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EVALUATION OF INLAND TRANSPORT INFRASTRUCTURE PROJECTS

Transport Infrastructure Needs Assessment (TINA) Final Report

Transmitted by the European Commission (EC)

The final report of the Transport Infrastructure Needs Assessment (TINA) Project, as transmitted by the European Commission, will be available at the meeting room. Its executive summary and conclusions are reproduced below.

FINAL REPORT

OF THE TINA SENIOR OFFICIALS GROUP

CONCERNING THE

Identification of network components for a future Trans-European

Transport Network in

Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia

AND CONCLUSIONS

October 1999

Editor: the TINA Secretariat, Vienna

Introduction

- 1. The first TINA Progress Report¹, presented in June 1998, set out a first outline TINA network. This Final Report² describes the network in its final form. It sets out, in a volume of more than 100 pages, the necessary features of the components in tabular form, giving details of the different sections. It is illustrated by various maps, showing the present status of the network, possible traffic development, and indications of possible bottlenecks, as well as describing the intended design of the network. In addition to pure considerations of infrastructure, the Final Report addresses briefly issues relating to the legislative-institutional framework applicable on the network, while also underlining the need to encourage the use of Intelligent Transport systems (ITS) on the various elements of the network.
- 2. With EU enlargement, the countries of Central Europe will increasingly adopt a dual role, as both constituent parts of the wider European Union, and an interconnection with the New Independent States in Eastern Europe and the littoral countries of the Mediterranean and the Black Sea. The transport infrastructure networks in this region are therefore vital to competitiveness, economic growth and employment throughout Europe, not least in the Union itself.
- 3. On enlargement, the population of the European Union will increase by about one third, from 375 to 478 million. The GDP of the enlarged Union will however only increase, at present levels, by around 4%, or € 244 billion at current prices. Although average per capita GDP, € 2.300 at present, should, according to conservative estimates, double over the next 15-20 years, it will still remain well below the current EU-15 average of € 17.200.
- 4. Central Europe is now a dynamic region where travel is both a major component of lifestyle and a crucial element for economic growth. The transport sector accounts for between six and nine percent of GDP, constituting a market for services and investment in Western and Central Europe worth € 400-600 billion annually, of which Central Europe's share would be of the order of € 20 billion.
- 5. Increasing trade and economic development will generate continued growth in traffic throughout Europe and with Western and Middle Asia and the Mediterranean basin. This will obviously particularly affect Central Europe's transport network. A recent PHARE Study³ suggests that freight transport will grow considerably between 1996 and 2015, with domestic transport growing by 40-70%, exports by 90-150% and imports by 80-140%. Passenger transport will also grow, with international traffic doubling or even quadrupling.
- 6. As regards modal split, the share of road freight transport will grow from 85% to 89-93% for domestic movements, from 29% to 36-43% for exports and from 18% to 29-37% for imports. In passenger transport, the increase in car travel will for some countries be of the order of 150%.

endorsed by the TINA Senior Officials Group at Vienna, June 1998

² endorsed by theTINA Senior Officials Group at Potsdam June 1999. It is available from the TINA Secretariat, Vienna, Auerspergstr. 15 e-mail: office@tinasecretariat.at mid-October this year
³ "Traffic Forecast on the Ten Pan-European Transport Corridors of Helsinki", NEA-INRETS-IWW, July 1999

- 7. This order of growth in road traffic can lead to capacity problems on main transport routes, as well as a substantial increase in accidents and negatively affect the environment. It will therefore be important that infrastructure development aims at achieving **sustainable mobility**, balancing economic efficiency, safety and minimal environmental damage. In the long run this requires a multimodal network for the whole of Europe, but specifically for the future enlarged Union, developed in line with present and future demand, and enabling European transport services to utilise each mode according to its comparative advantage. The first steps in this complex and long lasting process were made by the European Commission in the framework of the Pan-European Transport Network Partnership initiated at the Third Pan-European Transport Conference at Helsinki, June 1997.
- 8. For the present and future European Union, however, the "acquis communautaire" already contains guidelines for the development of the Trans-European Transport Network. There is therefore a need to identify the components for a future Trans-European Transport Network on the territory of the applicant countries. The TINA Final Report (October 1999) constitutes the output of the TINA process. It sets out the findings of the work, which was carried out under the supervision of a Senior Officials Group and executed by a technical secretariat in Vienna, in close co-operation with the relevant administrations in the applicant countries.

