NETWORKS FOR PEACE AND DEVELOPMENT

Extension of the major trans-European transport axes to the neighbouring countries and regions

Report from the High Level Group chaired by Loyola de Palacio

November 2005

European Commission

Extension of the major trans-European transport axes to the neighbouring countries and regions

Pictures of the cover of the HLG report courtesy of: British Rail, Egnatia Odos A.E, ESA and Port Autonome de Marseilles.

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Executive summary

A well functioning transport system connecting the European Union (EU) and the neighbouring countries is essential for sustainable economic growth and the wellbeing of all citizens in this part of the world. Better integration of national networks will foster regional cooperation and integration not only between the EU and its neighbours but also between the neighbouring countries themselves. Also, good transport connections in the EU as well as in the neighbouring countries are important for trade with Asia, sub-Saharan Africa or America. In short improving transport connections would be for the mutual benefit of both the European Union and its neighbouring partner countries.

With this development in mind, in April 2004 the EU adopted an ambitious plan[1] that focused investments on a limited number of major trans-European transport axes. In particular, the plan aimed at integrating the networks of the new EU Member states, thereby contributing to a stronger Single Market.

Following the ministerial seminar that took place in Santiago de Compostela, Spain in June 2004, the European Commission decided to establish a High Level Group (the Group) on the *"extension of the major trans-European transport axes to the neighbouring countries and regions"*. This was to extend the concept of European Neighbourhood Policy into the transport field and to find ways to better connect the European Union with the neighbouring countries and regions. Former Commission Vice President **Ms Loyola de Palacio** was appointed Chair of the Group, which comprised 26 neighbouring countries, the 25 EU States plus Bulgaria and Romania, the European Investment Bank, the European Bank for Reconstruction and Development and the World Bank (the Banks). The Group met on 10 occasions between October 2004 and November 2005.

Major transnational axes and projects

The Group identified the following **five major transnational axes** (see map below).

- Motorways of the Seas: linking the Baltic, Barents, Atlantic, Mediterranean, Black and the Caspian Sea areas as well as the littoral countries within the sea areas and with an extension through the Suez Canal towards the Red Sea.

- Northern axis: to connect the northern EU with Norway to the North and with Belarus and Russia and beyond to the East. A connection to the Barents region linking Norway through Sweden and Finland with Russia is also foreseen.

- Central axis: to link the centre of the EU to Ukraine and the Black Sea and through an inland waterway connection to the Caspian Sea. Connections towards Central Asia and the Caucasus are also foreseen, as well as a direct connection to the Trans-Siberian railway and a link from the Don/Volga inland waterway to the Baltic Sea.

- South Eastern axis: to link the EU through the Balkans and Turkey to the Caucasus and the Caspian Sea as well as to Egypt and the Red Sea. Access links to the Balkan countries as well as connections towards Russia, Iran and Iraq and the Persian Gulf are also foreseen.

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1 Decision 884/2004/EC on the Guidelines for trans-European transport networks

- South Western axis: to connect the south-western EU with Switzerland and Morocco and beyond, including the trans-Maghrebin link connecting Morocco, Algeria and Tunisia. An extension of the trans-Maghrebin link to Egypt as well as a connection from Egypt to the South towards other African countries are also foreseen.

These axes extend and complement the major axes of the trans-European transport network by interconnecting them with the networks of the neighbouring countries. They are also those which contribute most to promoting international exchanges and traffic as well as enabling regional cooperation and integration. The Group also emphasised that open and secure borders between the EU and the neighbouring countries and between the neighbouring countries themselves are a prerequisite for trade and cooperation.

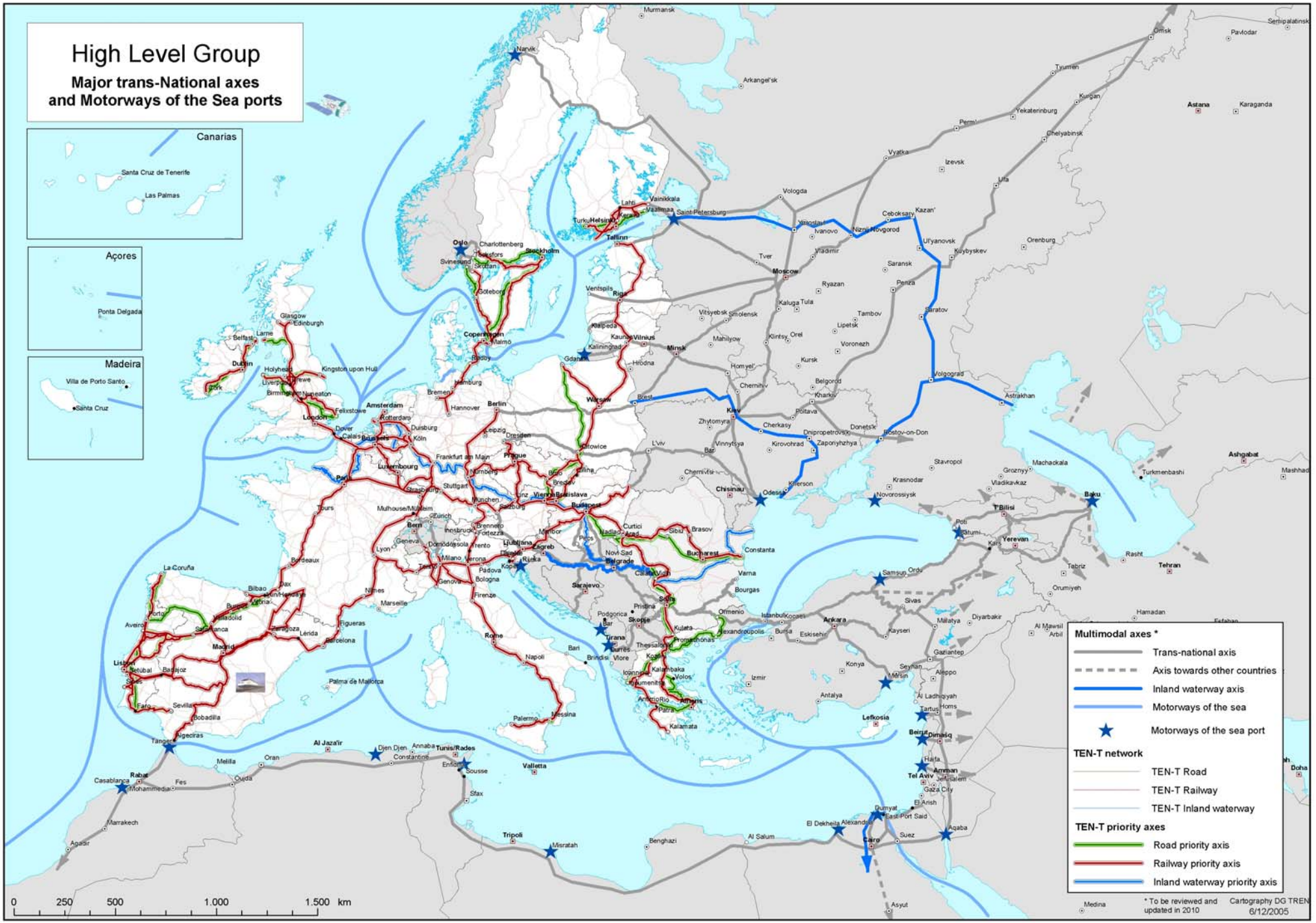
The Group put forward a number of projects (listed in annex 9.4) that were classified into two categories depending on their maturity: projects ready to start before 2010 and projects of longer term interest (beyond 2020). The total cost of these projects is estimated at **€ 45 billion**, of which € 35 billion between toady and 2020.

