contract schedules the deadline for completion of the entire construction of the M5 motorway for the end of 2003. From the Szeged junction Corridor IV shall follow the track of the planned M43 motorway to the Hungarian/Romanian Border. The planning of the M43 is in progress and measures for developing the plan licensing procedures have been taken. In the first stage it should be constructed as a two-lane expressway. The construction will begin with the 19 km long Szeged bypass.

ROMANIA**Rail:****Romanian/Hungarian Border (Curtici) - Arad:**

The construction works for the rehabilitation and modernization works in the railway station Curtici will cover the period 1998 – 1999. Since October 1997 the customs control in the international passenger trains between Hungary and Romania is done during train travel in both directions. There is no financing yet for the rehabilitation of the railway link.

Operational:

To improve the quality of service in passenger railway transport modern 200 km/h CORRAIL carriages are being purchased. Since 1997 there are passenger trains with car-carrying wagons, which are in operation on the routes Oradea – Cluj – Bucharest – Constanta – and Timisoara – Craiova – Bucharest.

Modernization works for the interlocking equipment in the railway stations of Arad, Timisoara and Brasov are planned.

Road:Romanian/Hungarian Border (Nadlac) - Timisoara – Lugoj:

The border crossing at Nadlac was modernized and 4.1 km of access roads were rehabilitated. A new motorway will be constructed but no date was yet fixed.

Branch to Constanta:**Rail:**Arad – Alba Iulia – Brasov - Bucharest – Constanta:

There is no financing yet for the rehabilitation of the railway link between Arad and Brasov. The feasibility studies and execution projects will be elaborated between 1999 and 2000. After finalizing the negotiations the EIB will ensure the financing for the rehabilitation of the railway line Brasov - Bucharest. The feasibility study and the execution project were finished in 1998. The construction works could start in 1999. A first round of discussions has taken place with Japanese companies to finance the rehabilitation of the Bucharest – Constanta railway section. The feasibility study and the execution project could be elaborated in 1999. To improve the combined transport the timetable for freight trains allows paths for RO-LA transport. This year the elaboration of the study regarding the development of combined transport in the port of Constanta has begun. The repairs in the port will be completed in 1999. Since 1998 a ferryboat line has opened between Constanta and Mersin (Turkey) and the construction works for a new container terminal have started.

Road:Lugoj – Sebes - Sibiu – Pitesti – Bucharest – Constanta:

The complete rehabilitation on the Nadlac – Sebes section will be finished in 1998. A new motorway will be constructed but no date was yet fixed.

Branch to Istanbul:**Rail:**Arad – Timisoara – Strehia - Craiova – (Calafat) Romanian/Bulgarian Border:

The current railway link will not be upgraded before 2005 respectively 2010.

Road:Lugoj – Craiova – (Calafat) Romanian/Bulgarian Border:

This stretch is a two lane main road. The construction of a highway on the section Lugoj - Craiova is planned.

BULGARIA

About 40 sub-projects aimed at overall restructuring and rehabilitation of the Bulgarian railway are under way. In the following only the priority projects are mentioned.

Branch to Istanbul:

Rail:

Bulgarian/Romanian Border (Vidin) – Vraca - Sofia:

A main investment project for Bulgaria is the construction of a new bridge for road and rail mode over the Danube river located between Vidin and Kulata, Romania. The bridge should replace the ferry crossing, which is now in operation. The renovation and upgrading of the railway line will start in 2004.

Sofia – Plovdiv – Dimitrovgrad – Svilengrad – (Kapitan Andreevo) Bulgarian/Turkish Border:

Reconstruction and electrification of the railway line Plovdiv – Dimitrovgrad – Svilengrad is under way. It will allow a travelling speed of 160 km/h.

Road:

In order to ensure the development and rehabilitation of the transport infrastructure the Bulgarian government laid down the main investment and priority projects.

Bulgarian/Romanian Border (Vidin) – Botevgrad - Sofia:

The road section Vidin – Sofia is part of the E 79 and is one of the priority projects. The rehabilitation of the border crossing at Vidin involved the construction of a 1.2 km access road to the ferry across the Danube, improvement of the quay wall of the ferry port and a 2.7 km by-pass at Vidin. It was completed in 1997.

Sofia – Plovdiv – Orizovo – Haskovo – Svilengrad - (Kapitan Andreevo) Bulgarian/Turkish Border:

The Orizovo – Svilengrad – Kapitan Andreevo section of the “Maritza Motorway” is considered also a priority project. Construction of the four-lane motorway with a design speed of 120 km/h should commence in 2000.

Branch to Thessaloniki:

Rail:

Sofia – Dupnica - (Kulata) Bulgarian/Greek Border:

The reconstruction and electrification of the 119 km long Dupnica – Kulata line is under way. The construction works have begun end of 1998.

Road:

Sofia – (Kulata) Bulgarian/Greek Border:

Within the scope of the “Transit Road” projects negotiations with the European Investment Bank are under way for granting a loan for the repair and reconstruction of the section Sofia – Kulata (E 79). The project will be cofinanced together with the PHARE Cross Border Cooperation Budgetary Funds. In parallel, the assignment of the necessary studies for the upgrading of this road section into a motorway is foreseen soon, in the framework of actions financed through PHARE Cross Border Cooperation Budgetary Funds.

GREECE

Branch to Thessaloniki:

Rail:

Greek/Bulgarian Border (Promahon) - Thessaloniki:

The upgrading of the railway line includes automatic signaling, telecommunications and the electrification, which should be implemented by 2004. The maximum speed will be raised to 150 km/h.

Road:

Greek/Bulgarian Border (Promahon/Kulata) - Thessaloniki:

Sections with a total length of 15 km on the sub-section Thessaloniki – Lefkon (62 km after completion) have already been constructed as a 4-lane motorway. Technical and environmental studies for the rest of this section are either ready or being completed with a view to be implemented within the period 2000-2006. A new alignment is foreseen for 16 km and widening for the rest. The sub-section Lefkon – Promahon with a total length of 35 km after completion is being upgraded into a four-lane motorway. The completion of works along 27 km of the length is expected in 2000, while the completion of the remaining 8 km is expected after the year 2000.

Technical and financial issues for a second bridge next to the existing one at the border crossing have been elaborated by the Greek and Bulgarian side in the framework of PHARE and INTERREG. The relevant works were launched in 1998. The Greek side has fully undertaken the financing of the project, the assignment of which is anticipated within the first semester of 1999.

TURKEY

Branch to Istanbul:

Rail:

Turkish/Bulgarian Border (Kapikule) - Edirne - Istanbul:

Signaling and electrification works on the total length have been completed.

Road:

Turkish/Bulgarian Border (Kapikule) - Istanbul:

The existing Turkish part of Corridor IV is constructed as a four- respectively six-lane motorway from Kapikule and ends in Istanbul.

The modernisation works at the Kapikule Border gate were completed. The average waiting time for vehicles at the customs office is ten minutes.

Corridor V

Alignment:

Corridor V is a multi-modal transport link running from South-West in Slovenia towards North-East in the Ukraine. The main line of Corridor V links Venice and Trieste (Italy) via Ljubljana (Slovenia) and Budapest (Hungary) with Lviv (Ukraine). Additional to this line there are three other branches to ports on the Adriatic Sea, and one branch connecting Corridor V with Corridor IV in Bratislava.

In Slovenia one branch links the Port of Koper with Corridor V in Divaca. In Budapest (Hungary) the Corridor splits into two branches, both of them running southwards to the Adriatic Sea. One branch goes to Rijeka in Croatia, the other branch runs via Sarajevo (Bosnia-Herzegovina) to the Croatian port of Ploce.

On the Railway Corridor there is an actual missing link between Hodos (SLO) and Zalalövö (H), that will be re-established around the year 2001. It was a decision of the former Yugoslav authorities to reduce to number of railway border crossings to Hungary after the World War II.

General development:

A Memorandum of Understanding was signed on December 16, 1996, by all parties except Croatia, because no agreement on the Rijeka – Trieste link was achieved. However, the Commission signed the Memorandum of Understanding in June 1997. The Italian Railways (FS) and Slovenian Railways (SZ) have signed an agreement on the co-ordination of the activities concerning Corridor V.

The Italian Ministry of Transport chairs the Steering Committee, which held its first meeting on 19 January 1998.

The branch through Bosnia Herzegovina to the Adriatic coast was added at the Helsinki Conference. However, because of the civil war in the area major parts of the railway line were destroyed. It has therefore been proposed to install an automatic electronic control system (ERTMS) to increase the capacity on the section in Bosnia Herzegovina.

The branch from Rijeka up to the Croatian capital, Zagreb, is in a bad state, too.

The PHARE Multi Country Transport Programme has signed in October 1998 a contract for a feasibility study on the development of branches on Corridor V.

Technical features of Corridor V:

Concerned countries	Bosnia Herzegovina, Croatia, Italy, Hungary, Ukraine, Slovakia, Slovenia
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	3270 km
Roads	2850 km
Inland waterways	n.a.
Number of Airports	5
Number of Sea- and Riverports	1
Alignment:	<i>Venice - Trieste - Ljubljana - Budapest - Uzgorod - Lviv</i>
Railway	Venice - Trieste - Sezana - Divaca - Pivka - Ljubljana - Zidani Most - Pragersko - Ormoz - Puconci - Hodos - Zalatövä - Boba - Budapest - Miskolc - Nyiregyhaza - Zahony - Cop - Lviv
Road	Venice - Trieste - Fernetici - Divaca - Ljubljana - Vransko - Maribor - Pince - Becsehely - Nagykanizsa - Siofok - Budapest - Füzesabony - Nyekladhaza - Polgar - Nyiregyhaza - Zahony - Uzgorod - Lviv
Railway	<i>Branch from Koper</i>
Road	Koper - Divaca Koper - Ankaran - Kozina - Divaca
Railway	<i>Branch from Rijeka</i>
Road	Rijeka - Karlovac - Zagreb - Gyekenyes - Kaposvar - Dombovar - Pincehely - Budapest Rijeka - Karlovac - Zagreb - Varazdin - Letenye - Becsehely
Railway	<i>Branch from Ploce</i>
Road	Ploce - Mostar - Sarajevo - Zenica - Osijek - Magyarboly - Pecs - Dombovar Ploce - Mostar - Sarajevo - Zenica - Osijek - Udvar - Mohacs - Dunjauvaros - Budapest
Railway	<i>Branch from Bratislava</i>
Road	Bratislava - Leopoldov - Puchov - Zilina - Poprad - Kosice - Cierna n/T. - Cop Bratislava - Horna Streda - Trencin - Zilina - Martin - Poprad - Presov - Kosice - Dargov - Zahor - Uzgorod
Investments foreseen up to 2015:	9980 MECU
Railways	2090 MECU
Roads	7680 MECU
Inland waterways	n.a.
Airports	150 MECU
Sea- and Riverports	60 MECU

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

ITALY

Rail:

Venice – Trieste – (Villa Opicina) Italian/Slovenian Border:

This railway section (177 km) is double track and allows a maximum speed of 150 km/h respectively 100 km/h from Trieste to the border. It is included as a planned high-speed line in the TEN Outline Plan until 2010. A feasibility study on the new high-speed line Venice – Trieste – Ljubljana, which also includes the connection between Trieste and Koper, is entrusted to Italferr.

Road:

Venice – Trieste – (Fernetici) Italian/Slovenian Border:

The existing road is a motorway and complies with TEN standards.

SLOVENIA:

Rail:

Slovenian/Italian Border (Sezana) – Divaca:

The double track, electrified railway line is being reconstructed during the period from 1998-2005. It includes the renewal of bridges and pillars, and the renewal of railway lines and stations and also the signaling safety devices.

Divaca – Pivka – Ljubljana:

The double track, electrified railway line is being reconstructed during the period from 1998-2005. It includes the renewal of bridges and pillars, and the renewal of railway lines and stations and also the signaling safety devices.

Ljubljana – Zidani Most – Murska Sobota – (Hodos) Slovenian/Hungarian Border:

The railway section from Ljubljana to Murska Sobota will be rehabilitated between the period of 1999-2001. The date of completion of the construction of the missing direct railway link agreed between the two countries is by end of 2000. The 6 km segment Murska Sobota to Puconci and two bridges will be constructed until 1999.

Road:

Slovenian/Italian Border (Fernetici) – Divaca:

Fernetici is an important border crossing between Italy and Slovenia as it is located a few kilometers from the port of Trieste and the port of Koper. In 1998 the border crossing was developed to facilitate increased truck traffic flows. The existing road is a four-lane motorway.

Divaca – Ljubljana:

This road section exists as four-lane motorway. The southern by-pass is open to traffic whereas the eastern section is still under construction.

Ljubljana – Vransko – Maribor – (Pince) Slovenian/Hungarian Border:

On the section Ljubljana – Vransko a new motorway is under construction; from there the road continues as a motorway to Maribor. From Maribor to the border the preparation for a new motorway is in process.

Branch from Koper:

Rail:

Koper – Divaca:

From 1999-2000 the modernization of signaling-safety devices on the existing line will be implemented. The construction of a second railway track shall increase the capacity of the railway line. A feasibility study is already completed and construction will start in 2001 after project plans are elaborated and building permit is obtained.

Road:

Koper – Ankaran - Divaca:

From Ankaran to Kozina the construction of a motorway is in progress.

HUNGARY

Rail:

Hungarian/Slovenian Border (Hodos) – Boba – Szekesfehervar – Budapest:

A new railway line will be constructed on the Hodos – Zalaövö stretch until 2001 since there is no existing line. The reconstruction of the Zalaövö – Zalaegerszeg railway link for 120 km/h and the modernization of the Zalaegerszeg – Boba line is planned until 2006.

Budapest – Füzesabony – Miskolc – (Zahony) Hungarian/Ukrainian Border:

The rehabilitation of the line for 120 km/h is planned until 2010.

Road:

Hungarian/Slovenian Border (Tornyiszentmiklos) – Becsehely – Nagykanisza – Siofok - Szekesfehervar – Budapest:

The Becsehely – Nagykanisza road section was rehabilitated. A motorway will be constructed from Balatonaliga (connection to the existing motorway to Budapest) to Zamardi and an expressway (later on a motorway) from Zamardi to Balatonszentgyörgy until 2007 and from Balatonszentgyörgy via Nagykanisza to the border until 2008.

Budapest – Füzesabony – Polgar – (Záhony) Hungarian/Ukrainian Border:

The Hungarian government decided to accelerate the realisation of the M3 motorway. It is completed between Füzesabony and the junction with the M0 near Budapest. The motorway section to Polgár will open in 2002, then a two-lane expressway (later a motorway) to Nyíregyháza in 2008. The construction to the border will be concluded after 2008.

Branch B: Rijeka – Zagreb – Budapest

Rail:

Hungarian/Croatian Border (Gyekenyes) – Dombovar – Budapest:

The current railway line is single track and continues double track from Pusztaszabolcs to Budapest. The total section is electrified. The rehabilitation of the line is planned until 2007 bringing back the possible speed from Budapest to Dombovar for 120 km/h, from Dombovar to Gyekenyes for 100 km/h.

Road:Hungarian/Croatian Border (Becsehely) - (main branch):

The Letenye - Becsehely road section was rehabilitated. A new expressway (later on motorway) will be constructed until 2006 from the border to Letenye.

Branch C: Ploce – Sarajevo – Osijek - Budapest**Rail:**Croatian/Hungarian Border (Magyarboly) - Pecs – Dombovar – (Branch B):

The rehabilitation of the line is planned from Magyarboly to Pecs until 2000 for 80 km/h, from Pecs to Dombovar until 2006 for 120 km/h.

Road:Hungarian/Croatian Border (Udvar) – Mohacs – Dunaujvaros – Budapest:

The existing road is a two lane main road. The construction of an expressway (later on motorway) will start after 2005 with the first stage between Budapest and Dunaujvaros, with completion by 2008. The study on the remaining sections is under way.

UKRAINE**Rail:**Ukrainian/Hungarian Border (Cop) - Batewo - Lviv:

The current railway link (264.7 km) is double track and electrified. The Ukrainian Railways have established a cooperation to generate flows for a Rolling Motorway (RoLa) from Zahony to Kiev.

Road:Ukrainian/Hungarian Border (Cop) – Lviv:

The Ukrainian Government gives great importance to Corridor V, this regards both modes. The motorways are included in the second category. The problems at the moment are the rebuilding of tunnels, border crossings and the rehabilitation of motorways.

Branch A: Bratislava – Uzgorod**Road:**Ukrainian/Slovakian Border (Uzgorod -) Lviv:

SLOVAKIA**Branch A: Bratislava – Uzgorod****Rail:**

Bratislava – Zilina – Kosice – (Cierna n. Tisou) Slovakian/Ukrainian Border (- main branch):

The modernization of the rail link Bratislava - Zilina - Kosice - Cierna n. Tisou - Ukrainian border continues slowly, according to the present financial situation. The reconstruction is financed by national sources, mainly the section Melcice - Zlatovce, where the completion to a design speed of 160 km/h in early 1999 is expected (see table 3).

Corridor VA - Rail

Table 3

Alignment	Distance in km	Proposed track speed km/h	Present track speed km/h	Estimation of cost (MECU)	Note
Bratislava Raca - Trnava	46	160	100 - 120	131.600	
Trnava - Nove M. n/Vahom	53	160	70 - 120	100.200	
Nove M.n/Vahom - Puchov	59	160	40 - 140	122.100	^{1*}
Puchov - Zilina	45	120 - 140	80 - 120	42.200	
Zilina - Kosice	242	120	40 - 100	477.000	
Kosice - Cierna n/Tisou	95	140 - 160	30 - 100	266.000	
Cierna n/Tisou - border UA	4	140	50	3.000	

Note: ^{1*} section Melcice - Zlatovce to speed 160 km/h in 1999

Combined transport:

The existing combined transport terminals are located in Bratislava UNS, Bratislava port, Palenisko, Zilina, Kosice and Cierna n/Tisou.

The new combined transport terminal in Dobra by Cierna n/Tisou is completed and in operation. The CTT Dobra is rented by CSE company. A new CTT in Trencianska Tepla is in preparation, and will be financed by the participating private companies. The CTT Ruzomberok is rented by the Czech company METRANS Prague as the basis for the 40' foot containers. In 1997 80 special basket wagons by the TATRA Vagonka - Poprad (SK) for combined transport were delivered. Till the end of year 2000 further 200 basket wagons with deprivation bag will be delivered.

At present the private company prepares the new CTT on the additional TINA network in Zvolen.

Road:

Bratislava – Ladce – Bytca – Zilina – Ivachnova – Poprad – Presov – Kosice – (Vysne Nemecke) Slovakian/Ukrainian Border:

The total planned length of the motorway is 512,6 km. 206,4 km motorway sections have been completed on Corridor VA, some in half profile (see table 4). In 1998 the total length of 103,9 km were under construction.

In 1998 about 56 km motorway in half profile were put in operation. Environmental studies (EIA) for all sections of the motorway are being prepared continuously for construction and profitability studies are undertaken. The further time table for construction of new motorway sections depends on the financial situation and on priorities, which will be stressed by the new Government in the new transport infrastructure construction strategy.

A by-pass around Vysne Nemecke (2.5 km) at the Slovakian/Ukrainian Border will be completed in 1999. In addition the customs area was extended and new lanes for trucks and other vehicles were constructed.