Extending the trans-European Transport Network (The TINA process for the enlarged EU)

9. In July 1996, the European Parliament and Council adopted, on the basis of Article 155 of the Treaty⁴, a Decision on Guidelines for the development of the Trans-European Transport Network⁵ of the European Union. This Decision contains outline plans for the land transport networks and criteria for network nodes such as airports or seaports. An amendment to Decision 1692/96 is currently under examination in the Union's legislative process, regarding the issue of network nodes⁶. The Guidelines constitute a declaration of intent by the Community for the development of a single multimodal transport network to meet the needs of the transport sector using the principles of sustainable mobility. As part of the "acquis communautaire", this Decision is the reference for the development of the Trans-European Transport Network on the territory of the candidate countries. The identification process was launched by the Commission services following the first Structured Dialogue between the Transport Council and the Transport Ministers of the associated countries, in September 1995. It subsequently acquired the title of the TINA process.

⁴ Treaty Articles are referred to on the basis of the new numbering introduced by the Amsterdam Treaty

⁵ Decision (96) 1692/EC,OJ L228 September 1996

⁶ Common position of the Council, June 1999; This amendment is already taken into account in the TINA process

- 10. The Commission established a Group of Senior Officials (The **TINA Senior Officials Group**)⁷ to oversee the TINA process, with representation from all Member States and from the 11 candidate countries involved. Neither Malta nor Turkey has participated so far; depending on their future status in the accession process, they will, as appropriate, need to participate in the Group's future work. At the operational level, the TINA Group worked in three geographically oriented subgroups covering the Baltic Sea, Central Europe and Southern Central Europe, chaired respectively by Germany, Austria and Greece.
- 11. The TINA process is supported technically by the **TINA Secretariat**, in Vienna. This project has been funded principally through the PHARE Multi-Country Transport Programme. The most important deliverable of this PHARE project was the identification and comprehensive presentation of the transport infrastructure network components for extending the EU's Trans-European Transport Network to the new Member States, once they accede.
- 12. The Commission, in chairing the Group, has throughout ensured that this process has remained consistent with the overall pre-accession strategy, notably the Accession Partnerships and the National Programmes for the Adoption of the Acquis.

The TINA Network

- 13. The Group divided its work into **two main stages**. The first concerned the definition of the network, where cost estimates played a major role. The second stage involved project assessment.
- 14. The definition of the **TINA network**⁸ was based on a certain number of assumptions, derived from the concept of sustainable mobility:
 - the network should be in line with the criteria laid down in the EU guidelines for the development of the TENs (Council decision 1692/96/EC)
 - the technical features of the future infrastructure should ensure consistency between the capacity of network components and the expected traffic on them
 - the time horizon for achievement of the network should be 2015
 - the cost of the network should be consistent with realistic forecasts of financial resources, so that average costs should not exceed 1.5% of each country's annual GDP over the period up to 2015.
- 15. The TINA network components were identified using two sources:
 - a backbone network, which is identical with the links and nodes of the ten multi-modal Pan-European transport corridors on the territory of the TINA countries, as endorsed at the Third Pan-European Transport Conference at Helsinki, June 1997. The European Commission (Directorate General for Transport) proposed this as the starting point of the TINA process for a differential network design.
 - additional network components, which were proposed by the three TINA regional subgroups, after assessment of proposals by each TINA country, according to the TENs concept and on the basis of cost estimates.

⁷ Hereafter called "the Group"

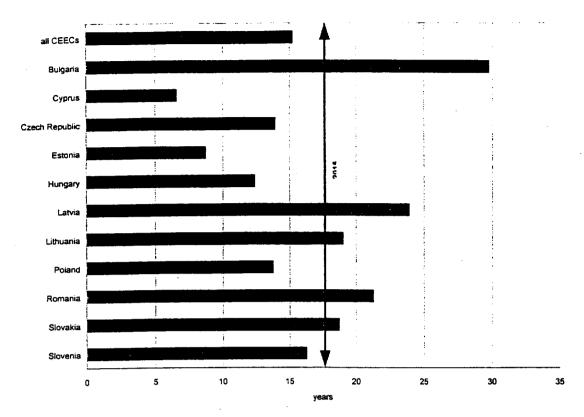
The term "TINA Network" is used throughout the report to address the future TENs in the acceding countries – sometimes also called the TINA countries.