The Group stressed the need for **further studies and analyses**, particularly concerning the economic viability, technical specification, environmental impact and financing mechanisms, before the projects could be considered for implementation.

Financing and public-private partnerships

The Group emphasised the importance of **adequate budget allocations** for the transport sector and acknowledged that private capital can in some cases usefully complement public financing through public-private partnerships (PPPs). It underlined the primary role of **transparent and clear public procurement legislation** in attracting private sector financing and urged its members to prepare appropriate legislation in the light of international best practice.

The Group proposed that international organisations such as the Banks and the European Commission would organise a series of **regional workshops** to exchange best practice and to discuss project financing, fiscal space, user charging and the role that PPPs could have in accelerating the implementation of the proposed measures. These could follow the format of the seminar, jointly organised by the European Commission and Russia, that took place in Moscow on 28 October 2005 to discuss transport financing and PPPs, international experience and legislative issues.


High Level Group
Major trans-National axes and Motorways of the Sea ports
Canarias
Santa Cruz de Tenerife
Las Palmas
Açores
Ponta Delgada
Madeira
Villa de Porto Santo
Santa Cruz
Multimodal axes *
Trans-national axis
Axis towards other countries
Inland waterway axis
Motorways of the sea
Motorways of the sea port
TEN-T network
TEN-T Road
TEN-T Railway
TEN-T Inland waterway
TEN-T priority axes
Road priority axis
Railway priority axis
Inland waterway priority axis
0 250 500 1.000 1.500 km
* To be reviewed and updated in 2010
Cartography DG TREN 6/12/2005

Horizontal measures

With a view to the removal of non-physical barriers and to facilitate communication between authorities in different countries, the Group recommended the following measures to speed up **border control procedures**:

- International Conventions should be implemented in full with the aim of harmonising the form and content of the relevant trade and transport documents. These documents should be mutually recognised in the language of the country concerned and in English, or in a mutually agreed language.

– Customs modernisation should be pursued, using as a reference, the rules and recommendations of the international conventions and standards. These concern e.g. corresponding opening hours and shared facilities of frontier posts, medico-sanitary and veterinary inspections as well as use of automated systems and risk management techniques.

– To reduce unnecessary delays in ports, simplified custom procedures and electronic data transfer through one-stop administrative procedure should be implemented. Also the five IMO FAL documents[2] already in use in the EU should be adopted by the neighbouring countries with the aim of replacing all existing documents by 2008 at the latest.

Regarding **satellite radio navigation systems**, the Group welcomed the on-going bilateral and regional cooperation activities and invited the European Commission and the relevant members of the Group to launch such negotiations as soon as possible.

The Group proposed to introduce, apply and control **security measures** resulting from international agreements and standards as well as to carry out security audits in common with the neighbouring countries, when relevant.

For **maritime transport and the Motorways of the Seas** the Group made the following recommendations:

- The international rules and conventions (IMO) should be ratified and implemented in full and without delay, including e.g. the MARPOL convention[3] related to single hull tankers and the convention on antifouling systems (AFS).

- The practices and procedures of the Paris, Mediterranean and Black Sea Memoranda of Understanding (MoU) should be harmonised at the highest level of performance. The Group welcomed the intention of the European Commission to approach the three MoUs in view of launching a dialogue for further cooperation.

– For the 3 MoUs to mutually recognise ships blacklisted by the other MoUs.

- To implement the concept of Motorways of the Seas, cargo flows should be concentrated to create sufficient critical mass, the quality of port infrastructure and

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2 Convention on Facilitation of International Maritime Traffic of the International Maritime Organisation (IMO)

3 International Convention for the Prevention of Pollution from Ships, 1973

services should be improved and the frequency of shipping services operating on the Motorways of the Sea should be at least once a week.

As regards **rail transport and interoperability**, there is urgency to act in this area and the on-going efforts of the two legal systems (COTIF[4] and OSJD[5]) to develop a unified consignment note are welcomed. Measures to render the transport laws more coherent and convergent should be undertaken as soon as possible. The Group also recommends gradual implementation of traffic management systems, ensuring interoperability with ERTMS[6], as well as of standardised telematic applications for freight services along the major axes, when relevant.

For **inland waterways**, the Group stressed the importance of granting mutual open access for international traffic. In parallel, implementation of traffic information systems should be pursued and their compatibility ensured, including with the river information services (RIS) of the EU. Harmonisation of rules and safety standards should be pursued.

The Group stressed the need to take measures to improve **road safety** addressing driver behaviour, vehicle safety, road infrastructure (safety audits) and traffic management systems. Priority should be given to the major axes identified by the Group. The Group recognised the usefulness of the annual Verona road safety conference, launched under the Italian EU presidency in 2003.

For **air transport**, the Group considered it desirable to gradually extend the principles of the Single European Sky initiative to the neighbouring regions along with the further enlargement of the EU or on a voluntary basis.

Implementation and coordination

The Group called for **a review and update of the major axes/projects and the horizontal measures in 2010** and regularly thereafter. To prepare this update, **a mid-term review is proposed to be carried out in 2008** based on information provided by the countries concerned on the evolution of traffic, progress of implementation of the proposed measures and on bottlenecks, including environmental difficulties that may emerge.

To ensure effective and timely implementation of the proposed measures along the axes, the Group highlighted the need for **strong and effective coordination frameworks**. These frameworks should be put in place gradually, starting from a **Memorandum of Understanding** (MoU) between the European Commission and the countries concerned for axes/regions where no such cooperation mechanism exists today. For axes/regions that currently operate through MoUs, a binding **Treaty** was considered to be the best option.

Finally, the Group recommended that the European Commission, the EU Member states as well as the Banks **focus their cooperation and financing** actions on the priority axes and on the horizontal measures put forward by the Group. The Group's recommendations should also be adequately reflected in the **cooperation agreements and action plans** under the European Neighbourhood Policy. In this context, the Group considered that the

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4 Convention concerning International Carriage by Rail, in use in the EU and several other countries.

5 Organisation for Cooperation of Railways law, applicable i.a. in the former Soviet Union countries

6 European Rail Traffic Management System

twinning of an EU Member state with a neighbouring country was a very useful and effective instrument for implementing the horizontal measures, particularly in the areas of maritime and road safety as well as to simplify border crossing procedures.

This report forms an innovative but practical and sustainable blueprint for the extension of the major trans-European transport axes to the neighbouring countries and regions. Action is vital in the context of further EU enlargement in particular and the wide effect of globalisation in general. The report describes the challenges ahead but also points out the opportunities for the EU and all the neighbouring countries to mutually share the multiple benefits of wider cooperation in the transport field. ***The Group established the coherence of transport networks in the EU and in the neighbouring countries and coordinated and synchronised management within the networks. The Group's main priorities and a time table are presented in the operational conclusions below.***

Operational conclusions

Support for a continuous process

- **A review and update** of the major axes/projects and of the horizontal measures **in 2010** and regularly thereafter;

- **A mid-term review in 2008** to prepare the update, based on information provided by the countries concerned.

Focussed and coordinated implementation of the axes

- To **focus cooperation and financing** actions on the five major axes and on the horizontal measures put forward by the Group.

- Exchange of best practice on **financing options**, including public-private partnerships, enabling legislation, user charging, etc. through regional workshops

- To put in place **strong and effective coordination frameworks**, including sustainable long-term financial support, for the implementation of the proposed actions:

    - Starting with a **Memorandum of Understanding** (MoU) for axes/regions where no such cooperation mechanism exists at present;

    - Strengthening of existing MoUs into a binding **Treaty**.