Corridor VA - Road/Motorway

Table 4

Road Category	E Classification	Stretch	Distance in km	Alignment in km	Financed in 1998 MECU	Note
I/63	E75	Viedenska str. - Pristavny bridge	3,90	0,00 - 3,90	0,02	^{1*}
D61	E75	Pristavny bridge - Mierova str.	1,30	5,20	0	^{2*}
I/61	E75	Mierova str. - Senecka str.	9,20	14,40	1,38	^{3*} (6,5 km)
D61	E75	Senecka str. - Chocholna	106,90	121,30	52,70	^{4*} (29,1km)
D1	E50, E75	Chocholna - Ladce	33,62	154,92	25,60	^{4*} (16,2km)
I/61	E50, E75	Ladce - Bytca	32,18	187,10	5,60	^{5*} (23,4km)
I/18	E50, E75	Bytca - Ivachnova	89,20	276,30	2,50	^{1*}
D1	E50	Ivachnova - Vazec	45,13	321,43	18,90	^{2*}
I/18	E50	Hybe - Presov cross.I/18/c.I/68	107,67	429,10	22,00	^{6*} (31,5km)
I/68	E50	cross.I/18/c.I/68 - cross.I/68/D1	4,40	433,50	0	^{1*}
D1	E50	cross.I/68/D1 - Budimir	19,40	452,90	0	^{2*}
I/68	E50	Budimir - Kosice	8,20	461,10	3,50	^{1*}
I/50	E50	Kosice-border SK/UA	89,40	550,50	0,06	^{1*}
Corridor VA TOTAL			550,50		132,26	

Note: ^{1*} in preparation, ^{2*} in operation full profile, ^{3*} in preparation will be constructed in 1999, ^{4*} the section H.Streda - Ladce in half profile, ^{5*} in construction (23,4 km), ^{6*} partly in construction including - tunnel Branisko (8,70 km)

CROATIA

Branch B: Rijeka – Zagreb – Budapest

Rail:

Rijeka – Ostraije – Zagreb:

On the rail route Ostraije – Zagreb there are many crossings with totally destroyed signaling and safety devices; their repair and modernization is of vital importance. The current railway line is single track.

Zagreb – Dugo Selo – (Gyekenyes) Croatian/Hungarian Border:

The rail segment from Zagreb to Dugo Selo is double track, from there it continues single track to the border.

Road:

Rijeka – Karlovac – Zagreb:

Only the first 10 km on the road from Rijeka to Karlovac are constructed as a four-lane motorway. The rest of the section is in preparation. From Karlovac to Zagreb the road continues as a four-lane motorway.

Zagreb – (Letenye) Croatian/Hungarian Border:

From Zagreb to the border a four-lane motorway is in preparation.

Branch C: Ploce – Sarajevo – Osijek - Budapest

Rail:

Ploce – (Metkovic) Croatian/Bosnia Herzegovina Border: (continuation through Bosnia Herzegovina):

The current railway line is single track.

Croatian/Bosnia Herzegovina Border – (Bosanski Samac –) Osijek – (Magyarboly –) Croatian/Hungarian Border:

This railway section will be upgraded to higher technical parameters.

Road:

Ploce – (Metkovic) Croatian/Bosnia Herzegovina Border: (continuation through Bosnia Herzegovina):

The two-lane road stretch will in the future be constructed as an expressway.

Croatian/Bosnia Herzegovina Border – (Bosanski Samac –) Osijek – (Udvar) Croatian/Hungarian Border:

BOSNIA HERZEGOVINA

Branch C: Ploce – Sarajevo – Osijek - Budapest

Rail:

Bosnia Herzegovina/Croatian Border (Caplijna) – Sarajevo:

The current railway line is single track. Caplijna now is a border railway station accepted by Bosnia Herzegovina and Croatia. It will consist of separate passenger and freight stations. The implementation period of the project is one year.

Sarajevo – Zenica – Zavidovici - Doboj - (Bosanski Samac) - Bosnia Herzegovina/Croatian Border:

The Sarajevo – Zenica railway line was renewed in 1998. The project included the renewal of electricity lines together with the signal and telecommunication systems. The railway link between Zenica and Doboj was rehabilitated in 1998 with complete reconstruction of the 25kV/50 Hz electrified line as well as track cables. Bosanski Samac now is a border railway station accepted by Bosnia Herzegovina and Croatia. It will consist of separate passenger and freight stations. The implementation period of the project is one year.

Road:

Bosnia Herzegovina/Croatian Border – (Metkovic) – Mostar - Sarajevo:

The overall repair of the Sarajevo – Caplijna stretch (160 km) will be implemented during 1999 - 2000.

Sarajevo Doboj – (Bosanska Samac) - Bosnia Herzegovina/Croatian Border:

A 3 km segment between Visoko and Lasva was rehabilitated in 1998. The bridge over the river Sava will be completely rehabilitated by 1999.

Corridor VI

Alignment:

Corridor VI is a multi-modal transport link running from North to South, connecting the Polish Baltic Sea ports of Gdynia and Gdansk with Slovakia and the Czech Republic.

The main line of Corridor VI runs from Gdansk (Poland) in two branches – one branch via Warsaw, the second via Torun and Lodz - to Katowice and further to Zilina (Slovakia).

At Tczew, approx. 40 km south of Gdansk, the Polish authorities have decided to separate the rail passenger traffic from the rail freight traffic. The passenger traffic passes through Warsaw and further to Katowice, whereas the freight traffic runs via Bydgoszcz south to Katowice.

In addition to the main link, there are two further branches. One branch, which is for road mode only, connects Corridor VI near Grudziadz (Poland) with Corridor II at Poznan (Poland). The second branch connects Corridor VI south of Katowice at Bielsko Biela (Poland) with Corridor IV, at Brno (Czech Republic) for road mode, and in Breclav (Czech Republic) for railway mode.

General development:

Two Memoranda of Understanding, one between Austrian Railways (ÖBB), Czech Railways (CD) and Polish Railways (PKP), the other between ÖBB, Slovakian Railways (ZRS) and PKP have been signed in May 1998 under the auspices of UIC.

The Polish Railways, PKP, are chairing the working group. The last meeting was held in Vienna on 6. and 7. October 1998. The next meeting will be held in the Czech Republic in May or June 1999. The working group will continue their work in sub-groups. These are: freight traffic, passenger traffic and infrastructure.

Technical features of Corridor VI:

Concerned countries	Czech Republic, Poland, Slovakia
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	1800 km
Roads	1880 km
Inland waterways	n.a.
Number of Airports	1
Number of Sea- and Riverports	1
Alignment:	<i>Gdansk – Grudziadz/Warsaw – Katowice – Zilina</i>
Railway	Gdynia – Gdansk – Tczew –Malbork – Ilawa – Warsaw – Psary – Katowice – Bielsko Biala – Zwardon – Cadca – Zilina Second line for freight traffic: Tzew – Zdunska Wola Karszn. – Gliwice – Katowice
Road	Gdansk – Torun – Lodz – Piotrkow Tryb. – Czestochowa – Katowice – Bielsko Biala – Zywiec – Zwardon – Skalite – Zilina Second alignment via Warsaw: Gdansk - Elblag – Ostroda – Mlawa – Plonsk – Warsaw – Rawa Maz. Piotrkow Tryb.
Road	<i>Branch to Poznan</i> Grudziadz – Swiecie – Bydgoszcz – Gniezno – Poznan
Railway	<i>Branch to Breclav/Brno</i> Czechowice-Dziedzice – Zebrzydowice – Petrovice u Karvine – Bohumin – Ostrava – Prerov – Breclav
Road	Czestochowa – Katowice – Gorzyczki – Ostrava – Lipnik – Olomouc – Vyskov – Brno
Investments foreseen up to 2015:	12555 MECU
Railways	5710 MECU
Roads	5680 MECU
Inland waterways	715 MECU
Airports	n.a.
Sea- and Riverports	450 MECU

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

POLAND

Rail:

Gdynia – Gdansk – Tczew – Malbork – Warsaw – Zawiercie - Psary – Katowice:

The railway section from Gdynia to Gdansk shall be upgraded to a design speed of 100 km/h. For the Gdansk - Katowice section on the E-65 line; a pre-feasibility study has been completed. This study identifies the possibilities of modernizing this link to allow tilting body trains to run at a speed of 160 km/h (and 250 km/h on some stretches) by the end of the year 2000. According to the "Plan of railway infrastructure development in Poland up to the year 2015" it is planned to complete the section Gdynia - Warsaw in the first stage in 2005 and to complete the second stage according to AGC standards in 2015.

(Second alignment:) Tczew – Zdunska Wola Karszn. – Bydgoszcz - Inowroclaw – Gliwice - Katowice:

This railway section is for freight traffic only. It is not planned to raise the maximum speed since the present speed of 100 km/h is sufficient. In Gliwice the first stage of terminal development (multifunctional building, access roads, parking, and transshipment installation) is planned up to the year 2000. The second stage, until the year 2015, will concern the construction of new buildings, the extension of roads and new devices purchasing.

Katowice – Czechowice - Dziedzice - Bielsko Biala – (Zwardon) Polish/Slovakian Border:

The single-track line section Bielsko Biala – Zwardon with a maximum speed of 50-70 km/h (due to the mountainous region) is part of the planned investment programme. Major parts of the line should be upgraded to a maximum speed of 160 km/h. The facilities at the border station of Zwardon are to be improved by the year 2000. At Czechowice – Dziedzice Branch A to Ostrawa (Czech Republic) splits from the Corridor.

(Second alignment:) Psary – Polish/Slovakian Border:

A new railway line as an alternative to the route Katowice – Zwardon with a design speed of 250 km/h is planned, but construction is not scheduled before 2015.

Road:

Gdansk – Grudziadz - Torun – Lodz – Piotrkow Tryb:

A road bridge has been constructed at Sopot at the starting point of the Corridor. A PHARE-financed traffic study on the A1 motorway from Gdansk to Zilina has been completed in 1996. The concession (for the section Gdańsk-Torun) was awarded to a Polish-foreign consortium (Gdańsk Transport Company) in October 1997, but works have not started due to lack of a Financial Closing Agreement. Several short sections of existing road were modernized and rehabilitated with local and IFI financing. A new motorway bridge across the Vistula River near Torun together with one carriageway of motorway A1 section Lubicz-Czerniewice (Torun by-pass 10,8 km) started operation on the 1st of July 1998.

- The Gdansk – Peplin motorway section (38 km) will be constructed until 2001,
- the section Peplin – Nowe Marzy (52 km) between 2002-2005,
- the section Nowe Marzy – Lubicz (51 km) between 2006-2010,
- the sections Torun – Kowal (64 km) and Kowal – Strków/Lodz (80 km) between 2011-2015.

(Second alignment:) (Gdansk -) Elblag – Ostroda – Mlawa - Warsaw:

The existing road is a two-lane main road respectively four-lane expressway from Zakrocym. The new construction of an expressway is planned where it does not yet exist.

Warsaw - Piotrkow Tryb:

The existing road is a four lane main road. It will be reconstructed into an expressway.

Piotrkow Tryb – Czestochowa:

The existing express road will be upgraded to the standards of a toll highway.

Czestochowa – Katowice – Bielsko Biala:

The existing four lane main road will be upgraded into an expressway.

Bielsko Biala – Zywiec – (Zwardon) Polish/Slovakian Border:

A 27 km segment of road between Zywiec and Zwardon will be rehabilitated in 1999. The project also includes the construction of a new border crossing point and the upgrading of an access road to freight traffic standard.

Branch to Poznan:**Road:****Grudziadz – Bydgoszcz – Gniezo – Poznan:**

The current road is a two lane main road. The existing road will be upgraded to an expressway. The expressway bypass of Świecie along the branch via Grudziadz - Poznań was opened to traffic in 1998.

Branch A: Katowice – Ostrava – Corridor VI**Rail:****(Katowice –) Czechowice - Dzierzice – (Zebrzydowice) Polish/Czech Border:**

According to the "Plan of railway infrastructure development in Poland up to the year 2015" it is planned to exchange the full permanent way on the section Warsaw-Zebrzydowice by 2005. The sections with bad technical conditions and impacts on safety and efficiency of the line will be given preference. A major reconstruction at the border station Zebrzydowice has been completed.

Road:**Katowice – (Gorzyczki) Polish/Czech Border:**

This section is planned for construction as a motorway.

(Second alignment:) Katowice – Bielsko Biala – (Cieszyn) Polish/Czech Border:

The existing road will be upgraded into an expressway.

SLOVAKIA**Rail:****Slovakian/Polish Border (Zwardon) – Skalite – Cadca – Zilina:**

The section Cadca - Skalite is leading through a mountainous terrain and the present track speed lies between 20 - 60 km/h (see table 5). In the year 1998 the pre-electrification works for the rail section Cadca - Zwardon have begun, completion is expected in 2001. The Cadca transit station is under reconstruction and will be completed in 1999. This includes the reconstruction of the service building, the railway track and supplied communication equipment. The existing line Zilina - Cadca enables speeds up to 100 km/h. It will be upgraded to a speed of 120 km/h.

Corridor VI - Rail

Table 5

Alignment	Distance in km	Proposed Track speed km/h	Present track speed km/h	Estimation of cost (MECU)	Note
Zilina – Cadca	31	120	40 - 100	27.000	
Cadca – Skalite border PL	21	70 - 100	20 – 60	36.600	^{1*}

Note: ^{1*} testing for combined transport

Combined transport:

Since October 1998 the Slovak Railway Corporation (ZSR) is testing the rail section for combined transport. The operation of CT on this line is expected from 1st January 1999.

Road:

Slovakian/Polish Border (Zwardon) – Skalite – Cadca – Hr. Podhradie – (Corridor V):

At present the national roads Zilina - Cadca/Svrcinovec and the road Svrcinovec - state border SK/PL secure the connection, which create the corridor for the future motorway routing.

In 1998 3 sections of motorway were in construction (see table 6):

- Oscadnica – Cadca, (3,60 km),
- Cadca - urban by-pass, (3,40 km),
- Skalite - state border SK/PL, (3,20 km).

The first two sections are in operation since 1998 in half profile. The joint - border crossing lies on the Polish side and has opened for operation since 1997 after the approach roads were resurfaced.

Corridor VI - Road/Motorway

Table 6

Road category	E Classification	Stretch	Distance in km	Alignment in km	Financing in 1998 MECU	Note
II/487		border SK/PL - Svrcinovec	15,50	15,50	4,01	^{1*} (6,80 km)
I/11	E75	Svrcinovec - crossing I/18 Zilina	38,30	53,80	3,76	^{2*}
Corridor VI TOTAL			53,80		7,77	

Note: ^{1*} - including 3,60 km section - half profile in operation (1998)

^{2*} - by - pass Cadca - half profile in operation (1998)

CZECH REPUBLIC**Branch A: Katowice – Ostrava – Corridor IV****Rail:**

Czech/Polish Border (Petrovice u Karvine) – Ostrava – Prerov – (Breclav) Czech/Austrian Border – (Corridor IV):

The current line is double track and electrified; the maximum speeds are 80-120 km/h. The future modernization will bring a speed increase to 120-160 km/h.

Road:

Czech/Polish Border (Cesky Tesin) - Ostrava – Belotin - Lipnik – Brno – (Corridor IV):

Part of the road to Lipnik exists as expressway. The missing sections will be constructed as a new expressway.

(Second alignment:) Czech/Polish Border (Gorzyczki) – Belotin – (Branch A):

A new motorway is planned from Gorzyczki to Vyskov, connecting there to the existing motorway to Brno.

Corridor VII

Alignment:

The Danube is one of the longest rivers in Europe and represents the main inland waterway transport Corridor linking Western and Eastern Europe through the Rhine, the Main and the Main-Danube canal. It connects the North Sea with the Black Sea crossing the countries of Germany, Austria, Slovakia, Hungary, Croatia, FR Yugoslavia, Romania, Bulgaria, Moldova and the Ukraine. Corridor VII also refers to the relevant port infrastructures and to the Black Sea-Danube Canal.

General development:

The Commission has asked Austria to convene a first meeting of a Steering Committee for Corridor VII, consisting of representatives from all the above countries crossed or touched by the Danube, plus the European Commission. A first meeting took place in Vienna on July 7, 1998, to prepare a MoU on Corridor VII. After the sessions of the three working groups the second meeting was held on November 27, 1998, again in Vienna. A Memorandum of Understanding for the development of Corridor VII was initialled and will be signed by the Ministers of Transport.

The three working groups, which have been established are:

- Infrastructure (chaired by Romania),
- Operation (chaired by Austria) and
- Fleet (chaired by Hungary).

The specific fields of interest covered by the working groups are attached as an annex to the Memorandum of Understanding.

The PHARE Multi Country Transport Programme finances a "Feasibility Study for Improving Navigation on the Danube River".

Technical features of the Corridor:

Concerned countries	Austria, Bulgaria, Croatia, Germany, Hungary, Moldavia, Romania, Slovakia, Ukraine, FR Yugoslavia
Transport modes	navigation
Approx. length of the Corridor	2415 km
Investments foreseen up to 2015	183 MECU

Remark:

- The figures for the investments contain only projects within the TINA countries

General

A necessary requirement for the effective shipment on the Danube lies in the establishment of a standardized legal agreement. This concerns not only the technical equipment of the ships but also the shipping crew and the cargo law. It is also necessary to secure the freedom of shipping on the Danube; this means no additional taxes and administrative duties.

Fairway conditions of the river

The river Danube has a length of 2850 km of which 2415 km are used for navigation. Geographically the river Danube is divided into three parts:

- Lower Danube, km 0-931 (length 930 km, difference in elevation 38 m)
- Middle Danube, km 931-1791 (length 860 km, difference in elevation 105 m)
- Upper Danube, km 1791-2415 (length 624 km, difference in elevation 195 m)

The most important parameters for shipping are as follows:

- The available water depth compared to the reference draught (fully loaded inland vessel) of 2.7 m plus keel clearance;
- the available channel width;
- the minimum fairway curvature;
- the available free air draft under bridges and cables;
- other secondary parameters with a potential impact on the navigability of the Danube such as natural conditions (fog, currents, ice, etc.).

The water depth of the fairway is by far the most important parameter hindering the economical use of the river for inland navigation with bottlenecks along the whole river length. Although there are bottlenecks along the whole river length the Upper Danube is the only inland waterway section in Europe without guaranteed water depth. In addition the Upper Danube is the only section where a reliable prognosis of water depth is not possible because of the quickly changing water depth conditions and the long travelling times of more than several days caused by the long distances on the Danube. Due to these circumstances the loading capacity of the ships is only about 50% of their maximum. The responsible bottle-necks are located in Germany, Austria and Hungary.

The second parameter is the width of the fairway where the most important problems are met on the Slovakian and Hungarian territory. The number of places with problems for fairway curvature (curve radius of less than 750m) is very limited.

The air draft (free height under bridges and cables) is critical especially in the vicinity of Budapest where a number of low historical bridges are located. However, similar problems exist in Germany and Yugoslavia, and the available air drafts allow most vessels to pass except container vessels stacked with three layers of containers during the high water period.

Natural conditions such as currents, fog and ice proved to be of secondary importance for navigation on the Danube during recent years.

Ports

Situated along the Danube are 44 main inland ports. The average distance between the ports is 55 km. However, the function of inland ports is not limited to inland shipping. The interlinkage of the major water axis with other rail/road corridors is very important to ensure the intermodal inter-connectivity of the overall network.

The major inland ports connecting with Corridor IV are: Prague, Budapest, Medgidia;
with Corridor V: Breclav/Hodonin, Bratislava, Budapest, Dunaujvaros, Mohacs;
with Corridor IX: Oltenita, Giurgu, Rousse and
with Corridor X: Budapest.

In addition there are two seaports; the bigger port is Constanta, lying at the mouth of the Danube-Black Sea Canal, the other is Ust Dunaisk at the mouth of the Danube.

The multi-modal potential of the overall network will substantially be increased by adding systematically the interfaces combining rail, road and inland shipping at the crossing points of the network. This will open new perspectives to operate cross-border combined transport services.

Corridor VIII

Alignment:

Corridor VIII is a multi-modal transport link running from East to West in the Balkan area. The Corridor links the Pan-European Transport Area Adriatic-Ionian Sea with the Black Sea Pan-European Transport Area. The Corridor starts at the port of Durrës (Albania), runs via Tiranë (Albania) and Skopje (FYROM), further to Sofia (Bulgaria) and to the Bulgarian ports Burgas and finally Varna at the Black Sea.

The Corridor was not affected by any adjustments at the Helsinki Conference in 1997. However, Corridor X, as agreed upon in Helsinki being a new link from Austria to Greece with several side alignments, as well as Corridor IV, on the section Sofia – Plovdiv, has integrated Corridor VIII into the core links of the Pan-European Transport Corridors. New connections to Italian ports and to the Trans-European Network at Greek borders are being considered by interested countries. In the draft Memorandum of Understanding the alignment reads as follows: Bari/Brindisi - Durrës/Vlore – Tirana – Popgradec – Skopje – Sofia – Plovdiv – Burgas – Varna; and a branch from Popgradec to Kapstiche/Kristallopigi at the Albanian/FYROM border, which has to be connected to the Trans-European Network.