- 16. In identifying transport links and nodes complying with the principles of the TENs Guidelines in Decision 1692/96, it was necessary to assess the possible investment measures required to bring the network components identified up to the necessary technical standard, taking into account the transport infrastructure Agreements of the UN/ECE. Traffic scenarios and forecasts, together with cost estimates, were provided both by the national administrations and through PHARE studies⁹, in order to ensure a solid assessment of both needs and costs. This process led to the identification of a "minimum" network, necessary to meet forecast traffic demand, and to the establishment of a comprehensive list of the possible investment measures, including fairly precise cost estimates, required to establish the network.
- 17. This list will be used to identify economically viable investment projects, which can, in the pre-accession phase, be considered for possible financing by ISPA¹¹ and IFI lending facilities. Financing priorities for will however be established by reference both to the network needs and to the specific needs of the countries involved, the readiness of projects and the requirements of the financing facilities. The Group did not therefore, as it was its initial intention, establish a priority list binding the financing institutions and instruments. It considered the National Investment Plans, to be developed in the framework of ISPA or future regional development plans, as a better forum for priority setting. In the financing procedures, the Commission will however ensure that network needs are met.
- 18. The Group's conclusions on the use of a common method for socio-economic project assessment were forwarded to the funding and financing institutions for endorsement. The principles and details of the common method are described in a separate document¹². The Group also discussed the need for strategic and individual project environmental assessment to be incorporated into socio-economic appraisal methods for networks and projects. It concluded however that present methods do not yet permit this and that further scientifically sound development is needed. While this should primarily be carried out as part of the EU work on revision of the Guidelines, the Group should be ready to contribute to this work in future.
- 19. As regards the financial framework for the development of the network, the Group reached a common understanding that the cost of infrastructure investments should be realistic and affordable. As a matter of common sense, and reflecting historic trends, the Group considered as realistic an upper ceiling for investment proposals of about 1.5% GDP. The chart below shows the necessary investment period for each country, on the assumption that all projects on the future extended trans-European transport network are to be financed within a limit of about 1.5% GDP of each country. It also demonstrates, that, with few exceptions, if the countries invest about 1.5% of their GDP in this transport infrastructure, the entire outline network could become operational over the next 15-20 years .

[&]quot;Traffic Forecast on the Ten Pan-European Transport Corridors of Helsinki", NEA-INRETS-IWW, July 1999; "Updating of Transport Unit Costs in Acceding Cou litries", COWI, October 1999

¹¹ Council Regulation (EC) No 1267/1999 of 21 June 1999, establishing an Instrument for Structural Policies for Preaccession

^{12 &}quot;TINA Appraisal Guidance", University of Leeds; October 1999



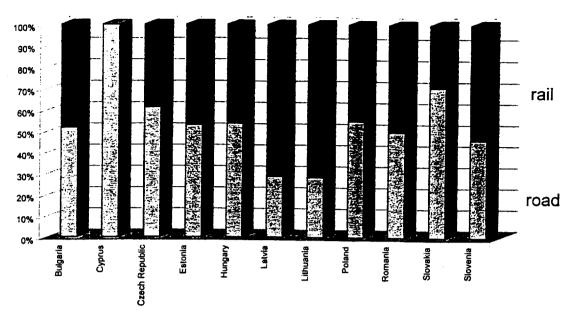
Estimated investment period for TEN extensions. The shown investment period per country has been estimated on the assumption of a network financing within a limit of 1.5% GDP of each country