- To launch **twinning actions** of an EU Member state and a neighbouring country by 2008 at the latest in view of the implementation of relevant horizontal measures.

Implementation of horizontal measures

- **Simplification and facilitation of border crossing procedures** including:

    - Implementation in full and without delay of the relevant **international Conventions** and agreements, especially:

        - the International Convention on the harmonisation of frontier controls for goods, particularly as regards corresponding opening hours of frontier posts, joint control of goods and documents through the provision of shared facilities, medico-sanitary and veterinary inspections;

        - the Kyoto Convention on simplification and harmonisation of customs procedures aiming at maximum use of automated systems through the use of pre-arrival information, risk management techniques (including risk assessment and selectivity of controls) and easy access to information on customs requirements, laws, rules and regulations;

        - the Convention of the international transport of goods (the TIR carnets) for road vehicles.

        - Adoption by all the countries concerned by 2008 at the latest of the five IMO FAL documents, already in use in the EU.

- Simplification of the **language regime**:
  - To mutually recognise all trade and transport related documents in the language of the country concerned and English, or in a mutually agreed language.
  - In the longer term, harmonisation of these documents.
- Implementation of "**one-stop office**" and development of electronic data inter-exchange systems (EDI) especially for ports.

- Promotion of interoperable **satellite radio navigation systems** (Galileo and GLONASS) .

- Introduction, application and control of **security measures** resulting from international agreements and standards as well as to carrying out of security audits.

- For the **maritime transport and the Motorways of the Seas**:
  - Harmonisation of the practices and procedures of the Paris, Mediterranean and Black Sea MoUs at the highest level of performance. The European Commission is invited to approach the three MoUs in view of launching a dialogue for further cooperation.
  - Ratification and implementation of the international standards and conventions (IMO) in a timely manner and in full, including e.g. the MARPOL convention related to single hull tankers, the AFS convention on antifouling systems.
  - Technical support for actions to improve the quality of port infrastructure and services and to implement regular frequency of shipping services (at least once a week) operating on the Motorway of the Sea.

- As regards **rail transport and interoperability**
  - To monitor the on-going efforts of the two legal systems (COTIF and OSJD) in view of a unified consignment note.
  - To undertake measures to render the transport laws more coherent and convergent.
  - Gradual implementation of ERTMS or an equivalent compatible system (e.g. TEDIM) along the major axes, when relevant.
  - Standardised telematic applications for freight services.

- For **inland waterways**:
  - To mutually open access for international traffic.
  - To pursue the harmonisation of rules and safety standards,
  - Implementation of traffic information systems that are mutually interoperable.

- Regarding **road transport**:
  - To design and implement measures to improve road safety that address driver behaviour, vehicle safety, road infrastructure (safety audits) and traffic management systems,
  - To gradually upgrade the road network along the major axes for vehicles of 11.5 ton axle load and of 4-metre height.
- For **air transport**, to gradually extend the principles of the Single European Sky initiative to the neighbouring regions along with the enlargement of the EU or on a voluntary basis.

1. OBJECTIVES AND MANDATE OF THE GROUP

Good transport connections between the European Union (EU) and its neighbours are essential for trade and economic development. Effective, safe and secure transport systems reinforce sustainable economic growth and competitiveness and ensure the efficient movement of passengers, goods and services.

Following a ministerial seminar that took place in Santiago de Compostela, Spain in June 2004, the Commission established on 29 September 2004[7] a High Level Group (the Group) on the *"extension of the major trans-European transport axes to the neighbouring countries and regions"* to look at how better to connect the European Union with its neighbours in the area of transport. Former Commission Vice-President **Ms Loyola de Palacio** was appointed Chair of the Group which consisted of one representative from each of the 26 countries neighbouring the EU[8], and one observer from the European Investment Bank, the European Bank for Reconstruction and Development and the World Bank (the Banks). The EU Member States (as well as Romania and Bulgaria) were also represented. The Group met on 10 occasions between October 2004 and November 2005[9].

The Group confirmed the importance and timeliness of reviewing transport connections between the European Union and its neighbours. In April 2004 the European Union adopted a comprehensive plan to build by 2020 a trans-European transport network (TEN) on its territory[10]. This new plan concentrates investment priorities on 30 major trans-European axes that primarily serve long-distance and international traffic. It covers the territory of the enlarged EU as well as Bulgaria and Romania and aims at better integrating the new Member States to the Union. The EU enlargement meant that the external borders of the Union have shifted further towards the East and to the South, introducing several new neighbouring countries to the EU. Following enlargement, the Pan-European Corridors developed during two Ministerial Conferences in Crete in 1994 and in Helsinki in 1997, are now mainly within the EU and thus part of the TEN network giving new impetus to review and in some cases realign these Corridors.

One of the main tasks of the Group was to select a limited number of major transnational transport axes better connecting the EU and its neighbours to focus efforts and to enable countries to cooperate in an international setting. Whilst these axes should be particularly relevant for international transport between the EU and its neighbours, **the Group highlighted the fundamental enabling role that transport connections can have in regional cooperation and integration.** Consequently, it emphasised that open and secure borders between the EU and the neighbouring countries and between the neighbouring countries themselves, especially along the major axes, are a prerequisite for stimulating trade and strengthening cooperation.

In addition to transport between the EU and its neighbours, the Group also stressed the importance of other regions and traffic flows stemming from trade with China, Japan and

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7 Decision C(2004) 3618 of 29th September 2004

8 See full list of members in annex 9.1.

9 See list of meetings in annex 9.2.

10 EC(2004) 884 Official Journal 7 June 2004

other Asian countries, sub-Saharan Africa or North and South America transiting through the territory of the countries participating in the Group.

As a second step, the Group was asked to put forward priority projects on the major axes identified. The Group also decided to analyse in more detail three cross-cutting priorities: 1) financing issues including public-private-partnerships, 2) environmental sustainability, and 3) how to organise cooperation along the axes to ensure their effective and timely implementation.

In view of efficient use of the transport system and implementation of common market rules, the Group was also asked to identify and make proposals on so called "horizontal priorities". These include, among others, technical and administrative interoperability, implementation of new technologies like traffic management systems, as well as measures to improve safety and security. The Group considered that in the absence of such measures, bottlenecks would occur especially at border crossings even if infrastructure works were completed along the axes.

2. BACKGROUND

2.1. Need to connect better the European Union and its neighbours

EU enlargement and the accession of 10 new Member States on 1st of May 2004 meant that the external borders of the Union have moved further towards the East and the South, bringing several new neighbouring countries to the EU. While for the existing territory of the Union the recent revision of the trans-European networks[11] (TEN) identified a limited number of major transport axes, aiming at better integrating the new Member States to the Union, the existing transport connections between the enlarged EU and its neighbours hardly reflected the new geo-political situation following enlargement.

Without good transport connections with the neighbouring countries as well as with other economic centres of the world, the growth of trade and the economy, and sustainable environmental and balanced social development will not be fostered, which would be to the detriment of both the EU and its neighbours. The improvement of transport connections has thus become a timely issue of utmost importance to ensure stable economic development.

Firstly, improving transport connections is important to enable effective exchanges and transport between the Union and its neighbours. These connections should be efficient, safe and secure and they should focus on the most relevant transport modes, including the concept of 'Motorways of the Sea'. Efforts should be focused on a limited number of major axes linking the EU with its main trade partners in view of promoting global competitiveness.