General development:

A draft Memorandum of Understanding has been elaborated under Italian leadership. Through the linkage of Corridor VIII to Corridor IV (see above) it has been possible to involve the participation of both Greece and Turkey. The signature is pending until a final agreement on the alignment has been achieved. A meeting of the Pre-Steering Committee is envisaged to take place on 20 January 1999, in the margins of the annual meeting of the G-24.

A railway working group was set up in May 1997 under the chairmanship of the Bulgarian Railways (BDZ).

It should, however, be mentioned that the railway link is interrupted in two sections in Albania and FYROM. Approximately 80 km of rail track have to be built in a mountainous and difficultly accessible region.

Technical features of the Corridor VIII:

Concerned countries ¹⁾	Albania, Bulgaria, FYROM (links to Italy, Greece and Turkey)
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	1270 km
Roads	960 km
Inland waterways	n.a.
Number of Airports	2
Number of Sea- and Riverports	2
Alignment: ¹⁾	<i>Durrës – Tirana – Skopje – Sofia-Varna/Burgas</i>
Railway	Durrës – Tirana – Elbasan – Oukës – (missing link) – Kicevo – Skopje – Kumanovo – (missing link) – Gjuesevo – Radomir – Sofia – Plovdiv – Mihajlovo – Bezmer – Jambol – Zimnica – Karnobat – Burgas/Varna
Road	Durrës – Tirana – Elbasan – Struga – Kicevo – Skopje – Kumanovo – Gjuesevo – Radomir – Sofija – Plovdiv – Orizovo – Jitarovo – Burgas/Varna
Investments foreseen up to 2015:	1950 MECU
Railways	820 MECU
Roads	890 MECU
Inland waterways	n.a.
Airports	60 MECU
Sea- and Riverports	180 MECU

¹ New connections are probably to be included.

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

ALBANIA

Rail:

The Albanian railway network was constructed after 1945, but all trains are now constrained to an operational speed of 40 km/h, due to poor construction materials and lack of maintenance.

Durrës – Tirana:

The construction and widening of the rail link to the Durrës port ferry terminal is under way.

Tirana – Oukës - Albanian/FYROM Border:

The construction of 2.8 km of railway line from the Albanian rail station of Lin towards the town of Struga in FYROM is planned in order to close a part of the missing link.

Road:

Durrës – Tirana:

14 km of dual carriageway were constructed between Durrës and Tirana.

Tirana – (Qafe Thane) Albanian/FYROM Border:

The border crossing at Qafe Thane between Albania and FYROM is handling commercial and passenger traffic. The Albanian authorities proposed to repair the damage at the border station as well as to correct some deficiencies in the original construction. Also 4 km of access road which connect the border station to the main Albanian highway will be repaired.

FORMER YUGOSLAVIAN REPUBLIC OF MACEDONIA

Rail:

There is no continuous railway line in FYROM on Corridor VIII, the railroad line in East-West direction (339 km) is not connected to the railway networks of the neighboring countries.

FYROM/Albanian Border (Lini) – Kicevo - Skopje:

From Lini at the FYROM/Albanian Border to Kicevo there is no existing railway line. The Western part of the railway line will start its development programme after the completion of the eastern part of the railway line. From Kicevo to Skopje a railway line exists.

Skopje – Kumanovo – Beljakovci - (Deve Bair) FYROM/Bulgarian Border:

From Skopje to Kumanovo a railway line exists. The section from Kumanovo to Beljakovci (30 km) is in the stage of reconstruction. There is a missing rail link towards Bulgaria (55 km), from Beljakovci to Deve Bair. The construction of the railway line for a connection to Bulgaria has started with funds from the national budget only, which is almost one third of the estimated costs for its completion. The problem, which is now faced, is the lack of funding.

Road:

The total length of Corridor VIII in FYROM is 176 km. In the past years activities were undertaken for completion of some motorway sections with financial participation of the World Bank and the European Investment Bank as well as PHARE programme grants.

The condition of the road network in the country, particularly on the road routes of the Corridors, is satisfactory.

FYROM /Albanian Border – Struga – Tetovo – Grupcin - Skopje:

The motorway sections, which shall be completed are Skopje – Grupcin, with financial aid from EIB funds, and Grupcin – Tetevo, with World Bank funds.

Skopje – FYROM/Bulgarian Border:**BULGARIA****Rail:**Bulgarian/FYROM Border (Gjushevo) – Radomir - Sofia:

A jointly operated border station at Gjushevo for the two countries is being constructed and is expected to be completed in 1999. From the border station there is no line continuing into FYROM. A project is under way to complete the link until 2002. From Gjushevo to Radomir exists a single track, non-electrified line. The section will be reconstructed and upgraded. The project includes the electrification of the line and the raising of the speed from 65-70 km/h to 100 km/h. From Radomir the line continues electrified to Sofia.

Sofia – Plovdiv – Yambol – Zimnica - Karnobat:

The railway line is electrified but not all the way double track. A second track will be added on the Plovdiv – Zimnica stretch until 2005.

Branch to Bourgas:Karnobat – Bourgas:

This railway section is double track and electrified. It will be upgraded to a speed of 160 km/h between 2005-2006.

Branch to Varna:Karnobat – Sindel – Varna:

The railway line is electrified but not all the way double track. A second track will be added on the Karnobat – Sindel stretch between 1999-2000.

Road:Bulgarian/ FYROM Border – Gjushevo – Radomir - Sofia:

Sofia, capital city of Bulgaria, is at the crossroads of Transport Corridors IV, VIII and X of the European Road Network. The international traffic through Sofia travels on the city's ring road, sharing it with local motorists. The result has been deterioration of the ring road and worsening environmental conditions brought on by increasing noise and air pollution.

Bulgaria's General Road Administration allocates a significant amount of funding granted by international financial institutions for highway rehabilitation and construction projects along the above corridors. Currently the General Road Administration is examining the possibility of building a bypass around Sofia along Corridor VIII.

Construction of the by-pass would effectively re-configure the alignment of Corridors IV and VII. Preliminary studies suggest that the by-pass will be approximately 35 km long and be built to standard 2-lane highway specifications, which could then be expanded into a 4-lane

motorway as demand develops in the future. The alignment for a new road is suggested as follows:

Radomir – Chervena Mogila – Dolna Dikanya – Samokor – Kostenec and link to Trakia.

At the moment a part of this bypass (North arc) – about 3 km is in the process of construction.

Sofia – Plovdiv – Orizovo – Bourgas - Varna:

The proposed motorway is in the eastern part of Bulgaria. It is planned as one of two east-west motorways in the national system of motorways and will connect the Bulgarian capital Sofia with the Black Sea port of Bourgas. The motorway is complete and operational for a distance of 168 km from Sofia to Orizovo. The current plan is to complete the Trakia Motorway as a two-carriageway limited-access highway from Orizovo to Vetren (360 km). At present, the section of the motorway from Orizovo to km 171 is under construction and contains the bifurcation interchange of the Trakia and Maritsa Motorways. The section between Vetren and Bourgas (11.5 km) is built as a dual-carriageway expressway and is planned to be the right-of-way of the motorway that will connect the termini of the proposed Trakia Motorway at Vetren with Bourgas. The Orizovo interchange is the intersection point between the Trakia and Maritsa motorways. The Vetren interchange will be the intersection point between Trakia and Chernomore Motorways. The Chernomore Motorway will link the two biggest Bulgarian Black Sea ports, Bourgas and Varna.

Bourgas is an important transport node with international seaport, airport, and railway terminals. More than 70 % of the port's traffic is from exports. Bourgas is also an important economic and tourism center.

Corridor IX

Alignment:

Corridor IX is the longest of the ten Pan-European multi-modal Transport Corridors. The Corridor starts in Helsinki (Finland), runs to St. Petersburg (Russia), where it splits into two branches, one running to Moscow (Russia), the second to Pskov (Russia). Both branches come together again in Kiev (Ukraine). In Ljubashevka/Rozdilna (Ukraine) the Corridor splits again. One branch runs down to Odessa (Ukraine) on the Black Sea, whereas the main line continues southward to Chisinau (Moldova), further to Bucharest (Romania), Dimitrovgrad (Bulgaria) and ends at the Aegean Sea in the Greek port of Alexandroupolis.

Besides the above-mentioned branches there are two additional links. Both links start at the Baltic Sea; one in Kaliningrad (Russia), the second in Klaipeda (Lithuania). In Kaunas (Lithuania) both branches meet and continue via Vilnius (Lithuania) to Minsk (Belarus), where the link is connected to Corridor II, to Kiev (Ukraine).

General development:

The Memorandum of Understanding for the whole Corridor and the Addendum bringing Greece into the Memorandum of Understanding was signed in March 1995. The first meeting of the Steering Committee took place in Alexandroupolis (Greece) in June 1996, under the chairmanship of the European Commission. A second meeting of the Steering Committee took place in Brussels in December 1996. To facilitate the monitoring, three Sub-Committees were set up, a Sub-Committee North chaired by Finland, a Sub-Committee Middle chaired by Lithuania and Sub-Committee South chaired by Romania.

In addition to these Sub-Committees one working party "Railways and Combined Transport" was set up at the first Steering Committee meeting. It is chaired by Greece. The last meeting was held in Athens on 21. and 22. December 1998.

The monitoring of the Corridor has so far been subject to the constraints related to the separation between PHARE and TACIS areas. The TINA Secretariat has been awarded in November 1998 with a contract to extend its activities to include the Pan-European Transport Corridors beyond the PHARE-financed area in the NIS. This means that statistical data on the entire transport corridors and areas will figure in the annual TINA report 1999. This will facilitate the integration of the Kaliningrad Railways in Corridor I and in Corridor IX, a branch which terminates in Kaliningrad.

The Working Party on Transport Trends and Economics (WP 5) of the UN-ECE is currently working on the identification and appraisal of projects on Corridor IX (Branch B) as far as transport infrastructures in the NIS are concerned.

Technical features of the Corridor IX:

Concerned countries	Belarus, Bulgaria, Finland, Lithuania, Moldova, Romania, Russia, Ukraine
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	6500 km
Roads	5820 km
Inland waterways	n.a.
Number of Airports	3
Number of Sea- and Riverports	2
Alignment:	<i>Helsinki – St. Petersburg – Pskov/Moscow – Kiev – Ljubasevka – Chisinau – Bucharest – Dimitrovgrad – Alexandroupolis</i>
Railway	Helsinki – Vainikkala – Vyborg – St. Petersburg – Cudovo – Bologoe – Moscow – Kaluga – Brjansk – Konotop – Kiev – (Second line between St. Petersburg and Kiev: St. Petersburg – Pskov – Dno – Novosokol'niki – Vicebck – Orsa – Zlobin – Homel – Cernihiv – Kiev) – Fastiv – Zmerynka – Rozdilna – Tiraspol – Chisinau – Ungheni – Iasi – Pascani – Bacau – Focsani – Ploiesti – Bucharest – Giurgiu – Rouse – Stara Zagora – Dimitrovgrad – Svilengrad – Pythion – Alexandroupolis
Road	Helsinki – Vyborg – St. Petersburg – Novgorod – Tver – Moscow – Tula – Orel – Kiev – (Second line between St. Petersburg and Kiev: St. Petersburg – Pskov – Ostrov – Vicebck – Orsa – Homel – Cernihiv – Kiev) – Bila Cerkva – Uman – Ljubasevka – Chisinau – Albita – Marasesti – Buzau – Bucharest – Giurgiu – Ruse – Stara Zagora – Haskovo – Svilengrad – Alexandroupolis (alternative alignment: Haskovo – Makaza – Komotini – Alexandroupolis)
Railway	<i>Branch from Klaipeda</i> Klaipeda – Kretinga – Siauliai – Gaiziunai – Kaisiadorys – Vilinius – Kena – Minsk – Zlobin – Homel – Cernihiv – Kiev
Road	Klaipeda – Kaunas – Vilinius – Medininkai – Minsk – Homel – Cerginov – Kiev
Railway	<i>Branch from Kaliningrad</i> Kaliningrad – Kybartai – Kazlu Rūda – Kaunas – Kaisiadorys
Road	Kaliningrad – Kybartai – Marijampole – Kaunas
Railway	<i>Branch to Odessa</i> Rozdilna – Odessa
Road	Ljubasevka – Odessa
Investments foreseen up to 2015:	4345 MECU
Railways	1720 MECU
Roads	1930 MECU
Inland waterways	n.a.
Airports	105 MECU
Sea- and Riverports	590 MECU

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

FINLAND

Rail:

Helsinki – (Vainikkala) Finnish/Russian Border:

The railway improvement programme started in the early 1990s. The upgrading of the Helsinki – Tampere link to high-speed standards will be finished in 2004. On the Vainikkala – Kouvola stretch the elimination of level crossings is under way.

Road:

Helsinki – (Vaalimaa) Finnish/Russian Border:

Road construction on E 18 has continued on several sections. The main mileposts of 1998 are the following:

- In spring 1998 a 13 km stretch of a new semi-motorway on the section Koskenkylä – Loviisa was opened to traffic some 65 km east of Helsinki.
- In autumn a contract was awarded on a 25 km stretch of semi-motorway (Porvoo – Koskenkylä) for building the second carriageway for the now two lane road.

At present, one half of the total length of the E 18 road (350 km) is built as a motorway or semi-motorway (expressway). According to the current road construction programme in Finland the entire road will be reconstructed into a motorway by 2010.

RUSSIAN FEDERATION

Rail:

Russian/Finnish Border (Buslovskaya) – Vyborg – St. Petersburg:

A study dealing with social and economic effects to be achieved through upgrading of the Helsinki – state border – St. Petersburg mainline was completed in 1997. The upgrading of the Buslovskaya - St. Petersburg line (158 km) includes railway infrastructure modernization to AGC standards as well as passenger train speed increase. The project's first stage covers overhaul of existing infrastructure components (permanent way, structures, overhead facilities, etc.). The second stage covers overall reconstruction including construction of an additional main track on Buslovskaya – Vyborg (excluding the bridge across the Saimen Channel) and Ushkovo – Udelnaya section, as well as reconstruction of traction power supply and S&C facilities.

St. Petersburg – Bologoye – Tver - Moscow:

High priority is given to upgrading the infrastructure on the St. Petersburg – Moscow mainline (650 km) to AGC standards as well as increasing passenger train speeds and satisfying freight traffic demand. A project envisaging overall reconstruction and overhaul of the main line sections for maximum passenger train speeds at 200 km/h level was launched in 1996. The reconstruction should be completed in the year 2000. The project includes replacement of existing track turnouts, upgrading of traction power supply, modernization of S&C systems and rolling stock maintenance facilities.

Moscow – Obninsk – Kaluga – Suchinici - Brjansk – Navla - Suzemka – (Seredyna Buda)

Russian/Ukrainian Border:

The existing railway line infrastructure has been analyzed for AGC conformity. The analysis has shown the infrastructure status to be inferior to the AGC infrastructure parameters in regard to nominal minimum speed and presence of level crossings. The upgrading of the line

is a high priority task for the Russian Railways and should be accomplished with other countries participating in the Corridor.

Scientific research institutes of Russia and Ukraine are conducting a joint investigation considering infrastructure development.

Road:

Russian/Finnish Border – Vyborg - St. Petersburg:

The road section will be reconstructed; this includes the Vyborg detour. The project implementation time scale is 2000.

St. Petersburg – Vysnij Volochek – Tver – Moscow:

At St. Petersburg a ring road (129 km) with four lanes will be constructed until 2006. The number of road lanes on the section St. Petersburg – Moscow varies from 2-6 lanes. On the stretch Klin – Moscow (90 km) a second road will be constructed. The first stage will be implemented between 1999-2002. At Vysnij Volochek a detour will be constructed, the estimated project duration is 1999-2004.

Moscow – Serpuchov – Tula - Orel – Zeleznogorsk – (Sopyc) Russian/Ukrainian Border:

No projects are currently foreseen on this road section.

2nd Branch: St. Petersburg – Kiev

Rail:

St. Petersburg – Vyrica – Dno – Novosokolniki – (Lobok) Russian/Belarussian Border:

Road:

St. Petersburg – Luga – Pskov – Opocka – (Lobok) Russian/Belarussian Border:

This road section has 2-4 lanes. The construction of the Luga detour (20 km) will be ready by 2005.

BRANCH B:

Kaliningrad/Klaipeda – Kaunas – Vilnius – Minsk – Kiev

Rail:

Kaliningrad – Cernjahovsk – Nesterov – (Kybartei) Russian/Lithuanian Border:

The rail section is double line and not electrified. No measures are currently planned.

Road:

Kaliningrad – Cernjahovsk – Nesterov – (Kybartei) Russian/Lithuanian Border:

The reconstruction of the Cernjahovsk detour (20 km) and the reconstruction of the Prigolja bridge will be implemented by 2000.

LITHUANIA

BRANCH B:

Kaliningrad/Klaipeda – Kaunas – Vilnius – Minsk - Kiev

Rail:

Klaipeda – Siauliai – Kasiadorys – Vilnius – (Kena) Lithuanian/Belarussian Border:

This is the main and most frequented East-West transport Corridor in Lithuania, it will be rehabilitated from the seaport Klaipeda to the Lithuanian/Belarussian Border. In 1994 – 1998 217 km of track have been repaired, costs were 52.2 M€. In addition 82 km of tracks will be renewed up to 2000. This project is financed from the state budget, EBRD, EIB and PHARE.

Signaling, telecommunication and power supply facilities will be upgraded, after the year 2000 traffic should be controlled from one centre. Upgrading of the telecommunication facilities on the section Kasiadorys – Radviliskis has been finished in 1998. The section Vilnius – Kasiadorys and Siauliai – Radviliskis will be modernized until 2000. Modernization of the telecommunication and signaling facilities and also track renewal works on the section Siauliai – Klaipeda is expected after the year 2000.

A development plan for the Klaipeda railway junction has been worked out in 1998. The costs of work were indicated with 22.3 M€ in 1998-2000, and with 26 M€ in 2001-2002.

The reconstruction of the Kena border station is due to start in 1999. In the final design a passenger station and a customs building is to be constructed and the station tracks and passenger platforms are expanded. The project will be implemented in different stages. Completion of the first stage will be in 2000, and completion of the second stage will be in 2002.

The complete electrification of Corridor IX is expected after the year 2010.

Lithuanian/Russian Border (Kybartai) – Kaunas – Kasiadorys:

This section is non-electrified and double track. A capital repair of 12.7 km track took place in 1998. Further capital repair of the line as well as upgrading of signaling and telecommunication systems is planned after the year 2000.

In 1995 a final design for reconstruction and expansion of the Kybartai railway border crossing was prepared. The works commenced in 1996 and completion is expected in 2000.

Road:

Klaipeda – Kryzkalnis – Paneveziukas – Kaunas – Vilnius – (Medininkai)

Lithuanian/Belarussian Border:

Throughout the section Paneveziukas – Kaunas Corridor IX and Corridor I follow the same alignment. The implementation of investment programmes continues according to the highway project of 1997-2000. The works are financed from the funds of the World Bank, the European Bank for Reconstruction and Development, the Japanese EXIM Bank and the PHARE programme. Additional funds for the improvement of infrastructure are allotted from the Lithuanian Road Fund. The total value of the highway project is 27 M€, of which 19.6 M€ are from international financing institutions and 1.5 M€ is a PHARE grant contribution.

In the year 1997-1998 reconstruction and pavement strengthening works on 68 km of the road section were performed. The construction of the Kaunas western by-pass with a bridge across the river Nemunas was also completed. More than 3 M€ have been invested to implement traffic safety measures.

By now 20.1 M€ have been invested, i.e. more than 74% of the total project value, of which 10.7 M€ was in 1998.

In 1998 a project for extension of infrastructure at Medininkai (Lithuanian/Belarusian Border) was finished, co-financed by the PHARE programme with 2 M€.