- 20. The TINA Final Report shows the network in a series of Maps, based on detailed information existing in the TINA database. Special analyses showing traffic forecasts, the development of the network over time and its changing technical features, existing and future capacity imbalances etc., are also included in the Report. In its present form, the TINA network comprises 18,683 km of roads, 20,924 km of railway lines, 4,052 km of inland waterways, 40 airports, 20 seaports and 58 river ports and 86 terminals. The ratio of network length to surface area is generally significantly lower in the acceding countries than inside the EU, while the ratio of network length to population is generally of a similar order.
- 21. The estimated cost of constructing the network is € 91,595 million (€ 37,119 million for the railway network, € 44,304 million for the road network, € 1,493 million for the inland waterways network, € 4,416 million for airports, € 306 million for river ports, € 2,944 million for seaports and € 1,012 million for terminals). The overall prospects for completion of the network in any country can be assessed on the basis of three ratios: construction cost to GDP, construction cost to population, and construction cost to per capita GDP.
- 22. About three-quarters of the cost for the rail and road elements of the network relates to construction of the backbone network (the Helsinki Pan-European Transport Corridors), which should in principle be given a degree of priority. This amounts to around € 60 billion (€ 27 billion for rail and € 33 billion for road). The greatest investment volume is foreseen in Romania or Corridor IV, at around € 7 billion. A detailed breakdown of Corridor investment costs can be found in the complete version of the Report.

- 23. The TINA Final Report identifies sections where the proposed investment measures will lead to the provision of either "less" or "more" infrastructure than necessary (taking into account the recommendations of UN/ECE/WP.5 on the relationship between traffic and infrastructure layout). From this, it appears that some infrastructure bottlenecks will still remain in 2015, for both rail and road in the planned TINA network, while on other sections the "offered" infrastructure in 2015 will exceed likely capacity needs. Although of course comfort, safety and, above all, the attractiveness of different modes will be heavily dependent on better infrastructure, the existence of bottlenecks, alongside sections with excess capacity, suggests that there may be room for further optimisation of the network planning.
- 24. The final report also contains extracts from the TINA database describing the network and its costs. This database, which is maintained by the TINA Secretariat and is still evolving, operates under a Geographical Information System environment. It will in the future form part of a network of databases held and operated at different locations in Europe under the supervision of different international and European institutions, and co-ordinated by the European Commission.

Transport Network development and operations in Central Europe

- 25. While infrastructure development is a necessary, and important, condition for the achievement of efficient transport systems in Europe, sustainable mobility will not be attained in the absence of the necessary regulatory, organisational and institutional framework. The Group considers it essential therefore that, in parallel with the necessary investment in infrastructure, the Union continues to support, through PHARE, institution building in the transport sector in Central Europe. Priorities for this funding are identified in the Accession Partnerships and the National Programmes for the Adoption of the Acquis, and progress towards their achievement is monitored in the Commission's regular reports. In order to assist this process, the Commission services also intend to pursue the development, within the future TINA process, of the organisational and legal aspects of improved and intelligent transport services. The aim is to promote the use of each transport mode according to its comparative advantage.
- 26. Similar considerations apply to the relative importance of road and rail infrastructure development needs in Central Europe. It is apparent that the rail network in the region is generally in better condition than the road network, and that there are fewer capacity constraints. There is however an essential need for modernisation of the rail network and restructuring of the railway companies to meet changing market needs. The chart below illustrates by country the difference in infrastructure investment requirements for road and rail.



Investment ratio rail/road for the CEECs

27. In Agenda 2000 the Commission drew attention to the urgency of the candidate countries moving towards market oriented policies in the rail sector. While this is less a question of funding than of political will, the urgency of action is growing, since there is already a sharp decline in the share of rail in freight and passenger services, albeit from a much higher starting point than the Union. This decline appears to be due principally to the poor service provided by the present railway companies. It is therefore vital that road infrastructure upgrading is accompanied by parallel legal, organisational and institutional measures to make railway companies more competitive with road. Strategic actions, co-ordinated wherever possible among the countries concerned, would help to overcome the present deficiencies.