Secondly, in addition to improved physical transport networks, transport between the Union and its neighbours requires efficient, intermodal and interoperable transport systems. Efficient traffic management systems, ensuring safety and security as well as

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11 EC(2004) 884 Official Journal 7 June 2004

interoperability, are of particular relevance. In the framework of the European Neighbourhood Policy, the Union is already developing, with a number of partner countries, concrete action plans in order to increase the efficiency of transport and enhance the safety and security of transport operations.

Thirdly, following the achievements of the EU in the transport sector and to ensure effective transit, it could be worthwhile to promote similar logistic and regulatory requirements and practices. These actions would include an increased sharing of best practices and common market rules in order to better manage today's complex transport flows and associated safety and security risks in view of protecting and promoting EU's interests and those of its partners. Such actions would consist of e.g. traffic management systems, including safety and security, handling equipment in ports and airports and other logistic terminals.

The Group highlights that better connections between the EU and the neighbours and other third countries and the promotion of efficient, safe and secure transport systems globally are important elements in facilitating trade and economic development of the EU and its neighbours.

2.2. Taking stock of completed and on-going exercises

Transport connections between the European Union and its neighbours have been discussed and developed under several initiatives over the past decades. These initiatives and actions, which are briefly summarised below, formed the starting point for the Group's work.

2.2.1. Revision of the trans-European transport network

The European Union adopted in April 2004 a comprehensive plan to build and complete by 2020 a trans-European transport network on its territory[12]. To assist in this revision, then Vice President Ms de Palacio set up a High Level Group, chaired by former Vice President of the European Commission, Mr Van Miert, and composed of experts nominated by the Transport Ministers of the 25 Member States, Romania and Bulgaria and the European Investment Bank.

The new plan revises and modernises the plans from the 1990's by concentrating investment priorities on a limited core network - major trans-European axes - that primarily serve long-distance and international traffic within the Community. It covers the territory of the enlarged EU as well as Bulgaria and Romania and includes a list of 30 priority axes and a number of priority investment projects on these axes. The "Van Miert Group" also recognised the importance of good connections with third countries as encouraging trade and promoting economic development[13].

A clear methodology and criteria were determined to select projects, important from the European point of view. Such a methodology was also seen necessary given the constraints relating to public finance, which inevitably required high selectivity in identifying projects for Community funding. This methodology comprised two stages:

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12 EC(2004) 884 Official Journal 7 June 2004

13 Chapter 6.5 of the final report, see http://europa.eu.int/comm/ten/transport/revision/index_en.htm.

– In a first stage, a pre-selection was made of projects considered appropriate for further examination, projects that were not on a main trans-European axis, that did not have a European dimension and that did not have sufficient evidence of potential economic viability were excluded;

– In a second stage, priority projects were selected with respect to their European added value, the strengthening of cohesion and the contribution to sustainable transport development while tackling problems of safety and environmental protection and by promoting modal transfer.

The Group took note of the methodology used by the "Van Miert Group" that contributed to the revision of the trans-European transport network policy for the territory of the enlarged EU and **it decided to adapt and extend the methodology to meet the objectives set for the Group.** In doing this the Group paid special attention to completed and on-going exercises aimed at determining regional and national core transport networks and master plans and at prioritising investments in transport infrastructure.

2.2.2. Recent international conferences and regional exercises

The need to review the connections between the trans-European transport network and the networks of the neighbouring countries following the enlargement of the European Union was raised by then Commission Vice-President de Palacio already at the *3rd International Euro-Asian Transport Conference* in St. Petersburg in September 2003. It was also discussed in the seminar[14] *Transport Infrastructure Development for the Wider Europe* in Paris in November 2003 and has been addressed during the ministerial meeting in Ljubljana in May 2004 organised by the European Conference of Ministers of Transport (ECMT).

On 7-8 June 2004, Ms de Palacio and Mr Costa, Chairman of the Committee on Regional Policy, Transport and Tourism of the European Parliament organised a ministerial seminar on a *Wider Europe for Transport* in Santiago de Compostela, Spain. The participants to the seminar welcomed the setting up of a High Level Group to look into transport connections between the enlarged European Union and its neighbours.

The European Commission organised a *Ministerial Conference on Transport and Energy* in Baku on 13-14 November 2004 with participants from the Black Sea/Caspian littoral states and their neighbouring countries. The conference participants agreed on the mutual interest for a progressive integration of their respective transport networks and markets in accordance with EU and international legal and regulatory frameworks.

One of the main topics of the Ministerial meeting of the European Conference of Ministers of Transport (ECMT) in Moscow in May 2005 was Euro-Asian transport connections.

In several neighbouring regions to the EU significant development in the field of infrastructure has taken place over the last decades. Several of these regions have defined a core network or are launching the first steps of an exercise to identify priority transport axes and projects. The most relevant of the existing exercises are summarised below.

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14 The seminar was jointly organised by the ECMT, European Investment Bank, European Commission and United Nations Economic Commission for Europe (UNECE)

– The Pan-European Corridors and Areas were developed during two Ministerial Conferences in Crete (1994) and in Helsinki (1997). For all the Corridors and for two of the Areas, a Memorandum of Understanding has been signed. The Corridors are now mainly within the EU and thus part of the TEN network. The remaining sections are in the territory of the Balkans, Russia, Belarus, Moldova, Ukraine and Turkey.

  In the Balkans significant progress has been made in defining a regional core transport network and priority projects. In June 2004, the countries signed a Memorandum of Understanding for the development of the core transport network. For Russia as well as for Belarus, Moldova and Ukraine, the Pan-European Corridors and Areas form the reference network, while the identification of priority projects remains to be completed. Turkey is in the process of preparing a transport infrastructure needs assessment.

  Russia and the EU have recently signed an MoU on the creation of an EU-Russia transport dialogue. One of the areas covered is transport infrastructure development and financing, especially public-private partnerships.

– The Euro-Mediterranean Regional Transport project was launched under the MEDA programme in 2003. The aim is to set up a basis for a transport action plan, a future integrated regional transport system in the Mediterranean region and its interconnection with the TENs. This project is a key step in developing the Euro-Mediterranean transport networks[15].

  As part of the 10th anniversary of the Barcelona Process, the transport ministers of the EU and the region are preparing a Ministerial meeting in Marrakech in December 2005 in view of adopting a "Blue Paper" for the development of the regional transport systems.

– The Traceca transport corridor connecting Europe through the Caucasus to Central Asia, has been developed since 1991 playing an important role in the continued development of these regions.

– United Nations Economic Commission for Europe (UN-ECE) has devoted a substantial amount of time and effort to develop transport infrastructure and related standards inside Europe and also for connections between Europe and Asia. The European agreement on main international traffic arteries (AGR) and the European agreement on main international railway lines (AGC) of 1975 and 1985 respectively set up the E-road and E-rail networks and the related standards. The UN-ECE has also a similar agreement for inland waterways (European agreement on main inland waterways of international importance (AGN) 1996).

  The UN-ECE has also developed master plans for a backbone road and rail network (so called TEM and TER) comprising 21 Central, Eastern and South-Eastern European countries in view of a short, medium and long term investment strategy.

– UN-ECE together with the UN Economic and Social Commission for Asia Pacific (UN-ESCAP) have been actively developing transport connections between Europe and

15 For further details see the Communication from the Commission to the Council and the European Parliament on the development of a Euro-Mediterranean transport network, COM (2003) 376 final.

Asia. In a project on Euro-Asian transport links, which covers countries beyond the Group in the east, the objective is to increase the capacity of the countries concerned to develop inter-regional transport connections and thus as a result the coverage of the infrastructure network is quite extensive.