During the period from 2000 to 2005 following infrastructure modernization activities will be carried out:

- construction of by-passes (including southern Vilnius by-pass, 28 km),
- strengthening of pavement (approximately 200 km),
- implementation of traffic security measures.

Russian/Lithuanian Border (Kybartai) – Marijampole - Kaunas:

The road section Kaunas – Marijampole of Branch IXB coincides with Corridor I, thus all activities are carried out in accordance with the Via Baltica investment programme. Strengthening of the pavement on Kybartai – Marijampole section and construction of the Vilkaviskis by-pass is planned until 2000. Construction of the Kybartai by-pass (7 km) and broadening of the driving lanes is scheduled after 2005.

The border crossing Kybartai will be modernized until 1999. This includes the construction of a main control building, control posts, a truck weighing bridge, access roads and a parking area.

Ports:

Klaipeda seaport is a crucial hub of multi-modal transport supporting transit services for the East-West bound traffic on Branch IXB. From 1995-1998 almost 60 M€ have been invested in the reconstruction of the Klaipeda port facilities, of which 23.4 M€ were spent in 1998. New berths for a Ro-Ro terminal (4.6 M€ PHARE grant), cement and liquid fertilizer transshipment have been constructed. The construction of a container terminal was finished in 1998 (14 M€ EIB loan). Additionally, intensive construction and reconstruction of the berths is taking place, including the deepening up to 14 m of the harbour water area and the approach channel. The rail facilities located in the port are also being reconstructed. All above mentioned projects are ongoing, and negotiations with the World Bank on financing infrastructure on the Klaipeda port entrance have commenced.

BELARUS

2nd Branch: St. Petersburg – Kiev

Rail:

Belarusian/Russian Border (Ezjarsco) – Vicebck – Orsa – Mahilev – Zlobin - Homel – Teryukha - Belarusian/Ukrainian Border:

The total length of the section is 439 km, of which 353 km are single track line and the remaining 86 km are double track. The total section is not electrified.

Road:

Belarusian/Russian Border (Ezjarsco) – Mogilov – Homel – (Novaya Guta) Belarusian/Ukrainian Border:

At the Novaya Guta border crossing reconstruction is under way and will be finished in 1999.

BRANCH B:
Kaliningrad/Klaipeda – Kaunas – Vilnius – Minsk – Kiev

Rail:

Belarussian/Lithuanian Border (Sumskas) – Maladзецna – Minsk – Zlobin:

The railway section from the Belarussian/Lithuanian Border to Maladзецna (80 km) is not electrified; the railway line continues electrified to Minsk (67 km) and then again continues not electrified to Zlobin (216 km).

Road:

Belarussian/Lithuanian Border (Medininkai) - Kamenny Log – Minsk – Homel:

At the Kamenny Log border crossing reconstruction is under way and will be finished in 1999.

UKRAINE

Rail:

Ministry of Transport Draft Programme for Railway Restructuring:

On August 18, the Ukrainian Transport Ministry Board decided to submit to the Government for consideration, a draft programme of the restructuring of railroad transport for 1998-2003. The main programme objective is to create a consumer-oriented control system, increase freight traffic, improve quality of services and integrate the Ukrainian railroads into the European transport system.

Except for the below mentioned projects no others have yet been implemented, because the Ministry of Transport does not have the means to carry them out.

Ukrainian/Russian Border (Seredina Buda) – Krolevec – Konotop – Nezin – Kiev:

On two sections, Gornostaevka – Chernigov and Chernigov – Nezhin, diesel traction was replaced by electric traction and the infrastructure was upgraded.

Kiev – Fastiv – Vinnica – Zhmerinka – Slobodka – Rozdilna – (Kucurhan) Ukrainian/Moldovian Border:

The section from Kiev to Zhmerinka (267 km) is double track and electrified, and from Zhmerinka to Rozdilna (313.7 km) it is also double track and electrified. From the line continues only partly double track and non-electrified to the border.

Road:

Road traffic data are currently scarce and unreliable. Apart from a few special project related studies, few traffic countings are carried out due to economic constraints. Road traffic has been reckoned to be only 50 percent of the 1989 levels, the estimated average traffic increase for 1997-2000 is considered to be too high. The exception to this last point may be on some transit routes.

Except for the below mentioned projects no others have yet been implemented, because the Ministry of Transport does not have the means to carry them out.

Ukrainian/Russian Border – Sopyc – Nezin – Kiev:

Rehabilitation of the road totaling to 21 km and rebuilding totaling to 32 km has been completed.

Kiev – Belaja Cerkov – Uman – Ljubasovka:
Ljubasovka – Malajevky - Ukrainian/Moldovian Border:

2nd Branch: St. Petersburg – Kiev

Rail:

Ukrainian/Belarussian Border – Hornostaika – Cernigov – Nezin - Kiev:

Road:

Ukrainian/Belarussian Border – Hornostaika – Cernigov – Kiev:

BRANCH A:

Rail:

Rozdilna – Odessa:

The branch from Rozdilna to Odessa has a length of 63.8 km, the total section is double track and electrified.

Road:

Ljubasovka – Odessa:

The port of Odessa handles the largest tonnage of cargo among the ports of the Ukraine. One of the main problems of the Odessa port is the land access. All trucks have to go through the city, which creates traffic jams. The construction of a 4.5 km elevated road out of the port has been initiated and should be finished by 2000.

MOLDOVA

Rail:

The Rozdilna – Bendery – Chisinau – Ungeny section is the main international railway in Moldova. Electrification of the line is a priority for the Moldovian Railways.

Moldovian/Ukrainian Border (Pervomaise) - Tiraspol – Bendery – Chisinau:

In the first stage the Rozdilna (Ukraine) – Bendery section is being electrified. Work started beginning of January 1998 and should be completed in the year 2000. The Bendery – Chisinau section will be constructed in the second stage and should be completed in the year 2005.

Chisinau – (Ungeni) Moldovian/Romanian Border:

The Chisinau - Ungeni section will be constructed in the second stage and should be completed in the year 2005.

Road:

Moldovian/Ukrainian Border - Goian – Chisinau:

Chisinau – (Leuseni) Moldovian/Romanian Border:

ROMANIA

Rail:

Romanian/Moldovian Border (Ungeni) Iasi – Pascani - Bacau – Ploiesti – Bucharest:

The railway line will be upgraded to take high-speed trains (160 km/h on some sections). The project is not to commence before 2000.

Bucharest – (Giurgiu) Romanian/Bulgarian Border:

There are two alignments for this stretch; one line goes via Videle. This railway line will be upgraded to take high-speed trains (160 km/h on some sections). The project is not to commence before 2000. The other alignment is a non-electrified, double track railway line, which allows a running speed of 100 km/h. It will be upgraded to AGC parameters for circulation with a speed of 160 km/h on limited sectors. Construction will not commence before 2000.

Modernization of the border crossing at Giurgiu, which is an important crossing point between Romania and Bulgaria, has been completed.

Road:

Romanian/Moldovian Border (Albita) - Husi – Focsani – Buzau – Bucharest:

The road section exists as two lane main road. A new motorway is planned but no date for beginning was reported.

Bucharest – (Giurgiu) Romanian/Bulgarian Border:

The railway line will be upgraded to take high-speed trains (160 km/h on some sections). The project is not to commence before 2000. The construction of a new motorway is planned but no date has been reported.

Since 1992 a number of projects have been going on to modernize the border crossing at Giurgiu. This includes the rehabilitation of 9.7 km access roads, the development of parking areas at the ferry terminal, new lanes for goods traffic at the customs area, and repair on the pavement on the bridge crossing the Danube. The projects were completed in 1998.

BULGARIA

Rail:

Bulgarian/Romanian Border (Rousse) - Veliko Turnovo – Stara Zagora – Dimitrovgrad – (Svilengrad) Bulgarian/Greek Border:

The rail infrastructure on this section varies considerably, between double and single track and electrified and non-electrified. It will be upgraded to a speed of 100-160 km/h but not starting before 2000.

Road:

Bulgarian/Romanian Border (Rousse) – Veliko Turnovo – Stara Zagora – Dimitrovgrad - Haskovo //– Kardzali – (Makaza) Bulgarian/Greek Border// - Harmanli – (Svilengrad) Bulgarian/Greek Border:

At Rousse a new 0.4 km access road to the ferry across the Danube was constructed and the road deck was repaired. Various sections of the Bulgarian road network are being rehabilitated in a national programme to improve traffic flow and safety. The work involves the strengthening and realignment of the roads, new crash barriers, traffic signs and road

markings, and the reconstruction of sidewalks. The following road sections are included in the programme: Veliko Tarnovo - Drjanovo – Gabrovovo – Kazanlak and Veliko Tarnovo – Polski Trambesh.

The road stretch between Haskovo and Svilengrad is also part of Corridor IV. It currently is designed as a two lane main road with a design speed of 80 km/h. The construction of a new motorway on this stretch is foreseen to begin in the year 2000.

However, the section between Svilengrad and Greek/Bulgarian Border is currently envisaged as a 4-lane Motorway, and the necessary funds have been already allocated in the framework of PHARE / C.B.C. – INTERREG Co-operation.

GREECE

Rail:

Greek/Bulgarian Border (Svilengrad) – Ormenio - Alexandroupolis:

The railway line Alexandroupolis – Ormenio is of a total length of 194 Km, has a normal gauge and allows today a maximum speed of 100 km/h. The permitted axle load in this line is 20 tons.

Studies for the upgrading of this railway line have been already carried out, aiming at the increase of the railway speed from 100 to 120 km/h, the permitted axle load from 20 tons to 22,5 tons by the year 2001, the application of automatic signaling and telecommunication system by the year 2001, as well as the rail link to the port of Alexandroupolis. The total cost for the above interventions is estimated to 200 MECU

Another study is to be completed within 1999, aiming at the increase of the railway speed up to 150 km/h by the year 2009.

The results of these interventions are expected to be the diminishing of travel time from 3h today to 1h 20' by the year 2009, the increase of cargo bulk traffic to 200.000 tonnes by the year 2000, mainly attracting transit traffic, as well as contribution to the decongestion of cargo traffic currently passing through Bosphorus channel.

Road:

Greek/Bulgarian Border - Nymphaea - Komotini – Alexandroupolis // Greek/Bulgarian Border – Ormenio - Ardanio - Alexandroupolis //:

Between Greek/Bulgarian Border and Komotini there is a regional road, 25 km long and 5 m wide. Studies are underway for the upgrading of this section into a 7,5 / 10,5 m wide road.

The road linking Komotini to Alexandroupolis, 65 km long, has a typical width of 12 / 14 m along the major part of its length. It is envisaged as a future part of Via Egnatia (widening or new alignment, by sections)

Greek/Bulgarian Border – Ormenio - Ardanio of a total length of 124 km.

Works for the upgrading of this section into a 12 / 14 m wide expressway are underway. It is foreseen that until the year 2000 more than half of its length will be completed.

A 4-lane motorway is under construction for the section Ardanio – Alexandroupolis, 21 km long, which is a part of Via Egnatia.

Port

The port of Alexandroupolis serves mainly transshipment traffic in the Mediterranean Sea, in co-operation with the Black Sea ports in a "hub - regional ports" scheme. It also serves commercial traffic (mainly imports and exports, in form of general, dry bulk and liquid bulk cargoes). In 1994, commercial traffic reached 1.3 million tons and it is expected to reach 3.0 million tons approximately by the year 2010.

In the period 1989 – 1994 7 MECUS have been allocated to the development of the port. The total investment in the period 1995 - 1999 amounts to 30 MECUS and includes the construction of a pier with total quaywall length of 480 m and a depth of 14 m, as well as the extension of a windward mole of 570 m in length protecting the new pier.

The pier is planned to operate as a container terminal with annual capacity of 100.000 TEUS, which can reach 200.000 TEUS, serving also LO-LO vessels of up to third generation, as well as RO-RO vessels.

In a second stage, after the year 2000, the construction of a multipurpose terminal is planned, as well as installations for transshipment of dry bulk cargoes according to the demand of port facilities. The total investment of the second stage construction works, including equipment for the terminal, is expected to reach 45 MECUS.

In a third stage, emphasis will be given to the land spatial planning of the broader port area and the link of Alexandroupolis port with via Egnatia.

Corridor X

Alignment:

Corridor X is the "youngest" of the Pan-European Transport Corridors. Due to the peaceful solution of the civil unrest in Bosnia-Herzegovina, the Helsinki Conference decided to include this Corridor in the Balkan area into the network of the Pan-European Transport Corridors.

Corridor X is a multi-modal transport link running from North-West to South-East. It connects Salzburg (Austria) via Ljubljana (Slovenia), Zagreb (Croatia), Beograd (FR Yugoslavia), Skopje (FYROM) with Thessaloniki (Greece). Besides this main link there are the following four additional branches:

- a branch from Graz (Austria) via Maribor (Slovenia) to Zagreb (Croatia),
- a branch from Budapest (Hungary) to Beograd (FR Yugoslavia),
- a branch from Nis (FR Yugoslavia) to Sofia (Bulgaria) and further on Corridor IV to Istanbul,
- a branch from Veles (FYROM) via Florina (Greece) to the Via Egnatia.

General development:

On the governmental level, Greece took on the task to organize meetings, inviting all parties involved, in view of preparing a Memorandum of Understanding by the Ministers of Transport. Due to the politically difficult situation prevailing in the region, notably between Croatia and FR Yugoslavia, it has not yet been possible to achieve the signing of a MoU. The first Pre-Steering Committee meeting took place in Thessaloniki, Greece, on November 19-20 1998, where the participants agreed on a first draft MoU. The next meeting, which will be held on 18 March 1999, in Athens, will aim at finalizing the draft MoU to get it initialed. The Greek delegation presented a proposal for the creation of a Steering Committee Secretariat for Corridor X, which will undertake both secretarial and technical support for the work of the Committee and should be organized and financed by the Greek Government.

At the Pre-Steering Committee Meeting the Chairman, Mr. Maniatis, referred to the fact that there has been a significant drop in traffic along this Corridor, influencing also the status of infrastructure. The aim of the Steering Committee is to upgrade the whole Corridor to the standards prevailing in Europe nowadays and attracting the portion of traffic, which normally belongs to it.

The railway companies have organized several informal meetings under the chairmanship of the Austrian Railways (ÖBB), in order to prepare a Memorandum of Understanding on the level of railways. The date for signing has not been fixed yet. The last meeting took place in Bad Vöslau, Austria, on 10 and 11 November 1998.

Corridor X runs through countries, which are parts of "Former Yugoslavia" not yet included in the PHARE programme, i.e. Croatia and Serbia. It will remain a political Corridor until peace is restored in the region.

The first step to organize Corridor activities will be to describe the status quo of the infrastructure. The railway companies are already doing this. Greece will convene the road directors to invite them to do the same.

Since the last change of railway schedule, 24 May 1998, a daily passenger train is running from Munich to Thessaloniki along Corridor X. The daily service is two trains in each direction. The railway companies aim at introducing measures in order to reduce the average travelling time.

Technical features of Corridor X:

Concerned countries	Austria, Bulgaria, Croatia, FYROM, Greece, Hungary, Slovenia, FR Yugoslavia
Transport modes	Railways, roads, aviation, navigation
approx. length of the Corridor	
Railways	2360 km
Roads	2150 km
Inland waterways	n.a.
Number of Airports	n.a.
Number of Sea- and Riverports	n.a.
Alignment:	<i>Salzburg - Ljubljana - Zagreb - Beograd - Nis - Skopje - Veles - Thessaloniki</i>
Railway	Salzburg - Villach - Jesenice - Ljubljana - Zidani Most - Dobova - Zagreb - Novska - Vinkovci - Beograd - Nis - Skopje - Veles - Thessaloniki
Road	Salzburg - Villach - Karavanke - Ljubljana - Bic - Kraska Ves - Obrezje - Zagreb - Beograd - Nis - Skopje - Gradsko - Thessaloniki
	<i>Branch from Graz</i>
Railway	Graz - Sentilj - Maribor - Zidani Most
Road	Graz - Sentilj - Maribor - Ptuj - Gruskovje - Zagreb
	<i>Branch from Budapest</i>
Railway	Budapest - Kunszentmiklos-Tass - Kelebia - Novi Sad - Beograd
Road	Budapest - Szeged - Kelebia - Subotica - Novi Sad - Beograd
	<i>Branch to Sofia (Istanbul)</i>
Railway	Nis - Dimitrovgrad - Kalotina - Sofia
Road	Nis - Dimitrovgrad - Sofia
	<i>Branch to Florina (Via Egnatia)</i>
Railway	Veles - Bitola - Florina
Road	Gradsko - Bitola - Florina
Investments foreseen up to 2015:	1100 MECU
Railways	200 MECU
Roads	900 MECU
Inland waterways	n.a.
Airports	n.a.
Sea- and Riverports	n.a.

Remark:

- The figures for the investments contain only projects within the TINA countries
- The figures about the number of airports, sea- and riverports contain only nodes within the TINA countries
- If one airport, sea- or riverport belongs to more than one Corridor, it is mentioned only in one Corridor

AUSTRIA

Rail:

Salzburg – Villach – (Rosenbach) Austrian/Slovenian Border:

This rail section is included in the TEN guidelines. Measures are well under way; these include upgrading and/or doubling of tracks. Further investments on the section Villach - Rosenbach should depend on joint examination with the Ministry of Transport of Slovenia.

Road:

Salzburg – Villach – (Karavanke) Austrian/Slovenian Border:

The existing road is the A10 and A11 motorway.

BRANCH A: Graz – Maribor - Zagreb

Rail:

Graz – (Spielfeld) Austrian/Slovenian Border:

This rail section is included in the TEN guidelines. The existing line is a single railway track. Doubling of the track is foreseen. Further investment will depend on the results of a joint examination with the region of Styria and with the Ministry of Slovenia.

Road:

Graz – (Spielfeld) Austrian/Slovenian Border:

From Graz to Maribor runs the A9 motorway.

SLOVENIA

Rail:

Slovenian/Austrian Border (Jesenice) - Ljubljana:

The current state of the railway line is single track and electrified. The reconstruction of the railway line including the renewal of bridges, pillars and buttresses has commenced in 1998 and should be finished by 2005. The signaling safety devices and telecommunication devices will also be renewed.

Ljubljana – Zidani Most – (Dobova) Slovenian/Croatian Border:

The current state of the railway line is double track and electrified. The stretch between Zidani Most and Dobova will be reconstructed until 2005. This includes reconstruction of railway lines, renewal of railway stations, bridges, pillars and buttresses and also signaling safety devices and telecommunication devices.

Road:

Slovenian/Austrian Border – (Jesenice) Ljubljana:

This road link will be constructed as a four-lane motorway in those stretches where it is not already constructed as such. This includes the Vrba – Kranj Zahod section (20 km) and the Kranj Vzhod section (6 km). A date for completion is not yet fixed.

Ljubljana –Visnja Gora – Krška Ves – (Obrežje) Slovenian/Croatian Border:

The road section between Koseze and Visnja Gora is constructed as a four-lane motorway. The remaining stretch to the border will be constructed as a four-lane motorway. The preparations for projects are in process.

BRANCH A: Graz – Maribor - Zagreb**Rail:**

Although the proposed TINA Network has been almost completely defined there still are some incomplete aspects, together with minor inconsistencies over individual links. Branch A of Corridor X is such a case. Slovenia has indicated their preference for using existing rail infrastructure (via Zidani Most, which is described below), while leaving open the possibility of studying a new direct connection (feasibility, space and environmental studies). Croatia would prefer a different alignment, which does not pass via Zidani Most.

Slovenian/Austrian Border (Sentilj) - Maribor – Zidani Most (main branch):

From Sentilj to Maribor the track is single line and electrified, the rest of the stretch is double line and electrified. A second railway track will be added to the Sentilj – Maribor stretch after 2005, depending on the results of a joint examination with the Ministry of Transport of Austria. The railway line between Maribor and Pragersko, which is 19 km long, will be reconstructed and renewed until 2002.