Conclusions and Recommendations

- 28. The TINA process, as envisaged by the Group in its terms of reference in 1996, has achieved its intended goal the identification of the components of a future Trans-European Transport Network and their estimated costs in eleven candidate countries. Preparations in the acceding countries for an extension of the Trans-European Transport Network are well under way.
- 29. The TINA process provides a reference framework for the transport network in the enlarged EU. As such, it mainly reflects transport needs at trans-national level, and would therefore need to be complemented by national and regional development strategies, developed in each candidate country, for their transport sector investments. While such strategies should be complementary to and consistent with the results of TINA, national strategies may need to go beyond the scope of TINA in order to address regional and local priorities and institution building needs.

endorsed by the TINA Senior Officials Group at Vienna, June 1998

⁴ endorsed by the TINA Senior Officials Group at Potsdam June 1999. It is available from the TINA Secretariat, Vienna, Auerspergstr 15 e-mail: office@tinasecretariat.at mid-October this year

- 30. While the Group has not established a list of priority projects, it recommends that, in principle, priority be given to financing the backbone network (i.e. the Pan-European transport Corridors on the territory of the TINA countries) over other components of the network. It further underlines that each element of the backbone network should be upgraded as soon as possible to the necessary standard for international transport. This is in particular true for those Corridors serving as interconnections between several countries such as Corridors I or IV. Their implications for cohesion also justify priority allocation of Community funds.
- 31. The present mandate for the TINA process will be completed on the delivery by the Group of this Final Report, in October 1999. The Group recommends, however, that a follow up stage should be envisaged, focusing on monitoring the implementation of the network and, during the accession process, adapting it to developments in transport and economic conditions. This would need to be carried out in close co-ordination with the Accession Partnerships and the National Programmes for the Adoption of the Acquis.
- 32. A consistent investment strategy will need to be implemented over the next 15 to 20 years. This will require a smooth transition from support by PHARE, through pre-accession support under ISPA, to the support schemes available for Member States, with careful co-ordination between the different financing institutions. IN this respect, the TINA Senior Officials Group has proved itself to be a useful forum for the development of transport network strategies jointly between the countries concerned, funding and lending institutions, and the Commission. In addition, investment schemes will be dependent on specific project proposals being made, which meet a number of economic, financial and institutional criteria. The establishment and development of common methodologies and organisational approaches will permit the identification and continuous development of project pipelines. The TINA process should support this coordination.
- 33. The successful work in the TINA process so far will, in the future, need to be coordinated with that going on inside the Union on the Trans-European Transport Network. This will require the use of similar, if not identical, methodologies and a common reporting framework, particularly as regards the establishment and maintenance of a database using GIS techniques.
- 34. In the next stage of this process the Group recommends that the following core functions be undertaken primarily by the Commission services, EIB, and other IFIs:
 - a. On the basis of the network outline endorsed in the TINA process, establish, for the transport sector, priorities amongst possible investment measures using the criterion of sustainable mobility and an investment project pipeline for external financing.
 - b. Promotion of institution building, and of organisational and regulatory measures favouring the competitiveness of rail (under the PHARE regime).
 - c. Promotion of PPP schemes for TENs projects in the future enlarged Union.
 - d. Promotion of Intelligent Transport Services for the benefit of the TINA network.

- 35. Further technical assistance will be required to monitor progress, and develop and utilise common methodologies for project analysis and priority setting etc. Appropriate arrangements should be put in place for such technical support during the next 3-4 years. Functions for which the Commission will need to draw extensively on this technical support are:
 - a. Development and adaptation of assessment methods for the future Trans-European transport network, including strategic environmental assessment, for its components, and for possible investment measures and projects

b. Monitoring of the development of the future Trans-European Transport network in the acceding countries and its usage, with the publication of regular information on progress

c. Maintenance of a Geographical Information System (GIS) and an Expert Network in the field of monitoring and GIS for Central Europe as part of the overall GIS being implemented at Directorate General for Transport.

- 36. An examination of the scope for technical assistance for the applicant countries in developing Private Public Partnerships (PPP) will be necessary. This will require very specific expertise, and should cover the possibility of setting up an interlocutor between the public and private sector, enjoying the confidence of both sides.
- 37. The Group recommends the use of a common method for socio-economic project assessment, as endorsed in September 1999 by the Group, the funding and the financing institutions. ¹⁵ It recommends that the candidate countries participate in development work, launched or to be launched by the Commission, concerning strategic and individual project environmental assessment. The group also recommends that environmental aspects should be incorporated into the socio-economic assessment of networks and projects. Future assessment methods should comply with this recommendation.
- 38. The identification of the necessary components for the Trans-European Transport Network, as set out here, should serve as basis for the enlargement negotiations, as regards transport infrastructure, for both the European Community and the candidate countries. Furthermore it would, if updated as appropriate, enable the Commission to make proposals to the European Parliament and Council to amend Decision 1692/96 as required after candidate countries acceded to the Union.
- 39. The experience gained in TINA could furthermore constitute a useful basis for any discussions on and planning of transport infrastructure development in the context of the Stability Pact for south-eastern Europe.
- 40. The TINA Senior Officials' Group has shown itself to be an essential element in co-ordinating the integrated development of infrastructure in Central Europe. It is recommended that it continue its work in order to facilitate the integration of the candidate countries into the EU.