The Group took note of these various international conferences as well as of the existing and on-going regional and other efforts to identify priority corridors and core transport networks and it decided to base its analysis on the experience gained in these various exercises. **They formed part of the starting point for the High Level Group work, aiming at identifying a sub-set of networks that best connect the EU with its neighbours and strengthen regional integration in the longer term.** To meet this aim and taking into account future changes in international production patterns and locations, it was considered necessary to review and in some cases to realign or extend the existing core networks and corridors.

3. METHODOLOGY FOR IDENTIFICATION OF PRIORITY AXES AND PROJECTS

3.1. Introduction

The task of identifying major transnational transport axes and key projects, connecting the major trans-European axes (TENs) with neighbouring countries or with broader regions, poses a number of difficult questions which needed to be resolved rapidly in order to ensure that an objective and coherent selection was made.

The Group reached broad agreement on the principles for the methodology to be used to identify and select potential axes and priority projects on them at its second meeting on 29 November 2004. This methodology, which provided the framework for the work of the Group, is outlined below. It is largely inspired by the successful approach adopted in the past in the various regions and in particular by the Group for the TENs that prepared the basis for the identification of key projects in the enlarged EU. The methodology also takes into account the constraints relating to available finance, which inevitably requires a highly selective approach to be adopted to identify major axes and projects for funding.

The methodology consists of a two step approach:

1) Identification of major transport axes connecting the EU with the neighbouring countries or broader regions. This step should lead to propose some 5-7 major axes that are most used and pertinent to international exchanges and traffic and to the strengthening of long term integration and cohesion of a group of countries[16].

2) Identification of priority projects on these major axes that are feasible and demonstrate the best value for money in terms of their economic, social and environmental impacts. A highly selective approach was again important to ensure that limited resources are put to best use.

16 Regional cohesion and integration of peripheral areas to the centre within one country are not parts of the objectives of the Group.

3.2. Step 1: Criteria for identifying major axes

The concept of major transnational axes was seen as important in focusing efforts and so as to ensure countries cooperate in an international setting. The first step of the methodology thus aimed at identifying a limited set of priority transport axes, which connect the EU with the neighbouring countries or regions and which are particularly relevant for international transport. It is important to underline that the approach was not limited to exchanges and traffic between the Union and its neighbours but should also recognise the importance of other regions and traffic flows stemming from trade with the Far-East, sub-Saharan Africa or America transiting through the territory of countries participating in the Group.

The axes would in many cases have a multimodal character in addition to their Pan-European dimension, being used by traffic between the European Union and the neighbouring countries or regions. Special attention was accorded to nodal points, such as ports given their potential strategic role as industrial and logistic platforms and as part of the Motorways of the Sea concept. The networks that have been the subject of international agreements and other joint decisions and actions should be considered as the starting point for this exercise, as explained above (ch. 2).

The following two aspects, reflecting "Pan-European interest", were adopted by the Group for the identification of priority axes connecting the EU with the neighbouring countries or broader regions comprising several countries:

Institutional dimension **–** a priority axis should facilitate and stimulate the development of exchanges between the European Union and its neighbours by extending the major TEN axes to the neighbouring countries or broader regions, taking into account the existing priority reference networks and corridors in the different regions. The institutional dimension was assessed according to the following two criteria:

- the proposed axis should link one of the 30 major TEN axes and projects[17] to the neighbouring countries or regions and/or

- the proposed axis should take due account of international agreements and other joint decisions and actions[18], which, when necessary, should be reviewed or realigned or extended to better reflect future trade patterns and traffic flows.

Functional dimension – in addition to carrying significant volumes of inter-regional long-distance traffic, a priority axis should be an important route for international traffic flows between the EU and the neighbouring countries or regions, in particular in the longer term. In addition, a priority axis could be a route that allowed traffic to avoid a major environmental bottleneck or barrier. This dimension was assessed using the following three criteria:

- the amount of long-distance inter-regional traffic in the current situation and forecast for 2020 (with particular focus on international traffic flows with origin or destination in the EU and a neighbouring country or region). This criterion should

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17 See Annex III of the Guidelines for the trans-European transport networks, EC/884/2004 Official Journal L201 of 7/6/2004

18 For a summary of these exercises, see ch. 2.2.2 above.

be measured either in tonne- and passenger-kilometres or as the number of vehicles crossing a border; or

– the volume of transit traffic, in the current situation and estimated for 2020, with origin or destination in the Union and using the infrastructure of the neighbouring country or region; or

– the axis offers an alternative, which would be potentially much shorter (less costly to users), environmentally friendlier or safer than the alternative, established route.

Particular attention should be paid to the assumptions of traffic forecasts in the different regions. The forecasts should be based on coherent and, where possible common, assumptions regarding e.g. economic development or tariffs affecting choices of routes and modes to ensure comparability and to avoid double-counting.

3.3. Step 2: Criteria for selecting priority projects

As a second step, priority projects on the selected major axes were identified paying particular attention to the most pressing bottlenecks for international traffic. As funding transport investments is inevitably difficult, a full evaluation prior to putting forward projects is fundamental. A two-stage procedure was proposed for project selection.

First stage – pre-selection

The first stage aims at pre-selecting a restricted number of projects which merit a more detailed examination by the Group. The methodology should be simple but comprehensive and allow a rapid analysis of project proposals. This should allow the elimination of those projects not meeting all of the following three criteria:

- The project should form part of one of the priority transnational axes, as identified by the Group in step 1, taking notably due account of projects which cross or circumvent natural barriers, alleviate congestion or other bottlenecks or offer safer or environmentally friendlier alternatives to main corridors used today.

- To eliminate projects which would be too small or too regional in their character to merit inclusion, the project should be of sufficient size and significance. The particular situation of the countries concerned should, however, be taken into account. The proposed project should meet the following criteria:

  – To avoid a multitude of small projects without significant impact, the cost of each infrastructure project should be above the indicative threshold of 0.15% of the GDP[19] of the country in question or of the countries concerned for cross-border projects.

  – Lower indicative thresholds could be approved for rehabilitation of existing infrastructure, motorways of the sea projects including relevant hinterland connections, traffic management and security systems, or for projects which would

[19] The source for GDP figures should be the World Bank.

promote transport using inland waterways or address environmental or safety concerns.

– The technical characteristics of the project proposed should be more cost efficient in reaching the stated objectives than alternative technical options, including e.g. type of action (new construction/rehabilitation; motorway/dual/single carriageway) or investments in other modal routes (motorway of the sea/land based solution).

- There should be a firm commitment by the country or region concerned to implement the project, by establishing whether the project had been subject to national selection tests and relevant international conventions:

  – The project should be scheduled in national transport plans with the start of works prior to 2010 and completion by 2020 at the latest; and

  – The project should demonstrate considerable potential benefits, in particular the growth rate of demand being such that severe bottlenecks would occur by 2020 if no measures were taken; and

  – The financial plan should be realistic and indicate the various funding sources, including, in particular, the amount of national and international funding and where appropriate, private funds.

Second stage – evaluation

In the second stage, the objective was to identify those projects, which would contribute most to balanced sustainable development in terms of their economic, environmental and social impacts using the following three criteria:

- *Improving economic efficiency* – notably cost savings, including time savings, to international users of the transport system – both passengers and freight - and to operators offering transport services. An assessment should be made of the possibility of charges for infrastructure use as well as the impact on economic growth and employment.