Road:Slovenian/Austrian Border – (Sentilj –) Maribor – Ptuj – Gruskovje - Slovenian/Croatian Border:

From Sentilj to Maribor the existing road is a four-lane motorway. The remaining stretch to the border will be constructed as a four-lane motorway. The preparations for projects are in process.

CROATIA**Rail:**Croatian/Slovenian Border (Savski Marof) – Zagreb:Zagreb – Novska – Vinkovci – (Tovarnik) Croatian/Yugoslavian Border:

The current state of the railway line is single track from Zagreb to Novska and double track from Novska to the border.

Road:

The total length of the main branch of Corridor X through Croatia is 279 km. Of this 192 km already exist as motorways, the missing part will also be constructed as motorway.

Croatian/Slovenian Border (Obrežje) – Bregana - Zagreb:

The section from Bregana to Jankomir (13.7 km) is under construction as a motorway.

Zagreb – Novska – (Lipovac) Croatian/Yugoslavian Border:

Construction works for a highway on the road section Oprisavci – Velika Kopanica will be finished in July 1999. The section Oprisavci – Lipovac (73.2 km) will also be constructed as a motorway.

BRANCH A: Graz – Maribor - Zagreb**Road:****Croatian/Slovenian Border – (Gruskovje -) Zagreb:**

Out of the total length of 60 km on the road section 40.5 km have been constructed as motorway. The remaining 19.5 km stretch is planned for construction.

HUNGARY**BRANCH B: Budapest Novi Sad - Beograd****Rail:****Budapest – Kunszentmiklos-Tass – (Kelebia) Hungarian/Yugoslavian Border:**

The current state of the railway line is single track and electrified. The rehabilitation of the line for 120 km/h is planned from Kelebia to Kiskunhalas until 2002, for the other part of the line until 2010. There is an alternative route from Kiskunhalas via Kiskunfelegyhaza – Cegled to Budapest, which is proposed as an additional component to the TINA network.

The 9 km long section between Budapest – Ferencvaros station and Soroskar station will be rehabilitated by the opening of the new intermodal logistic center lying at this main line, at the crossing with the Budapest circular motorway M0.

The Budapest Intermodal Logistics Center is to be built at Soroksar by 2000 in its basic infrastructure part at least on a territory of 0.5 km² financed in a Public/Private Partnership construction. It will include a railway terminal, a Rolling Road station and a joint logistics center, altogether with 100.000 TEU handling capacity per year in its final extension of nearly 1 km². The rehabilitation of the section and the construction of the railway terminal are financed by the state budget, but supported with an aid from PHARE too.

Road:**Budapest – Kecskemet - Kiskunfelegyhaza – Szeged – (Röszke) Hungarian/Yugoslavian Border:**

The road section from Budapest to Kiskunfelegyhaza is constructed as a four-lane motorway. The rest of the stretch to the border is a two-lane main road. The preparations for the establishment of a concession scheme for the funding and construction of the Kiskunfélegyháza – Röszke section, M5 motorway, are in progress. The negotiations between the Concession Company and the Ministry will start in 1998. The concession contract schedules the deadline for completion of the entire construction of the M5 motorway for the end of 2003. The section Budapest – Szeged is also part of Corridor IV.

FR YUGOSLAVIA**Rail:****Yugoslavian/Croatian Border (Tovarnik) – Sid - Beograd:**

This railway section will be completely modernized and upgraded for a speed of 160 km/h until 2010.

Beograd – Nis – (Presevo) Yugoslavian/FYROM Border:

The railway track from Beograd to Nis is double track (128.3 km) and single track (112.5 km). Until 2010 the present double track will be upgraded to a speed range of 120-140 km/h and the present single track will be constructed as double track with parameters for high-speed and equipment for 160 km/h. From Nis to Presevo (156.2 km) the single track line will be upgraded for 120 km/h until 2010. The total length will be electrified.

Road:

Yugoslavian/Croatian Border - Beograd:

Beograd – Nis – (Sopot) Yugoslavian/ FYROM Border:

BRANCH B: Budapest Novi Sad - Beograd**Rail:**

Yugoslavian/Hungarian Border – Subotica - Novi Sad - Beograd:

The present single line (182.9 km) will be constructed as a double track line with parameters for high-speed and equipment for 160 km/h until the year 2010.

Road:

Yugoslavian/Hungarian Border – Subotica - Novi Sad - Beograd:

BRANCH C: Nis – Sofia**Rail:**

Nis – Dimitrovgrad – Yugoslavian/Bulgarian Border:

The existing railway line is single track (103.9 km). The complete electrification, the reconstruction of loading gauges and upgrading for 120 km/h of the line should be completed by 2005.

Road:

Nis – Dimitrovgrad – Yugoslavian/Bulgarian Border:

BULGARIA**BRANCH C: Nis – Sofia****Rail:**

Bulgarian/Yugoslavian Border (Kalotina) - Sofia:

The existing railway line is single line and not electrified. The modernization and reconstruction of the line with upgrading to 140 – 160 km/h will commence in 2000 and is expected to be finished in 2004. The improvement of the border crossing facility will include the upgrading of the telecommunication links.

Road:Bulgarian/Yugoslavian Border (Kalotina) - Sofia:

The construction of a four-lane motorway is planned. Works should begin in the year 2000 and be finished in 2004.

FYROM**Rail:**

The total length of the railway line on Corridor X is 215.6 km and of its branch 145.6 km. The major part of Corridor X is single track with standard rail gauge, electrified, and modern signal, security and communication systems. The largest part of the rail route allows a speed of 100 km/h, and only on small sections where the terrain is difficult, in particular mountainous, a speed of 80 km/h is allowed.

Having in mind the fact that 85% of the total transport operations by railway are performed on Corridor X, particular attention has been paid to the infrastructure conditions of this Corridor, so that overall technical conditions are satisfactory. FYROM is undertaking efforts for its improvement. It is necessary to carry out general overhaul, completion of the border stations and particularly to undertake measures for reducing the waiting times at the borders. A radio connection on the North-South route as proposed by Corridor X should be installed for railway guidance.

FYROM /Yugoslavian Border (Tabanovce) - Skopje:

The total railway section is single line and electrified. The Macedonian authorities have prepared a proposal for the construction of a completely new border station at Tabanovce.

Skopje – Veles – (Gevgelija) FYROM/Greek Border:

The total railway section (206 km) is single line and electrified.

Road:

The road transport Corridor X on the territory of the FY Republic of Macedonia from the border with FR Yugoslavia (Tabanovce) to the border with the Republic of Greece (Bogorodica) has a total length of 176 km, and a road Branch D from Veles through Bitola to the border with the Republic of Greece (Medzitlija) with a length of 127 km, or in total 303 km.

FYROM/Yugoslavian Border (Tabanovce) – Kumanova - Skopje:

The stretch from Kumanovo to Skopje is constructed as a motorway.

Skopje – Veles - Gradsko – Demir Kapija – Gevgelija - (Bogorodica) FYROM/Greek Border:

Skopje is connected to Gradsko by a 96 km long motorway. The road segment from Demir Kapija to the Greek Border will be upgraded to motorway standards. Works have commenced 1998.

The Bogorodica border station is being completely modernized with financial support by the PHARE programme. This includes a new customs terminal, service buildings and access roads.

BRANCH D: Veles – Bitola – Florina – Via Egnatia

Rail:

Veles – Bitola – (Kremenica) FYROM/Greek Border:

The total railway section (145.6 km) is single line and electrified. The railway branch Veles – Bitola – Kremnica allows train speeds of 100 km/h on one half of its total length and on the other half the allowed speed is 60-80 km/h.

Road:

Veles – Bitola – (Medzitlija) FYROM/Greek Border:

This road branch is under construction as a trunk road. It is planned to be constructed as a motorway by the year 2020. The Medzitlija border crossing has been reconstructed with additional entry and exit lanes, a new customs house, administrative and service facilities.

GREECE

Rail:

Greek/FYROM Border (Idomeni –) Thessaloniki:

The railway line Idomeni – Thessaloniki has a total length of 77 km and is generally in a good state, serving the current and future traffic needs. It is double line and electrified; the maximum permitted speed is 120 km/h. No further improvement is planned until 2005. Furthermore there is a rail connection to the port of Thessaloniki.

Road:

Greek/FYROM Border (Evzoni –) Thessaloniki:

The road section is constructed as a motorway along the first section of 15 km. The subsection, Evzoni – Axios G.S.I., with a cross section 12 / 14 m wide, will be probably upgraded into a four-lane motorway between 2000-2006.

BRANCH D: Veles – Bitola – Florina – Via Egnatia

Rail:

Greek/FYROM Border (Messionis -) Florina:

Road:

Greek/FYROM Border (Niki) - Florina:

The section from the border to Florina has a length of 15 km. A technical study was assigned in summer 1998 regarding the upgrading of the road.

Port

The upgrading of the Thessaloniki port includes the construction of quayside gantries, container and bulk terminals, as well as the purchasing of container stocking equipment, and bulk cargo handling equipment.

A project of 33 MECU is currently prepared for tendering, concerning the expansion (1st phase) of Pier VI to accommodate container traffic. After its completion, the total annual container through put capacity for the port will be 500.000 TEUS. Additionally, land reclamation to accommodate stocking area and Container Freight Stocking is underway. Land (road / rail) access to the port, via a new entrance, is planned and certain sections are under construction.

The Pan-European Transport Areas (PETRA)

In relation to the considerations on transport infrastructure needs, it became apparent that the Corridor concept, as identified in Crete in 1994, was not appropriate for geographical areas, such as the Arctic area, the Black Sea and the Mediterranean Basin.

It was therefore agreed on the Third Pan-European Transport Conference in Helsinki in June 1997 that four maritime areas should be defined as a complement to the Pan-European transport corridors. All of them,

- the Barents Euro-Arctic,
- the Black Sea Basin,
- the Adriatic/Ionian Seas and
- the Mediterranean Basin,

are adjoining Europe. Three out of four lie on the territory of PHARE and TACIS beneficiaries, whereas the fourth one, the Mediterranean Basin PETrA, will benefit from MEDA assistance.

Barents Euro-Arctic Pan-European Transport Area

The Barents/Euro-Arctic PETrA is a multi-modal transport area. The area covers the northern provinces of Sweden, Finland, and Norway, as well as the North-Western part of the Russian Federation, among others the Kola Peninsula.

Finland and Sweden have been very active to promote the signing of a Memorandum of Understanding for the Barents Euro-Arctic area. The Memorandum of Understanding, which was the first one for a PETrA, was signed by the four countries concerned at the European Conference of Ministers of Transport in Copenhagen on May 26, 1998. The European Commission signed in July 1998. The Memorandum of Understanding follows the example of similar Memoranda of Understanding for Pan-European Transport Corridors by setting up a Steering Committee composed of representatives from the parties involved to monitor the work.

The objective is to strengthen the existing international co-operation in areas such as customs co-operation, maintenance and new construction of multi-modal transport infrastructures. The MoU furthermore aims at developing a regional transport network in an area with difficulties of access, particularly due to paucity of road and rail infrastructure combined with long distances and harshness of climate.

A preparatory meeting to set up the Steering Committee took place on November 12 in Arlanda, Sweden, and the first Steering Committee meeting took place in Oslo on December 8, 1998.

One major task of the Steering Committee will be to set up an action programme to co-ordinate the several initiatives already taken in the area. The Steering Committee will report to the European Commission, the Barents Euro-Arctic Council and the G-24 annually.

The Northern Dimension, an action programme developed by the Ministry of Transport of Finland, also recommends improving land transport connections to and from the ports of the Baltic States and Russia. The European Commission has presented a Communication to the Council on November 20, 1998, on the Northern Dimension.²

Black Sea Transport Area

Since the adoption of the Black Sea Transport Area at the Helsinki Conference, Georgia has expressed strong interest in monitoring the regional co-operation in the Black Sea area. All the Black Sea littoral states are potential participants in this regional co-operation on transport, namely Moldova, Ukraine, the Russian Federation, Georgia, Turkey, Bulgaria and Romania. Greece has been asked to join, and a representative from the secretariat of the Black Sea Economic Co-operation (BSEC) has been invited to assist in the meetings as an observer.

The Commission welcomed Georgia's wish to host a first meeting of Senior Officials in order to prepare a Memorandum of Understanding of the development of the Black Sea Transport Area. The Senior Officials' meeting took place on November 23-24, 1998, in Tbilisi (Georgia) where a draft MoU was initiated by all the participating countries, but the European Commission. Moldova was not present at the meeting.

The Ministers of Transport from the littoral countries of the Black Sea will sign the MoU in spring 1999. To ensure the financing of starting the administrative tasks to develop the Black Sea PETrA, credits from the TACIS Inter-State programme 1998 were transferred for that purpose. The TINA Secretariat has been awarded an extension of its contract with the European Commission to ensure secretarial assistance in a transitional phase to the Black Sea PETrA. The TINA Secretariat will cooperate closely with the organizational committee, established by the Georgian President in view of working out an **Action Programme** on the development of the Black Sea PETrA.

In this context attention should be drawn to the existing Black Sea Economic Co-operation (BSEC), which was established in Moscow in October 1992 between Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, the Russian Federation, Turkey and the Ukraine. To avoid any overlapping of project development the Tina Secretariat will cooperate closely with the BSEC Working Group on Transport to ensure an efficient co-ordination of transport infrastructure development in the Black Sea Area.

² COM(1998) 589/3 of November 20, 1998

Adriatic-Ionian Seas Transport Area

Informal contacts between potential participants took place under an Italian initiative. The interested parties have agreed to postpone any action on the Transport Area until the MoU of Corridor VIII has been signed.

The Mediterranean Basin Transport Area

It was decided, at the Helsinki Conference in June 1997, to develop transport infrastructure in the Mediterranean Basin, in what is by far the largest one of the four Pan-European Transport Areas.

Meanwhile, in order to apply the Euro-Mediterranean policy, established under the Barcelona process to transport, the European Commission adopted in January 1998 a Communication³ outlining the strategy to be adopted in order to ensure that the development of transport services meet effectively both the needs of the partners and the constraints of sustainable and acceptable growth of the transport system.

This Communication also explores ways of implementing this strategy and proposes the launching of an action plan for transport to be supported by a Working Group (see below).

In order to avoid duplication of work, which might reduce the overall effectiveness of the transport action plan, the Commission has proposed the creation of a **Euro-Mediterranean Forum for Transport**, which is the new name of the Working Group recommended by the Communication, and which will develop the actions set out in the Communication.

Its tasks will include the work to be done in the framework of the Mediterranean Pan-European Transport Area (Mediterranean PETrA), as well as that in the context of the Trans-European Transport Networks and the TINA initiative for the acceding countries in Central and Eastern Europe.

The Forum was approved on September 15, 1998 by the 15 Member States and the 12 Mediterranean partners. The Commission is currently preparing a Memorandum of Understanding and an Action Plan, which will be submitted to the 27 participating countries at the first meeting of the Forum, foreseen to be in February 1999 in Malta.

³ Communication from the Commission to the Council and to the European Parliament concerning the Euro-Mediterranean partnership in the transport sector – COM (1998) 7 final

ANNEX

INFORMATION SHEET ON PAN-EUROPEAN CORRIDORS

corridor		Correspondent				remark
N°	MoU	overall	Rail Co-ordinator (UIC) C. Boutté	road	DG VII S. Mogensen	
I	Yes	Chair: COM	Rail Baltica: UIC: T.Kaczmarek	via Baltica: B. Denis	S. Mogensen	
II	Yes	Chair: rotating	Branch IA: Russia DB: K.Ebeling	Branch IA: Russia	S. Mogensen	PPP taskforce
III	Yes	Chair: COM	PKP: M.Smolec		S. Mogensen	
IV	Yes	Chair: D: W. Dörries	DB: K.Ebeling		M. Vermyle	MoU not signed yet
V	Yes	chair: I: V. Giacchi	ZRS: Havrila		S. Khelif	
VI	No		PKP: M.Smolec		M. Vermyle	Poland to take initiative
VII	Yes	Chair: A: O. Schwetz			S. Khelif	
VIII	No (in prep.)	chair: I: V. Giacchi	BDZ: D. Boev		M.A. Guzman	Italy has taken the initiative
IX	Yes	Chair: K. Sterner Chair:FIN Chair:LT A.Sakalys Chair: RO	CH: E. Kosteas		S. Mogensen	
X	No	Chair: I.Maniatis Secr.: Greece	ÖBB: W. Flöck		J.W. Grüter	Greece to take initiative

INFORMATION SHEET ON PAN-EUROPEAN TRANSPORT AREAS

Area		correspondents/ participants				Remark
N°	MoU	Secretary	countries	Action plan	DG VII	
Co-ordination: EC					S.Mogensen	
Barents Euro-Arctic	Yes	Finland	regions in Norway, Sweden, Finland, N-W Russia		S.Mogensen	
Black Sea	Draft	TINA Secretariat	Russia, Ukraine, Moldova, Georgia, Turkey, Bulgaria, Romania, Greece		S.Mogensen	
MED	No (in prep.)	CETMO	Malta, Cyprus, Syria, Lebanon, Israel, Turkey Palestinian Authority, Jordan, Egypt, Tunisia, Algeria, Morocco, Spain, Portugal, France, Italy, Greece		H. Chraye	under discussion
Adriatic /Ionian	No	under discussion	Italy, Slovenia, Croatia, Bosnia-Herzegovina, (FRY), Albania, Greece		S. Khelif	Italy to take initiative

INFORMATION SHEET ON EURO-ASIAN LINKS (LIST NON-EXHAUSTIVE)

link		correspondent/participants				remark
N°	MoU	secretary	country	action plan	DG VII	
Arctic	No		Finland, Russia		S.Mogensen	Finland took initiative, related to Euro-Arctic area
Trans-Siberia	No		Russia		D.Boeing	Russia national plan
TRACECA			Georgia Kazakhstan etc.	EC-DG IA	S.Prout	Commission's initiative