As a Transport Infrastructure Needs Assessment in Central Europe, TINA has met its objectives. It should now be followed by a Transport Infrastructure Network Adaptation in Central and in Eastern Europe

^{15 &}quot;TINA Appraisal Guidance", University of Leeds, October 1999

Annexes

Maps:

TINA Rail Network

TINA Road Network

TINA Network – national maps

"Minimum Network" for rail and road in 2015

TINA Rail Network - Traffic data 1995

TINA Road Network - Traffic data 1995

TINA Rail Network - Traffic forecast 2015

TINA Road Network - Traffic forecast 2015

Tables

Accumulated investments per country (Summary tables)

Summary for Bulgaria

Infrastructure lines	Length	Cost estimation
Raiways	2095 km	€ 2,130.00 million
out of which Backbone	1702 km	€ 1,930.00 million
out of which Additional	393 km	€ 200.00 million
Roads	2025 km	€ 2,263.50 million
out of which Backbone	1658 km	€ 2,165.50 million
out of which Additional	367 km	€ 98.00 million
Inland Waterway	471 km	€ 0.00 m ili on
Infrastructure nodes	Number	Cost estimation
Airports	4	€ 241.40 million
River ports	9	€ 54.90 million
Seaports	2	€ 515.34 m ili on
Terminals	2	· € 73.00 million
TOTAL	€ 5,2	78.14 million

Summary for Cyprus

Infrastructure lines	Length	Cost estimation
Roads	425 km	€ 528.41 million
Infrastructure nodes	Number	Cost estimation
Airports	2	€ 257.10 million
Seaports	2	€ 270.00 million
TOTAL	€ 1,0	55.51 million

Summary for Czech Republic

Infrastructure lines	Length	Cost estimation
Railways	2341 km	€ 3,711.11 million
out of which Backbone	889 km	€ 1,904.43 million
out of which Additional	1452 km	€ 1,806.68 million
Roads	1898 km	€ 5,829.15 million
out of which Backbone	831 km	€ 2,387.08 million
out of which Additional	1067 km	€ 3,442.07 million
Inland Waterway	334 km	€ 398.10 million
Infrastructure nodes	Number	Cost estimation
Airports	3	€ 231.00 million
River ports	11	€ 24.70 million
Terminals	16	€ 8.50 million
TOTAL	€ 10,2	02.56 million

Summary for Estonia

Infrastructure lines	Length	Cost estimation
Railways	657 km	€ 259.29 million
out of which Backbone	430 km	€ 183.21 million
out of which Additional	227 km	€ 76.08 million
Roads	1000 km	€ 289.93 million
out of which Backbone	404 km	€ 114.29 million
out of which Additional	596 km	€ 175.64 million
Infrastructure nodes	Number	Cost estimation
Airports	1	€ 35.70 million
Seaports	6	€ 43.21 million
Terminals	0	€ 0.00 million
TOTAL	€ 6	28.13 million

Summary for Hungary

Infrastructure lines	Length	Cost estimation
Raiways	2727 km	€ 4,030.30 million
out of which Backbone	1619 km	€ 2,914.80 million
out of which Additional	1108 km	€ 1,115.50 million
Roads	1448 km	€ 4,632.00 million
out of which Backbone	1181 km	€ 3,832.00 million
out of which Additional	267 km	€ 800.00 million
Inland Waterway	417 km	€ 400.00 million
Infrastructure nodes	Number	Cost estimation
Airports	1	€ 286.00 million
River ports	6	€ 92.00 m ili on
Terminals	19	€ 726.00 m ≣ on
TOTAL	€ 10,1	66.30 million