- *Enhancing environmental sustainability of the transport system* - Reduction in air pollution, noise, green house gases and other environmental impacts including the issue of biodiversity, e.g. through changes in the existing modal shift, re-routing to environmentally friendlier modes or infrastructures or through reduction in congestion.

- *Improving transport safety and security* - Reduction in the number and severity of accidents caused by international traffic and in security incidents to international operators, e.g. through modal shift or re-routing to safer modes or infrastructure.

All these criteria should be assessed for the situation with the project proposed and compared to a situation without the project in the forecast year 2020. The impacts, calculated in monetary terms as far as possible, should be checked against the investment, maintenance and running costs of the project. The net benefits should be significantly positive overall and to the extent possible for each separate criterion. Only projects with a sufficiently high economic rate of return, about 6%, should be considered.

It is also important to stress that the projects proposed should respect relevant EU legislation and international conventions and that environmental assessment, public procurement procedures etc. must carried out in accordance with donors' funding rules and best international standards and practice.

4. MAJOR TRANSNATIONAL AXES IDENTIFIED BY THE GROUP

4.1. Traffic volumes today and the forecast for 2020

In addition to the institutional dimension (see above ch. 3.2), current and future international traffic volumes formed the other main criteria of the Group when identifying major transnational axes. Recent studies forecast that rapid growth in trade flows and freight transport will continue. One of the most recent estimates[20] shows that the highest growth in trade is forecast to take place between the "old" and recently joined EU Member states (almost 2% pa) and even more so between the enlarged EU and other European countries such as Turkey or Russia (up to 2.6% pa). Overall, traffic volumes between the EU and the neighbouring countries are expected to grow by 100% between 2000 and 2020.

Whilst road traffic is typically the dominant mode for domestic transport, international traffic by rail is particularly important for trade between the EU and its North-Eastern neighbours, Russia, Ukraine and Belarus. In the figure 1 below, the estimated rail volumes for 2020 are presented for traffic between the EU and Northern and South-Eastern neighbouring countries as well as with the countries of Southern Caucasus. Traffic originating from trade with China, Japan and other Asian countries transiting through the neighbouring regions is also accounted for.

Maritime transport accounts for a high share in the total trade between the EU and particularly its Mediterranean neighbours where direct lad connections are rare. Figure 2 below highlights the traffic volumes on the main maritime routes in the Mediterranean Sea including also traffic volumes by land transport modes.

[20] The EUN-STAT study analysed traffic volumes between the EU and its northern and south-eastern neighbours; and the MEDA study examined traffic between the EU and the Mediterranean neighbours.

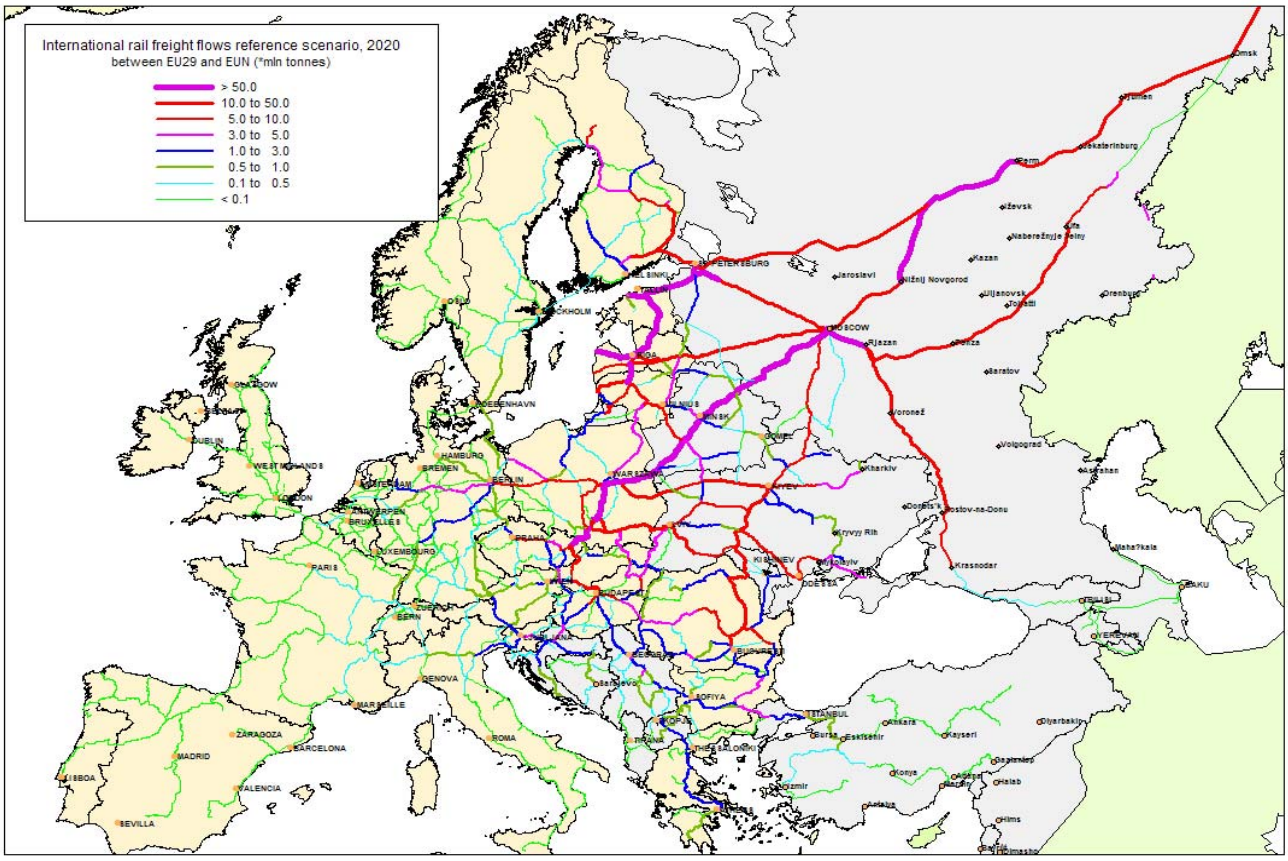

Figure 1: International traffic volumes between the EU and the North-Eastern and South-Eastern neighbouring countries