CORRIDOR I RAIL NETWORK

Corridor I

Corridor I Railways

Present Alignment

TINA Rail Network

TEN Rail Network

Other Railways

Cities

Rivers

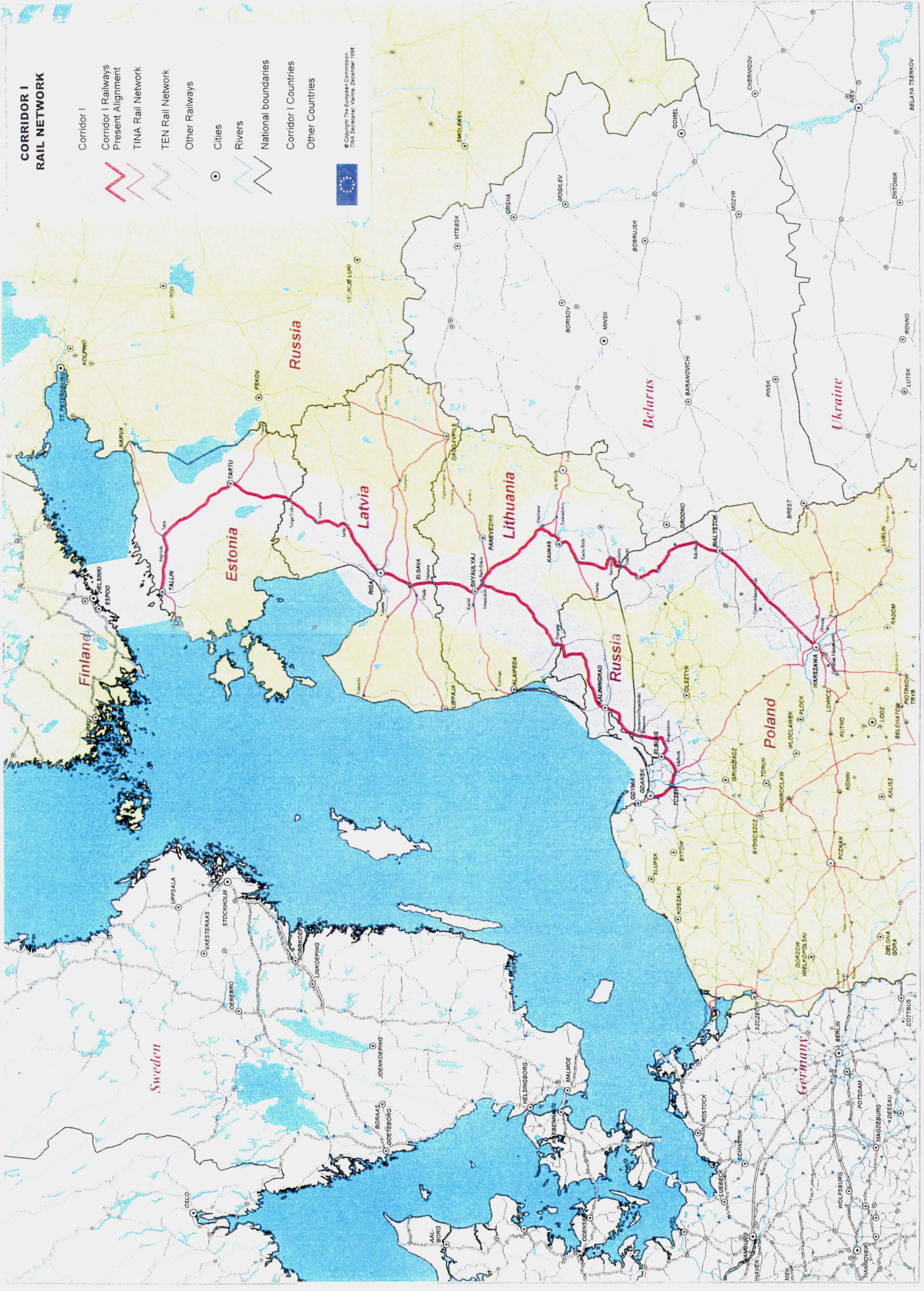
National boundaries

Corridor I Countries

Other Countries



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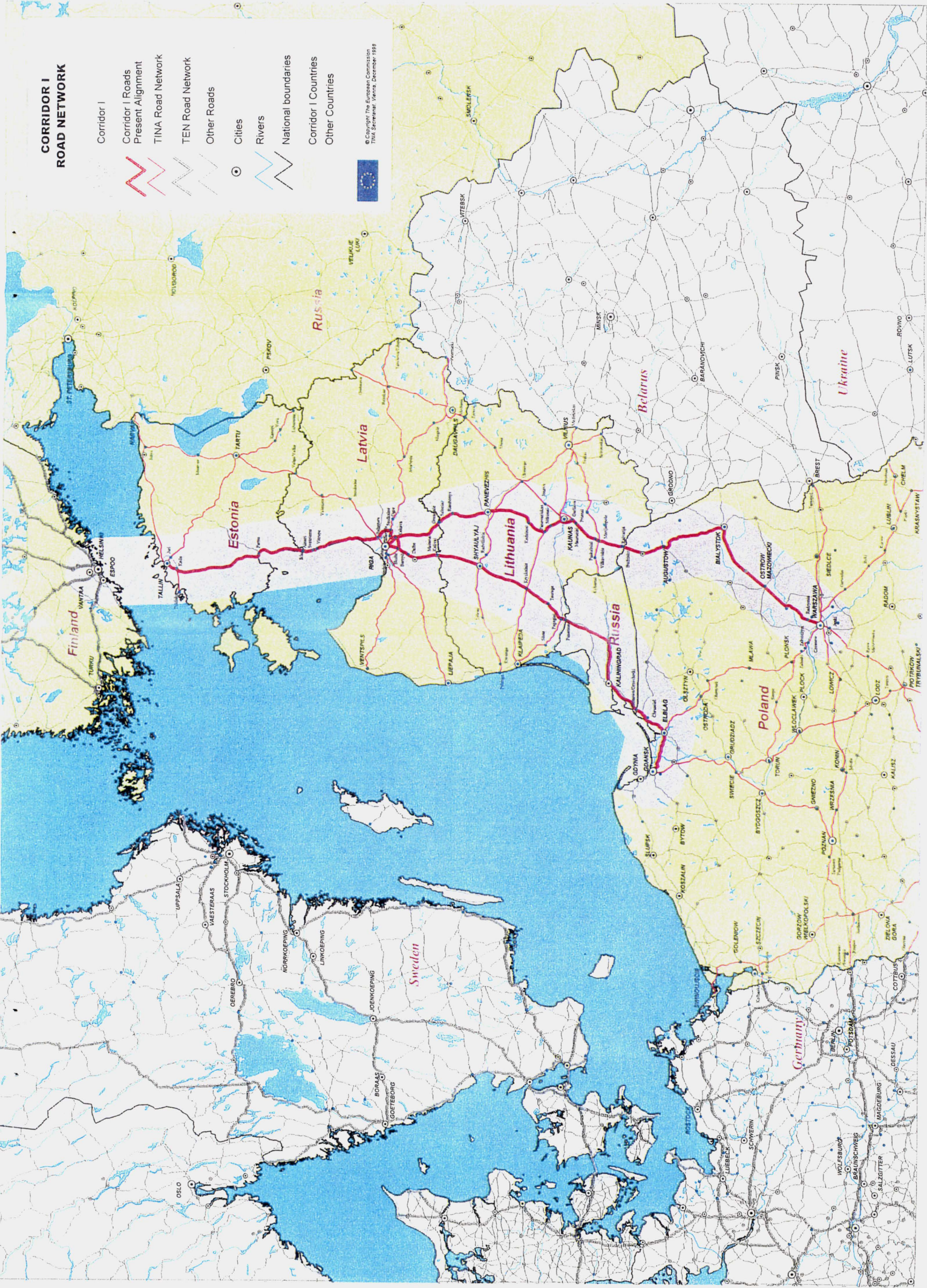


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CORRIDOR II RAIL NETWORK

Corridor II

Corridor II Railways

Present Alignment

TINA Rail Network

TEN Rail Network

Other Railways

Cities

Rivers

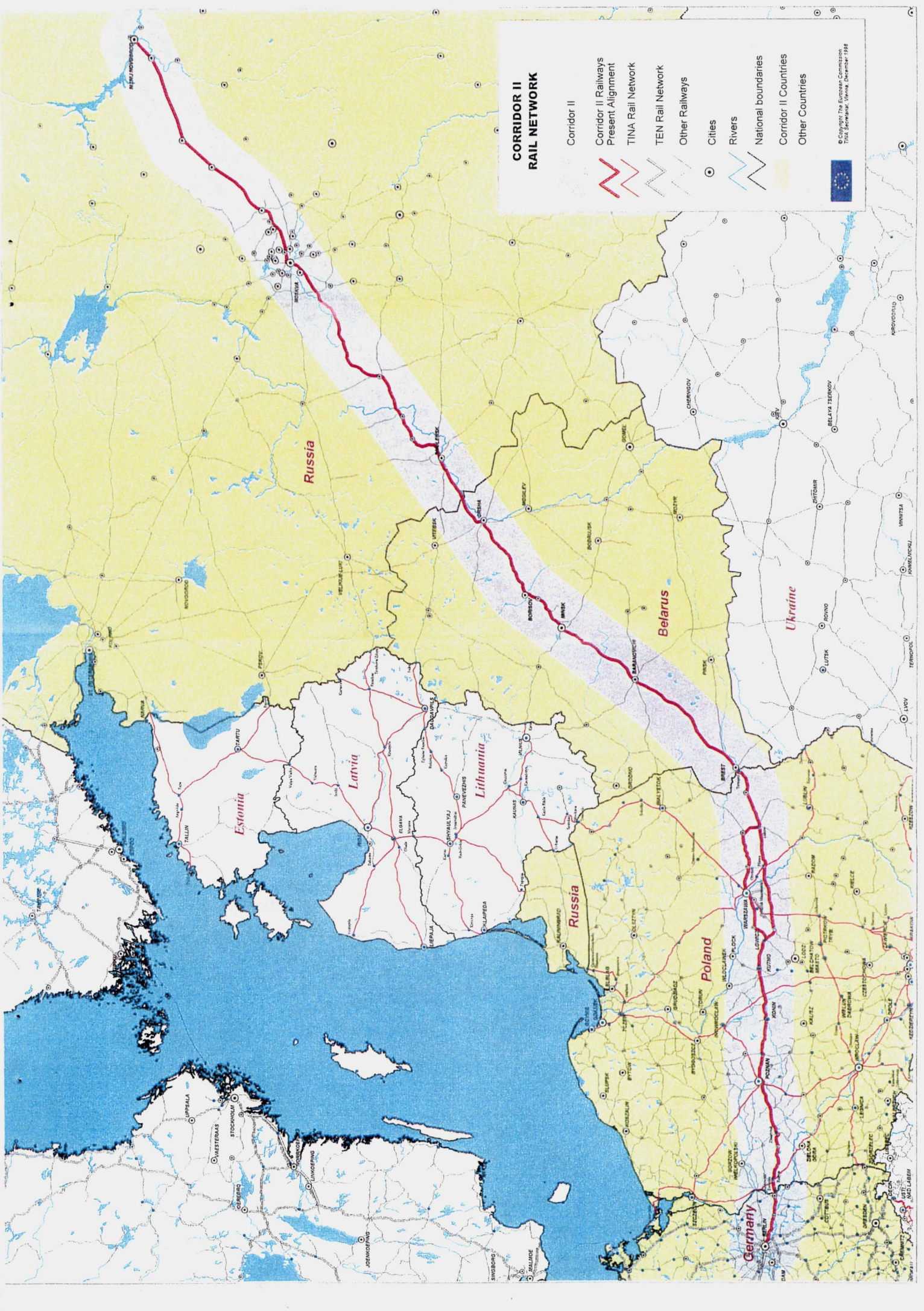
National boundaries

Corridor II Countries

Other Countries



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CORRIDOR II ROAD NETWORK

Corridor II

Corridor II Roads Present Alignment

TINA Road Network

TEN Road Network

Other Roads

Cities

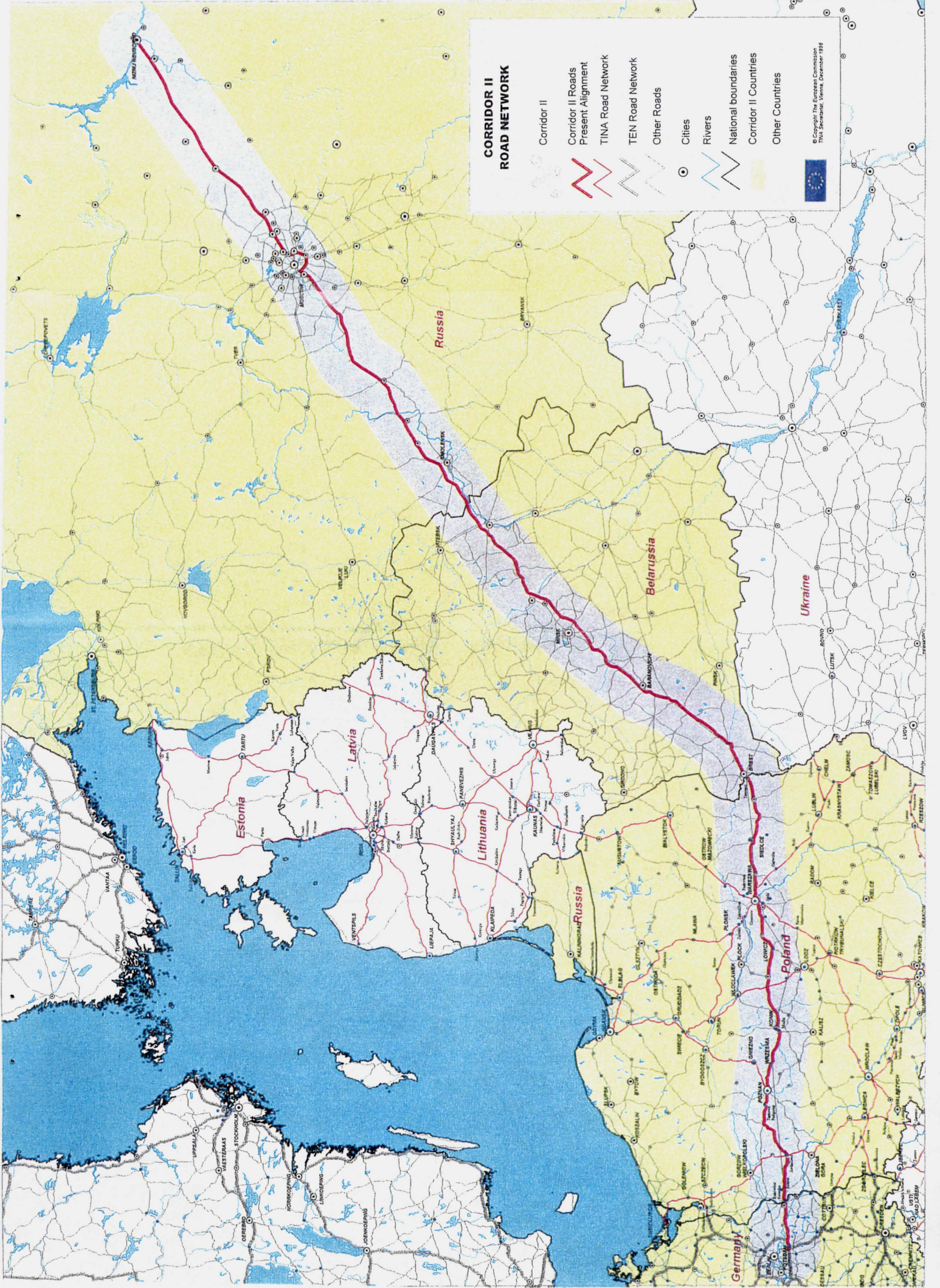
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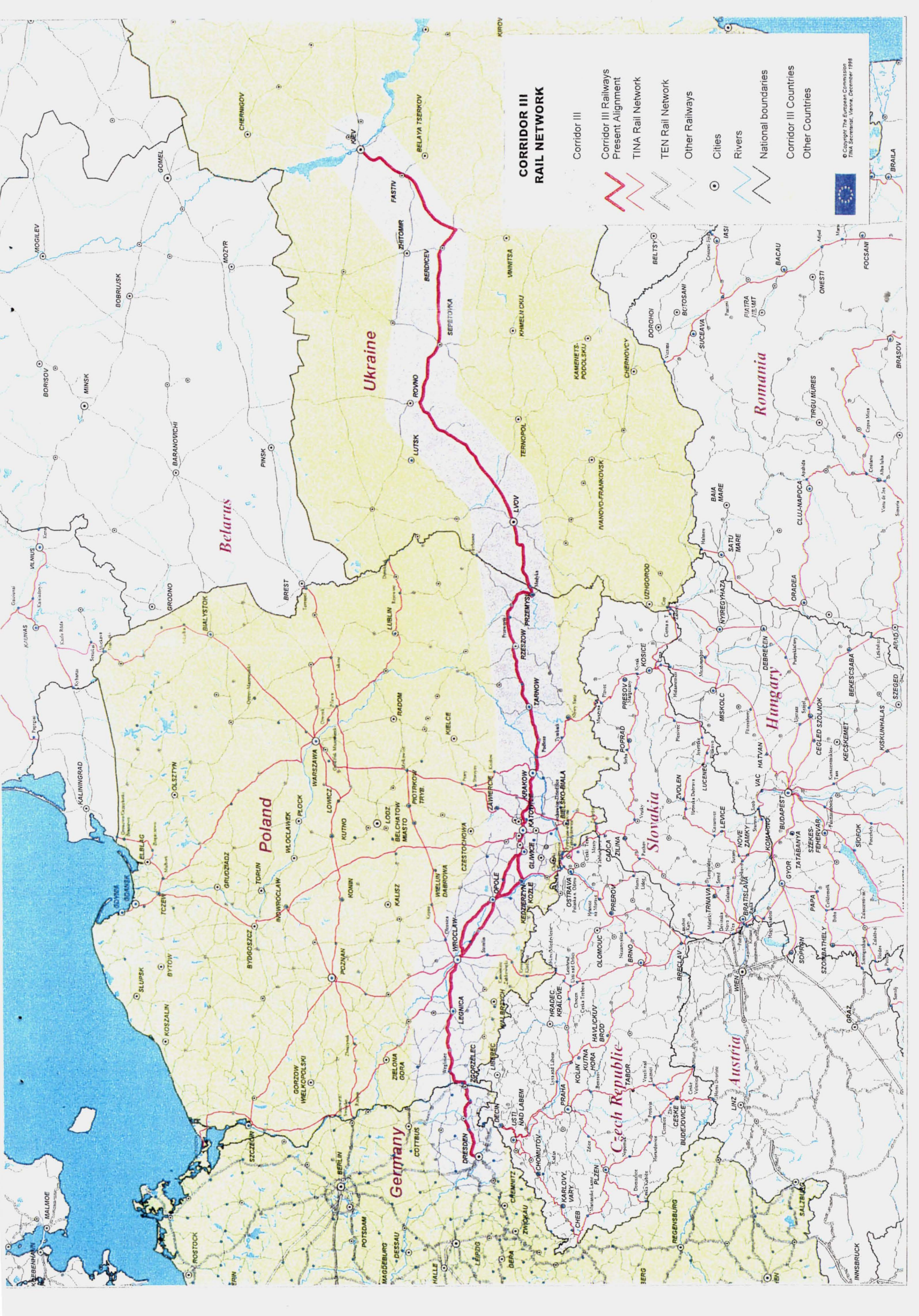
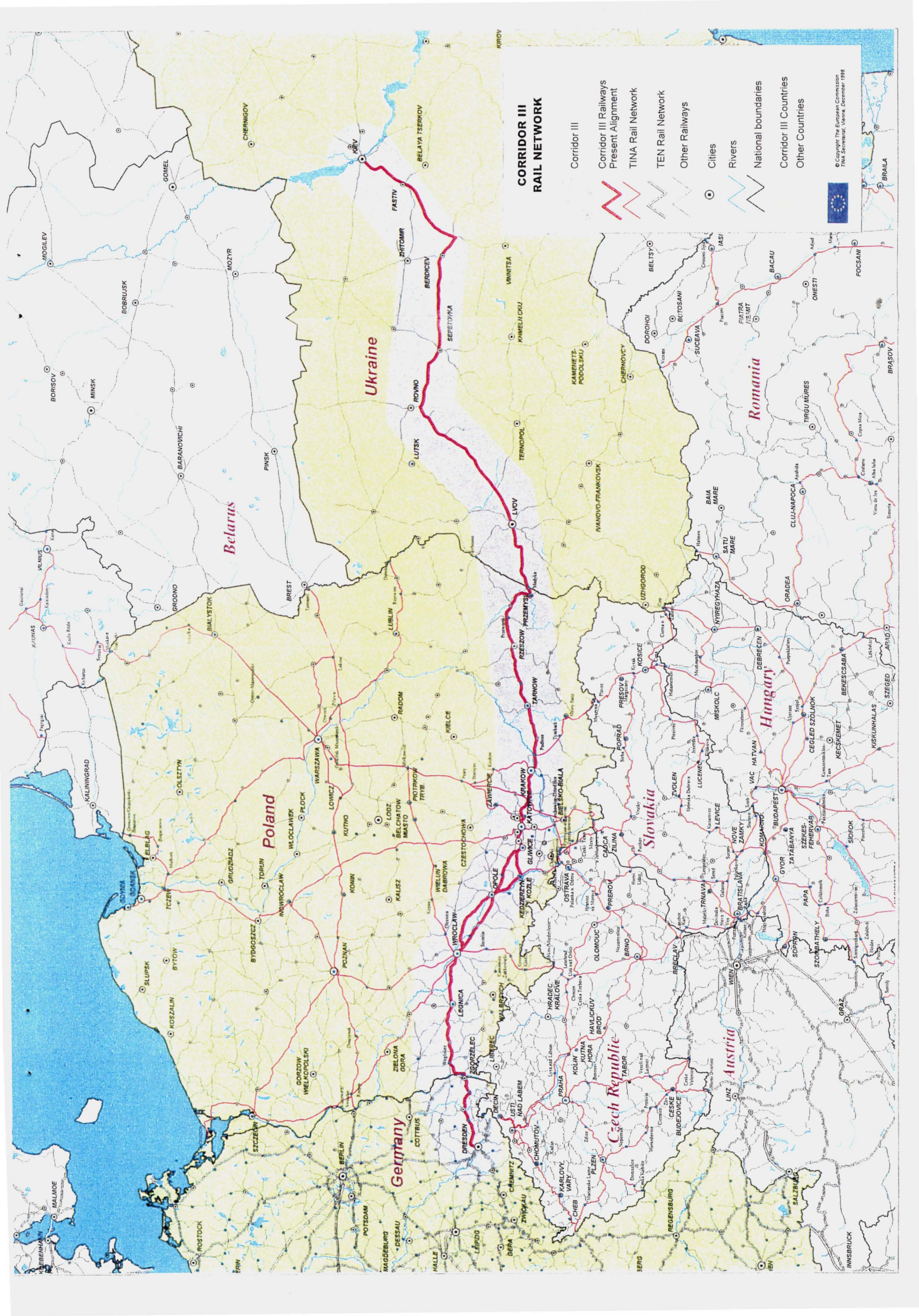
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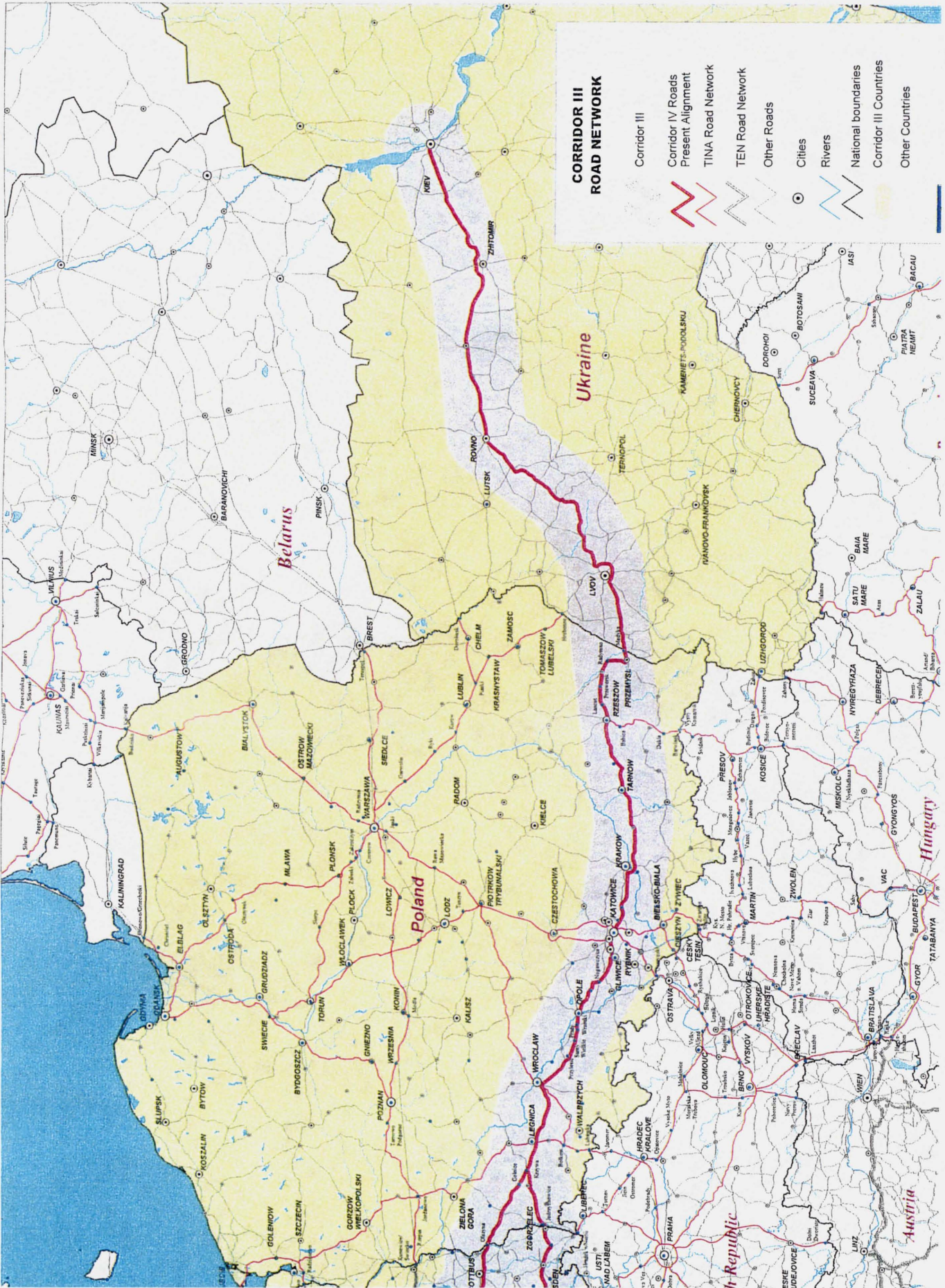
Corridor II Countries