Summary for Latvia

Infrastructure lines	Length	Cost estimation
Railways	1343 km	€ 942.10 million
out of which Backbone	700 km	€ 510.10 million
out of which Additional	643 km	€ 432.00 million
Roads	1520 km	€ 376.23 million
out of which Backbone	830 km	€ 277.92 million
out of which Additional	690 km	€ 98.31 million
Infrastructure nodes	Number	Cost estimation
Airports	3	€ 74.00 million
Seaports	3	€ 569.30 million
Terminals	3	€ 28.03 million
TOTAL	€ 1,98	9.66 million

Summary for Lithuania

Infrastructure lines	Length	Cost estimation
Raiways	1100 km	€ 1,316.99 milion
out of which Backbone	937 km	€ 1,268.09 million
out of which Additional	163 km	€ 48.90 million
Roads	1617 km	€ 516.95 million
out of which Backbone	817 km	€ 354.70 million
out of which Additional	800 km	€ 162.25 million
Inland Waterway	278 km	€ 0.00 m illi on
Infrastructure nodes	Number	Cost estimation
Airports	3	€ 92.50 m ili on
River ports	1	€ 0.00 m ili on
Seaports	1	€ 396.00 m ili on
Terminals	2	€ 0.00 m ਛ on
TOTAL	€ 2,32	2.44 million

Summary for Poland

Infrastructure lines	Length	Cost estimation
Raiways	5529 km	€ 14,612.20 milion
out of which Backbone	3651 km	€ 9,718.00 million
out of which Additional	1878 km	€ 4,894.20 million
Roads	4723 km	€ 17,549.95 m ili on
out of which Backbone	3315 km	€ 12,538.95 million
out of which Additional	1408 km	€ 5,011.00 million
Inland Waterway	1213 km	€ 436.50 m il on
Infrastructure nodes	Number	Cost estimation
Airports	8	€ 2,930.75 million
River ports	16	€ 0.35 m ili on
Seaports	4	€ 716.61 million
Terminals	19	€ 176.85 milion
TOTAL	€ 36,4	23.21 million

Summary for Romania

Infrastructure lines	Length	Cost estimation
Railways	3163 km	€ 5,191.70 million
out of which Backbone	1977 km	€ 3,651.00 million
out of which Additional	1186 km	€ 1,540.70 million
Roads	2524 km	€ 5,139.30 million
out of which Backbone	1597 km	€ 4,819.30 million
out of which Additional	927 km	€ 320.00 million
Inland Waterway	1167 km	€ 257.90 m ili on
Infrastructure nodes	Number	Cost estimation
Airports	9	€ 114.40 m ≣ on
River ports	13	€ 134.50 m ili on
Seaports	1	€ 373.20 m ili on
Terminals	16	€ 0.00 m ili on
TOTAL	€ 11,2	11.00 million

Summary for Slovakia

Infrastructure lines	Length	Cost estimation
Raiways	1400 km	€ 1,914.50 miion
out of which Backbone	848 km	€ 1,727.70 million
out of which Additional	552 km	€ 186.80 million
Roads	949 km	€ 4,602.74 million
out of which Backbone	693 km	€ 3,678.13 million
out of which Additional	256 km	€ 924.61 million
Inland Waterway	172 km	€ 0.00 m # on
Infrastructure nodes	Number	Cost estimation
Airports	3	€ 26.15 m illi on
River ports	2	€ 0.00 m ਛ on
Terminals	5	€ 0.00 million
TOTAL	€ 6,54	3.39 million

Summary for Slovenia

Infrastructure lines	Length	Cost estimation
Railways	569 km	€ 3,011.09 million
out of which Backbone	569 km	€ 3,011.09 million
out of which Additional	0 km	€ 0.00 million
Roads	565 km	€ 2,576.00 million
out of which Backbone	565 km	€ 2,576.00 million
out of which Additional	0 km	€ 0.00 million
Infrastructure nodes	Number	Cost estimation
Airports	3	€ 127.30 million
Seaports	1	€ 60.00 million
Terminals	4	€ 0.00 million
TOTAL	€ 5,7	74.39 million