Other Countries

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





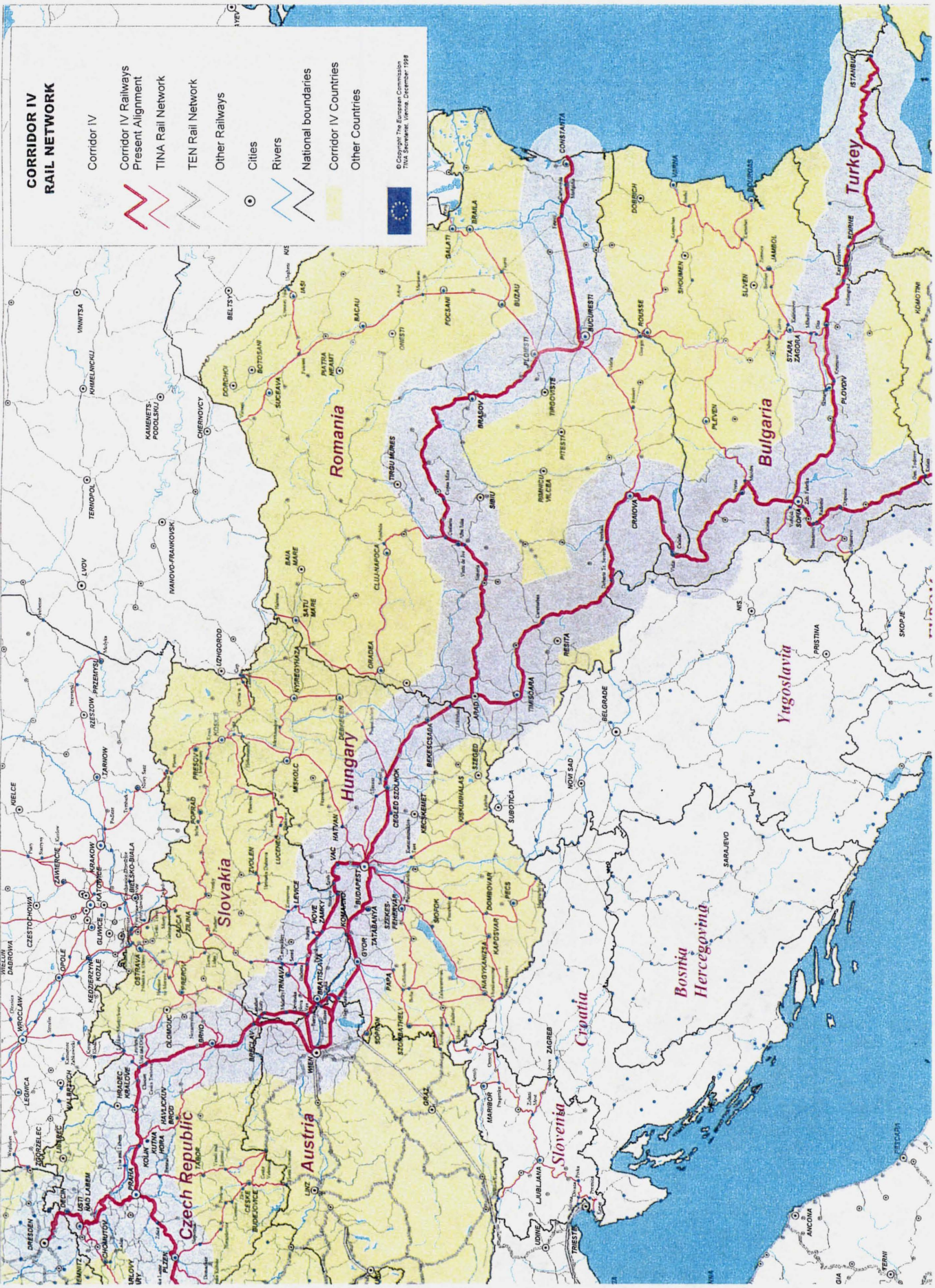


Map showing the Corridor III Road Network across Eastern Europe, including Belarus, Ukraine, Poland, Czech Republic, Slovakia, Hungary, and Austria. Major cities and road networks (TINA, TEN) are highlighted. National boundaries and other countries are also indicated.

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CORRIDOR IV ROAD NETWORK

Corridor IV

Corridor IV Roads
Present Alignment



TINA Road Network



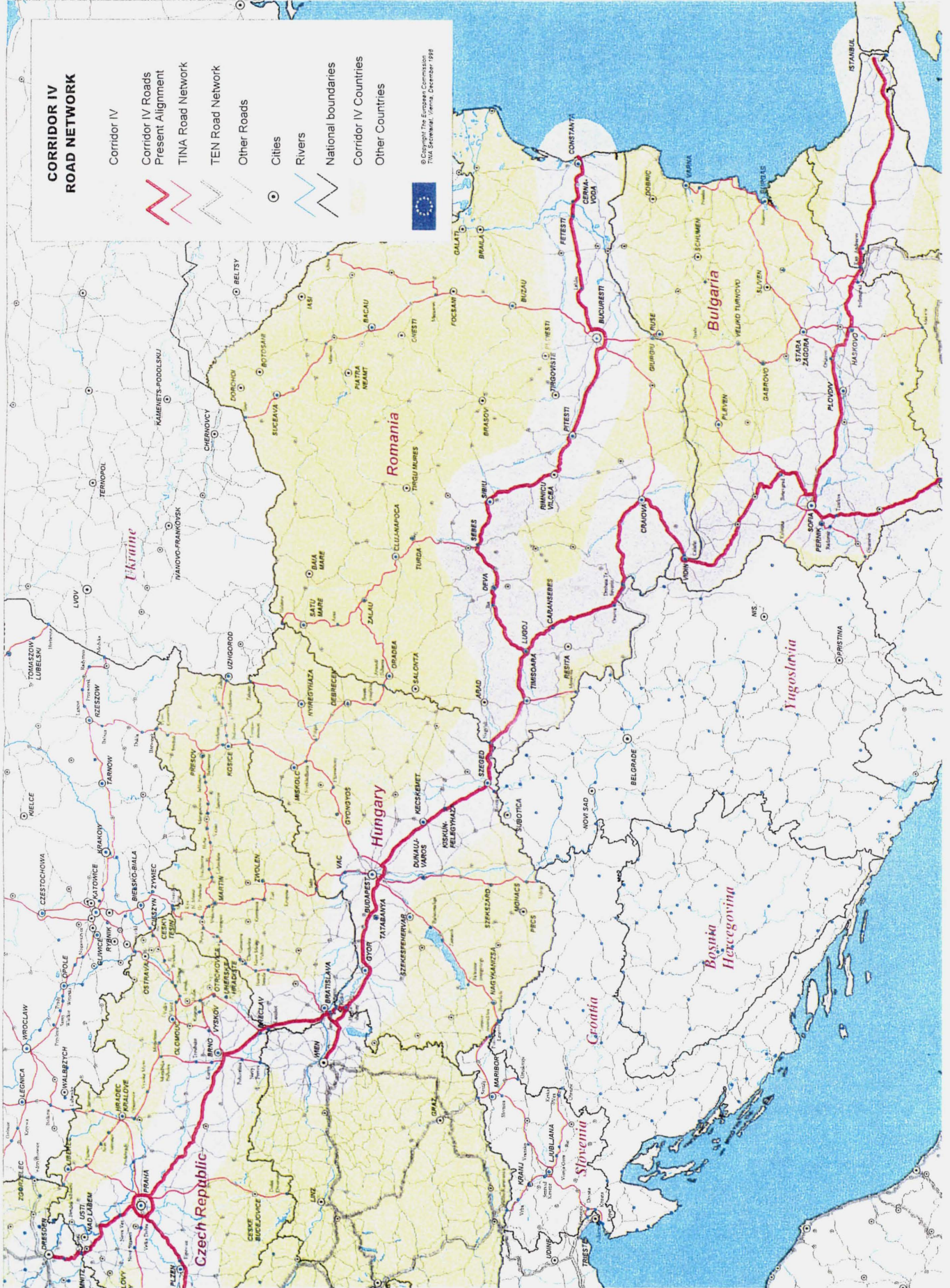
TEN Road Network



Other Roads



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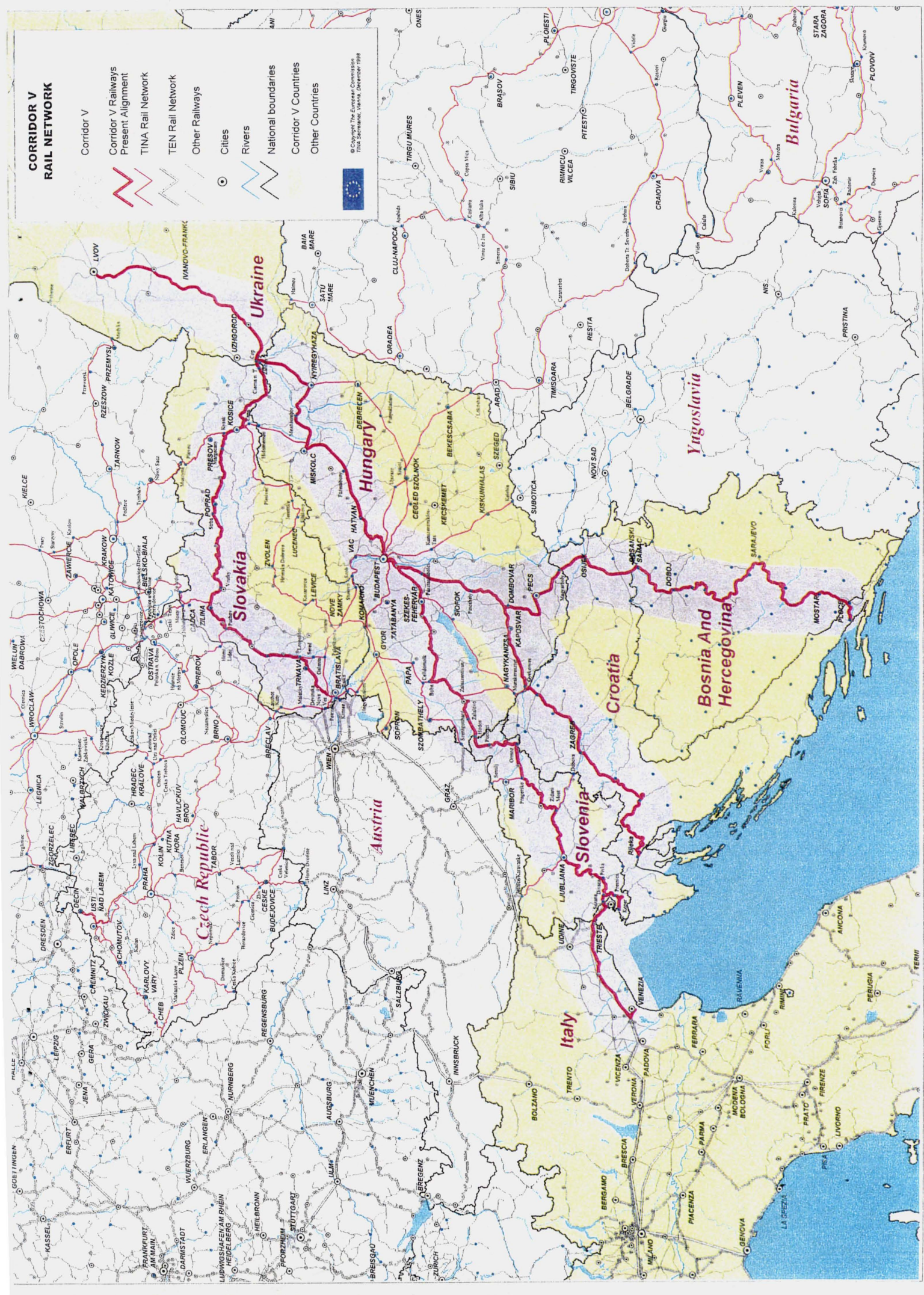


CORRIDOR V RAIL NETWORK











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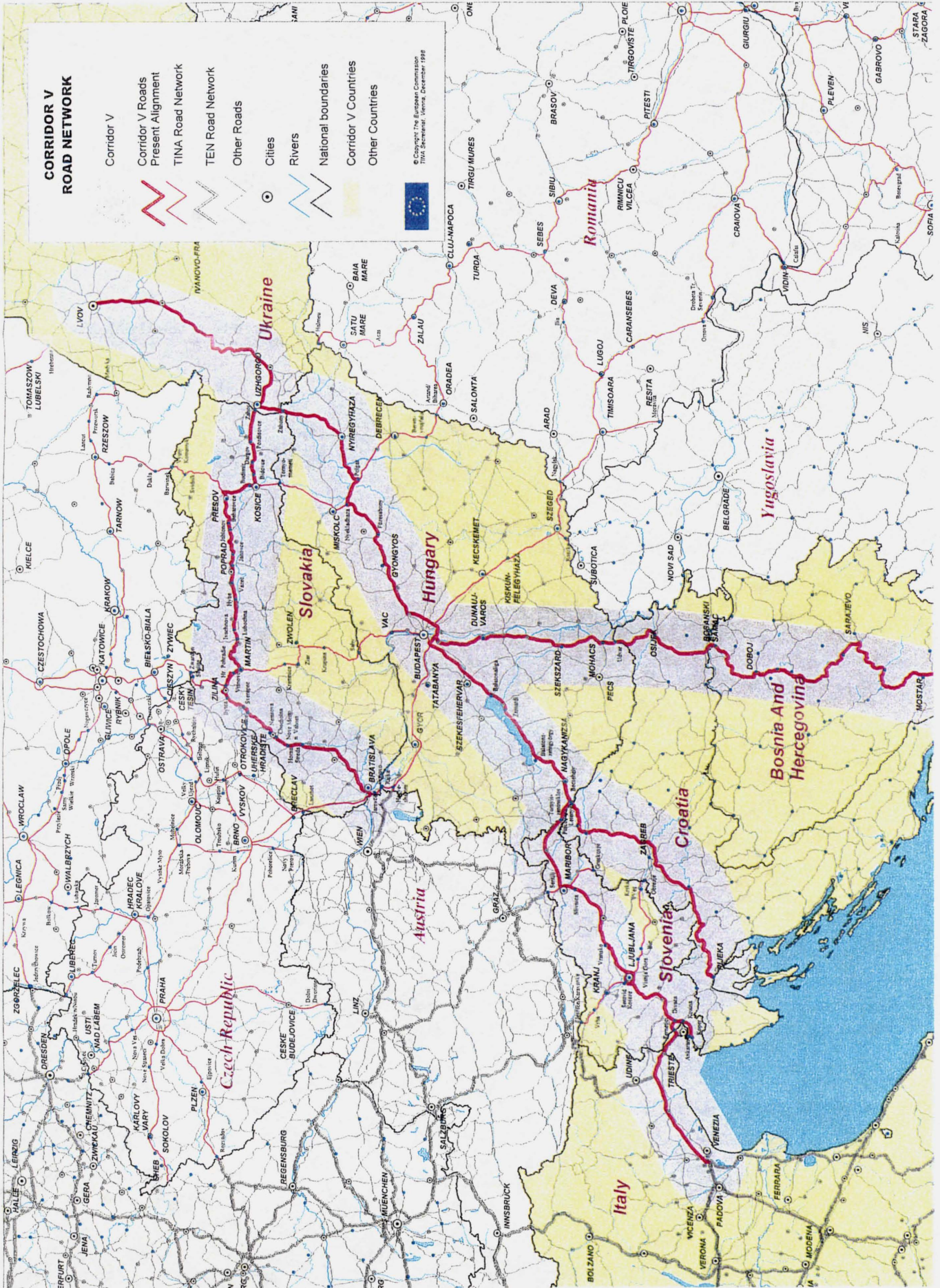
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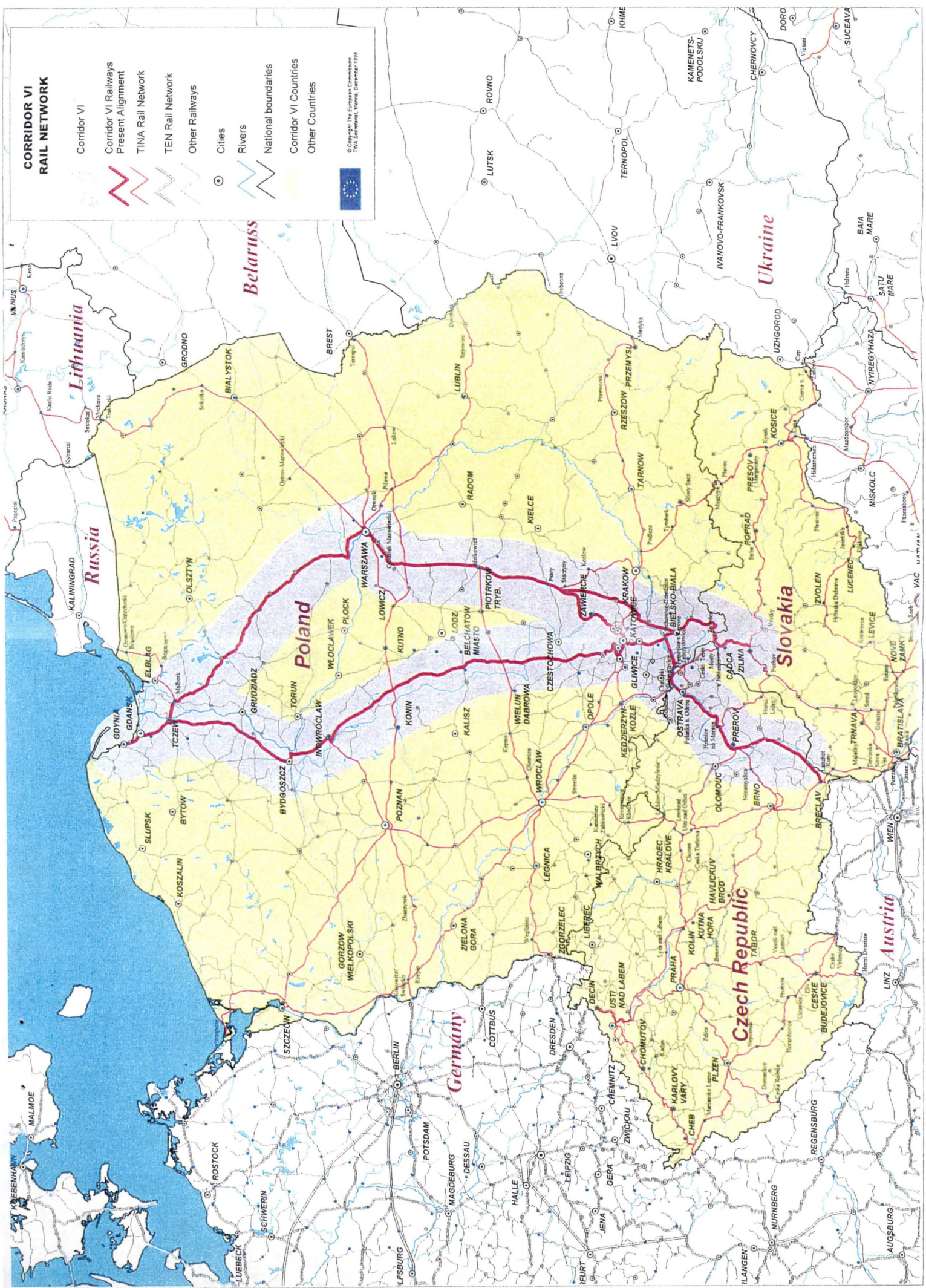


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CORRIDOR VI ROAD NETWORK

Corridor VI

Corridor VI Roads Present Alignment

TINA Road Network

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Cities

Rivers

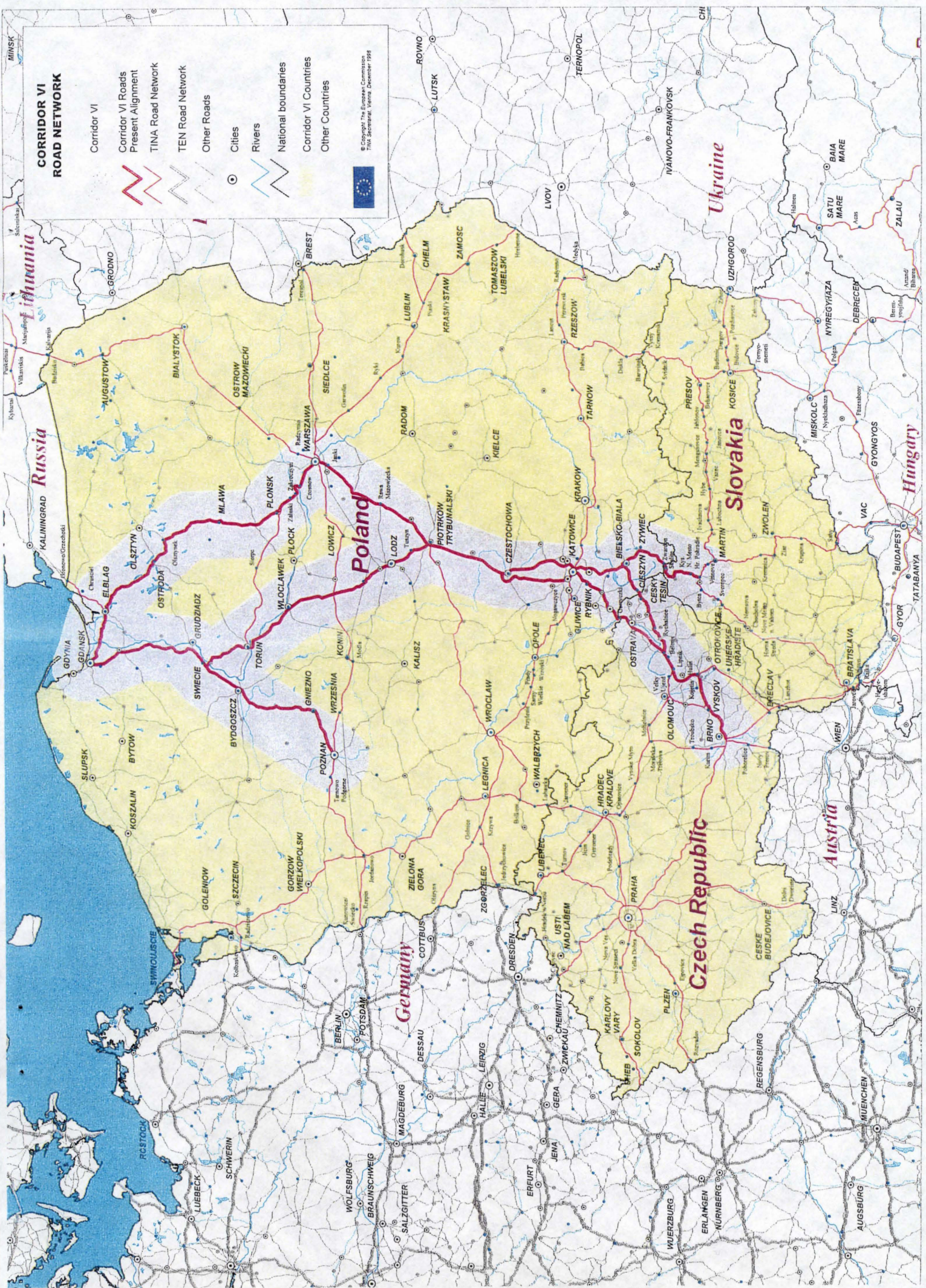
National boundaries

Corridor VI Countries

Other Countries



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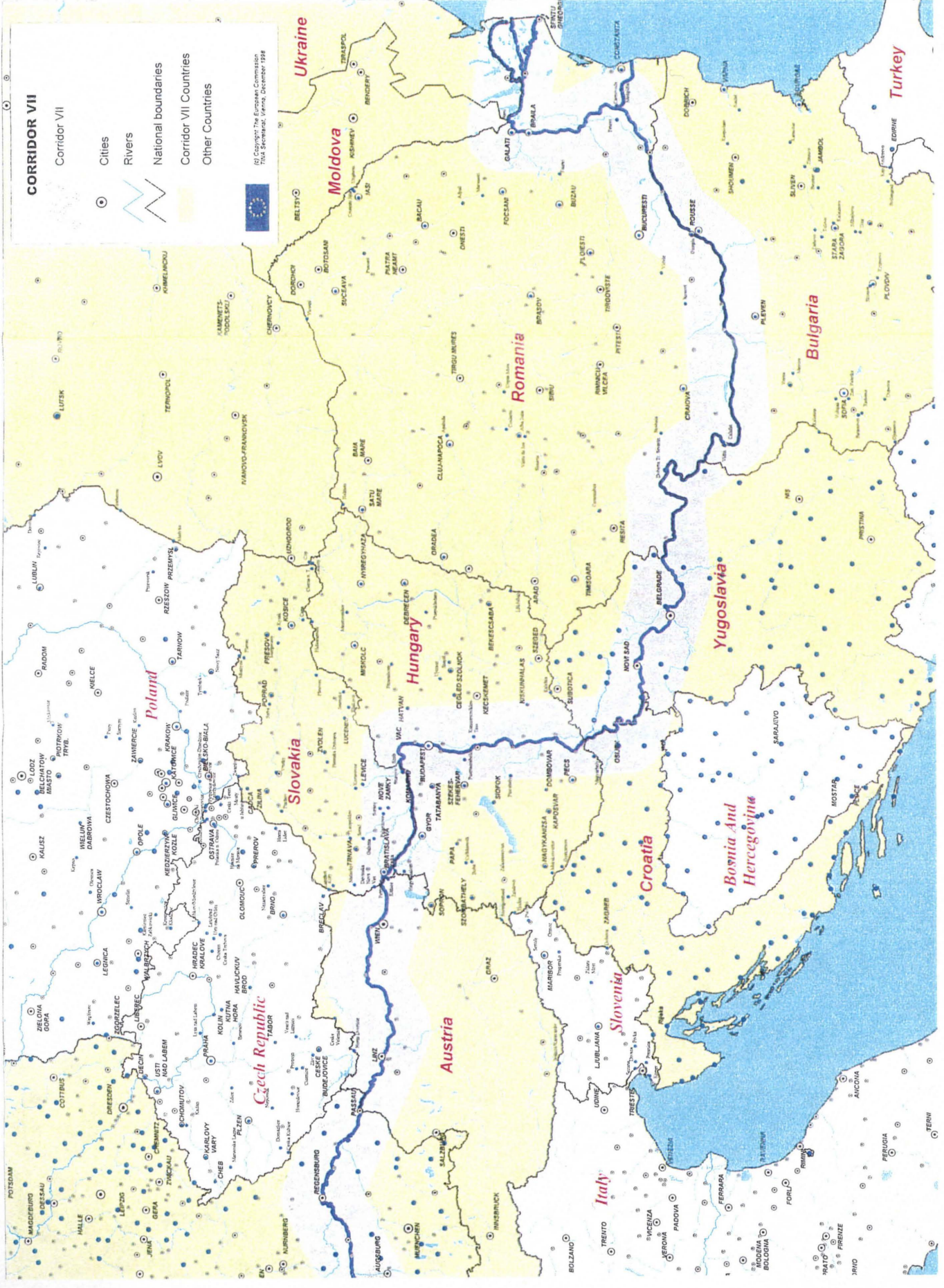


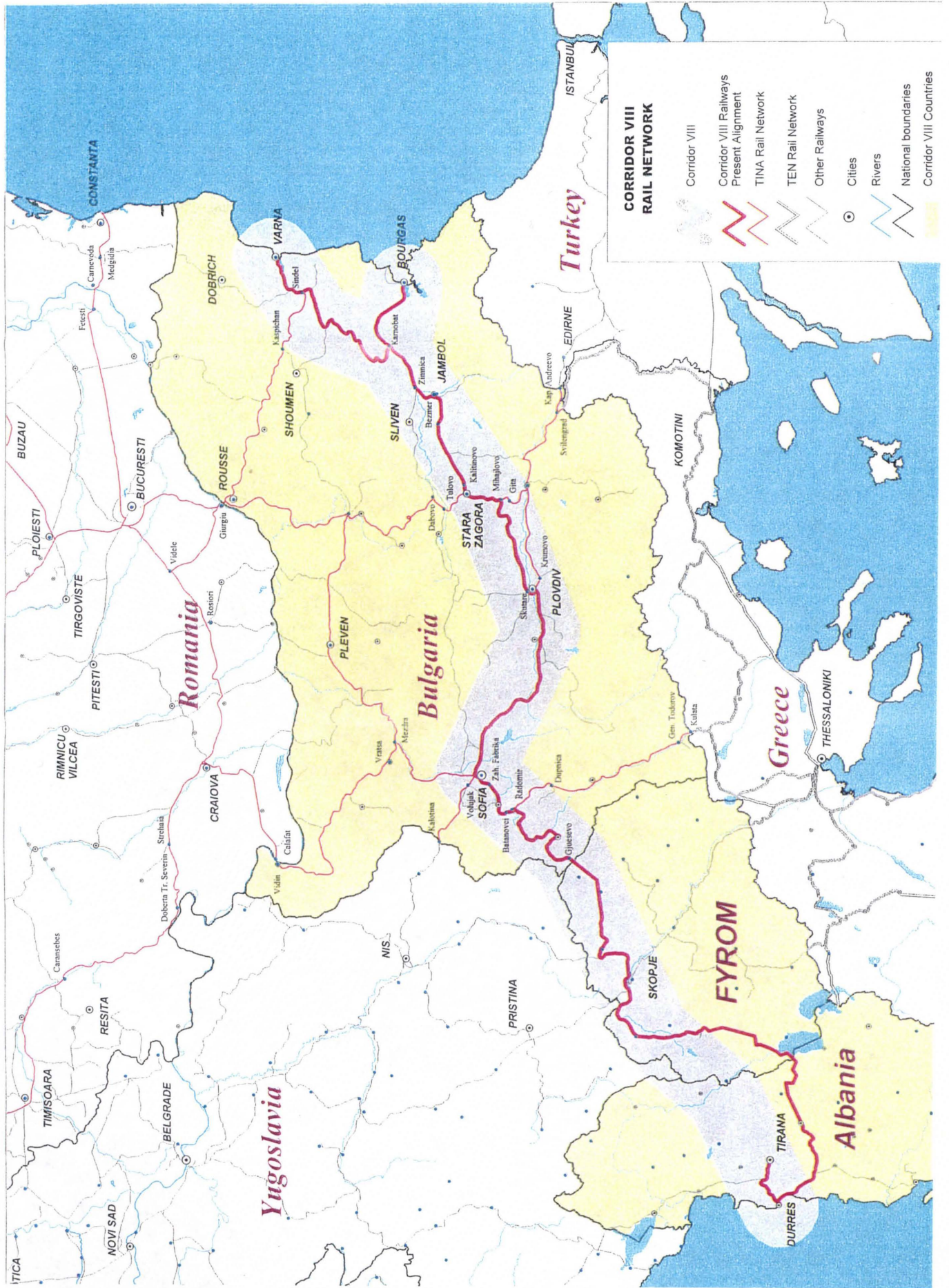
CORRIDOR VII

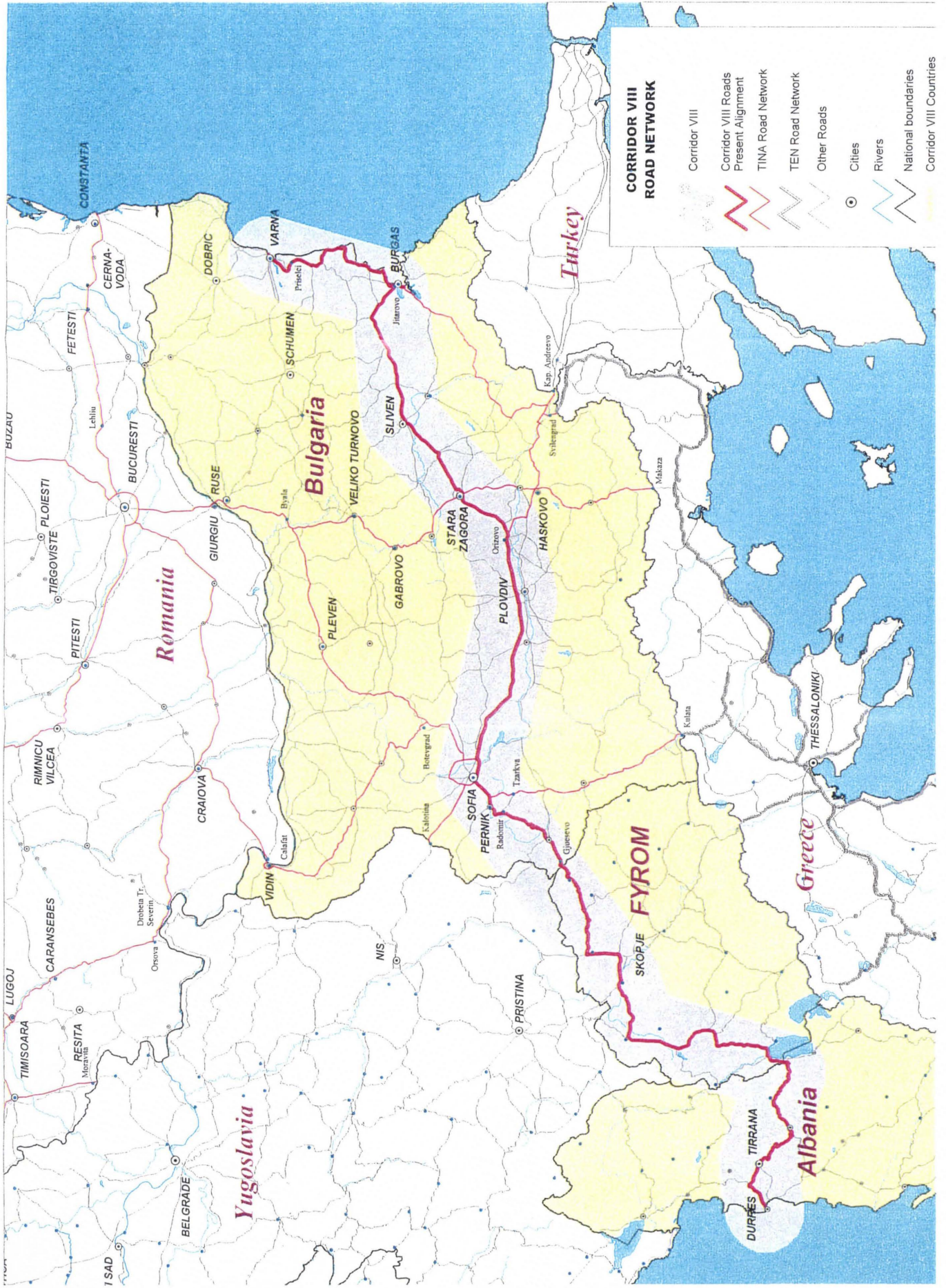
Corridor VII

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- Present Alignment
- TINA Road Network
- TEN Road Network
- Other Roads
- Cities
- Rivers
- National boundaries
- Corridor X Countries
- Other Countries

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