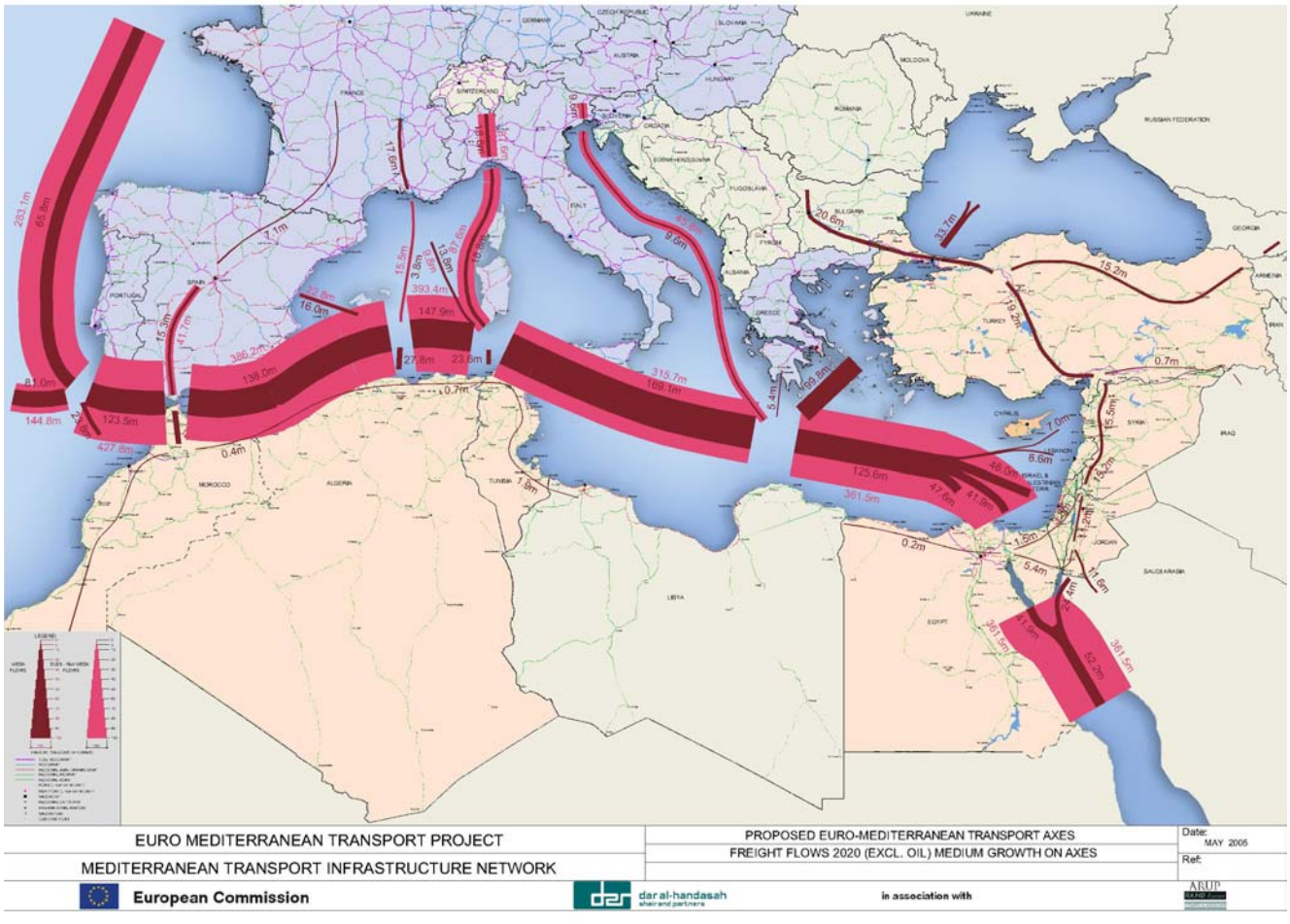

Figure 2: Traffic volumes in the Mediterranean region

4.2. Application of the Group's methodology

The Group members submitted some 60,000 km of network to be considered as transnational connections. In line with the mandate given to it, the Group adopted five multimodal transport axes at its sixth plenary meeting on 19-20 September 2005.

All of the five axes comprise one or more branches reflecting the volumes of international traffic today and the forecast for 2020 and ensuring connectivity between the neighbouring regions and the trans-European networks of the EU. The Group emphasised that open and secure borders between the EU and the neighbouring countries and between the neighbouring countries themselves are a prerequisite for trade and cooperation. The Group also identified a number of branches that link to countries beyond the Group.

The five major transnational axes adopted by the Group are illustrated in the following map (figure 3). (They are summarised below (ch. 4.3) and presented in more detail in annex 9.4).

The major transnational axes selected by the Group are those which contribute most to promoting international exchanges and traffic as well as to enabling regional cooperation and integration. The identification of these axes facilitates the ordering of priorities and the establishment of consistency between national plans. **The Group draws attention to the importance of developing national and regional transport master plans as a complement to the work of the High Level Group.** (For instance, such an exercise has been completed for the Western Balkan countries, is well underway for Turkey as well as for the Mediterranean region.)

The Group recognises that forecasting the future development of economic activities, trade and the ensuing traffic volumes is a difficult task given the many uncertainties involved. Consequently, **the Group recommends that the major axes be reviewed and updated in 2010 and regularly thereafter.** Such a review and updating should be based on detailed analysis of current traffic volumes and forecasts in all modes covering all the Group counties as well as other relevant trade partners. To prepare this update, **a mid-term review is proposed to be carried out in 2008** based on information provided by the countries concerned on the evolution of traffic, progress of implementation of the proposed measures (projects and horizontal priorities) and on new bottlenecks that may emerge.

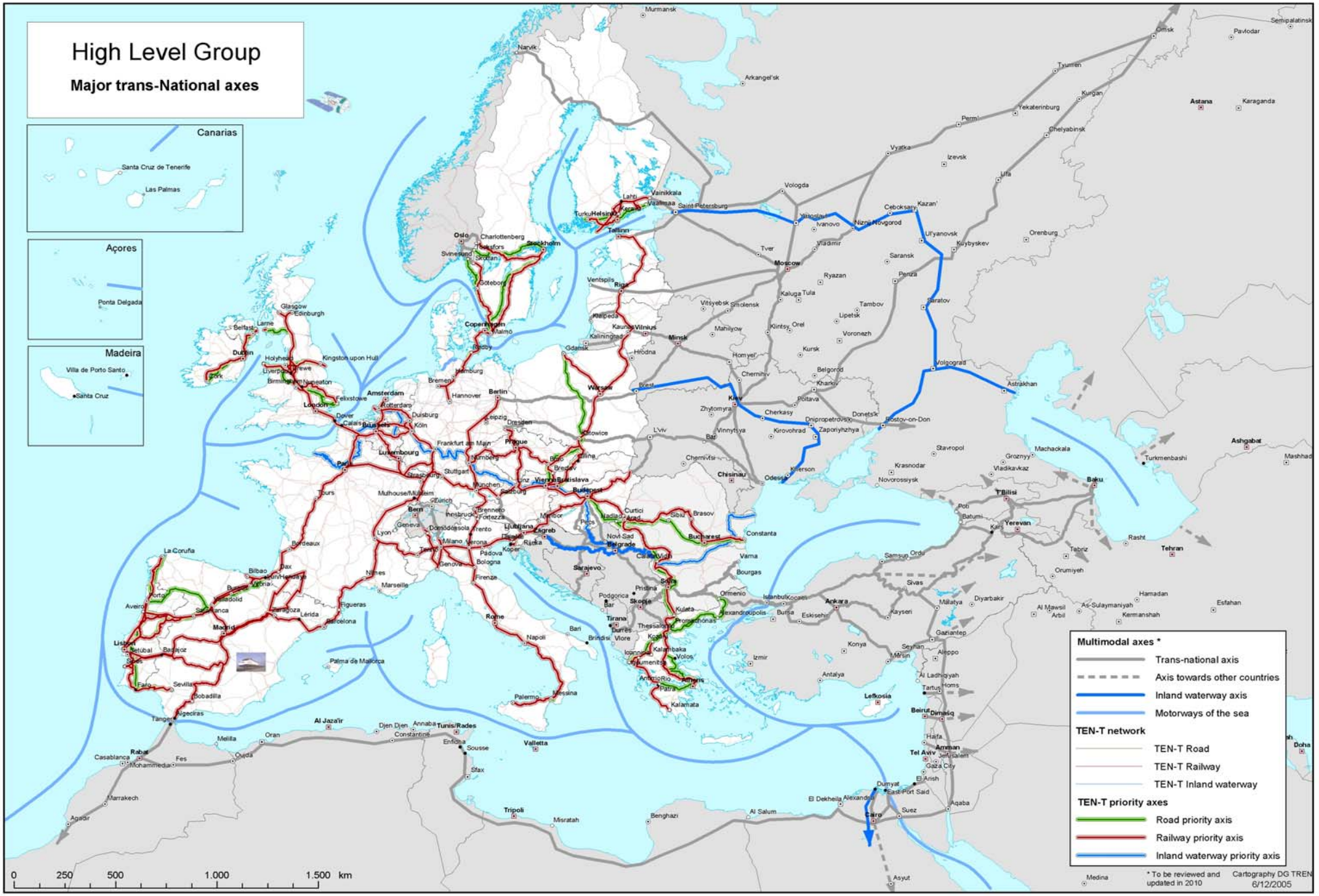

Figure 3 – Major transnational axes

4.3. The five major axes to connect the EU with its neighbours

4.3.1. Motorways of the Seas

The Motorways of the Seas link the sea areas of the Group – the Atlantic, Baltic, Barents, Mediterranean, Black and Caspian Seas – as well as the littoral countries within these areas. An extension from the Mediterranean through the Suez Canal towards the Red Sea is also included. More specifically, the Group agreed on the following extensions to the priority project n^{o} 21 of the trans-European transport networks:

- Extension of the motorway of the Baltic Sea towards Russia including Kaliningrad
- Extension of the motorway of the sea of western Europe towards Norway in the north and towards Morocco in the south
- Extension of the motorways of the Mediterranean Sea towards North Africa and Middle East, including the Red Sea and beyond
- Extension of the motorways of the Mediterranean Sea to the Black Sea.

The Group identified also a number of Motorways of the Sea ports in the neighbouring countries. These are illustrated in the map in ch. 6.2 and listed in annex 9.3.

4.3.2. Northern Axis

The Northern axis connects the northern EU with Norway on the one hand and with Belarus and Russia and beyond on the other. A connection to the Barents region linking Norway through Sweden and Finland with Russia is also foreseen. The alignment of these connections is the following (a more detailed description of the axis and the projects put forward by the Group is given in annex 9.4.2):

- Multimodal connection Berlin – Warsaw – Minsk – Moscow – trans-Siberian
- Multimodal connection Finnish border – St Petersburg – Moscow
- Rail freight connection St Petersburg – Vologda – Moscow/trans-Siberian
- Multimodal connections from Baltic ports to Minsk/Moscow:
    - Tallinn – St Petersburg – Moscow
    - Ventspils – Riga – Moscow
    - Klaipeda/Kaliningrad – Vilnius – Minsk – Moscow
- Multimodal connection in Norway of the TEN priority axis n° 12 (Nordic Triangle)
- Multimodal connection St Petersburg – Vartius – Tornio – Haparanda – Narvik

4.3.3. Central Axis

The Central axis links the centre of the EU to Ukraine and the Black Sea and towards Central Asia and the Caucasus. A direct connection to the trans-Siberian railway as well as an inland waterway linking the Caspian and Baltic Seas are also included. The alignment of these connections is as follows (a more detailed illustration of the axis and the projects put forward by the Group is given in annex 9.4.2):

- Multimodal connection Dresden – Katowice – Lviv – Kiev
- Multimodal connection Budapest – Lviv
- Multimodal connection Moscow – Kiev – Odessa
- Inland waterways Belarus – Kiev – Odessa (Dneper)

– Inland waterways Don/Volga linking the Caspian Sea – Black Sea and a connection from Volga to the Baltic Sea
– Multimodal connection Minsk – Kiev
– Multimodal connection Kiev – Kharkiv – trans-Siberian/Caucasus

In addition to the above connections and branches, Poland and Ukraine raised the importance to connect their respective capitals through a multimodal axis. Slovakia, Austria and the Czech Republic stressed the need to include a branch from the Ukrainian border to the major industrial area of Zilina.

4.3.4. South Eastern Axis

The South Eastern axis links the EU through the Balkans and Turkey to the Caucasus and the Caspian Sea as well as to Egypt and the Red Sea. Access links to the Balkan countries as well connections towards Russia, Iran and Iraq and the Persian Gulf are also foreseen as well as a connection from Egypt to the South towards other African countries. The alignment of these connections is the following (a more detailed description of the axis and the projects put forward by the Group is given in annex 9.3.3):

– Multimodal connection Salzburg – Ljubljana – Zagreb/Budapest – Belgrade – Nis, including the following connections
  – Sofia – Istanbul – Ankara – Georgia/Armenia – Azerbaijan (Traceca)
  – Skopje – Thessaloniki
– Multimodal connection Budapest – Sarajevo – Ploce
– Multimodal connections Bari/Brindisi – Durres/Vlora – Tirana – Skopje – Sofia – Burgas/Varna
– Inland waterways Danube[21] and Sava
– Multimodal connection Ankara – Mersin – Syria – Jordan – Suez – Alexandria/East Port Said, including the following connections:
  – Sivas – Malatya – Mersin
  – Turkey towards Iran and Iraq
  – Tartus – Homs towards Iraq
  – Beirut – Damascus towards Iraq and Saudi Arabia
  – Haifa – Israel border
  – Jordan border – Amman towards Iraq and Saudi Arabia
– Multimodal connections Damietta – Cairo and beyond including the Nile river
– Multimodal connections from Armenia, Azerbaijan and Georgia towards North and South

In addition to the above connections and branches, Austria supported by Croatia and Bosnia and Herzegovina raised the so called Pyhrn corridor linking Berlin to Zagreb and connecting to the TEN priority project n^{o} 22 and the Pan-European Corridor X. UNMIK/Kosovo, Serbia and Montenegro and Albania stressed the importance of the Balkan regional core network in providing access to the main axes. Azerbaijan stated that no cooperation or any other activities along the axis linking Armenia with Azerbaijan can be considered until the major consequences of the conflict between Armenia and Azerbaijan are fully eliminated. Armenia stated that with a view to enhancing regional

21 The exact alignment of the Danube to the Black Sea requires further analysis.

cooperation it is ready to establish and develop collaboration with Azerbaijan, without any preconditions.

4.3.5. South Western Axis

The South Western axis connects the south-western EU with Switzerland and Morocco and beyond, including also a West-East connection between Morocco, Algeria and Tunisia up to Egypt. The alignment of these connections is as follows (a more detailed presentation of the axis and the projects put forward by the Group is given in annex 9.4.4):

– Multimodal connection Algeciras – Rabat – towards Agadir and beyond
– Multimodal connection Rabat – Fes – Oudja – Constantine – Al Jazair – Tunis – Libyan border (the "trans-Maghrebin") including also the connection Tunisia – Egypt
– Extension of the TEN-T priority axis n° 24 through Switzerland

In addition to the above connections and branches, Spain underlines the importance of the so called Mediterranean corridor in Spain for freight flows between South Western Mediterranean region and the centre of the EU.

5. PROJECTS PUT FORWARD BY THE GROUP

5.1. Classification of projects

The members of the Group submitted almost 100 project proposals to be considered as priority investments on the major transnational axes. The cost of the projects put forward by the Group is estimated at € 45 billion in total. The proposals were classified into two categories depending on their maturity and the potential role they could have in alleviating bottlenecks that affect international and long-distance traffic, i.e.

- Projects ready to start before 2010 (completion by 2020) - Projects in this category aim at addressing the most pressing bottlenecks stemming from congestion, poor quality infrastructure or from environmental considerations that hamper international exchanges and traffic at present. These projects are expected to bring about time and operating cost savings to the users and operators in comparison to today's situation. The estimated cost for this category is ca. € 35 billion.

- Projects of longer term interest (works to start by 2020) - With forecast traffic growth from today to 2020 and beyond, congestion, environmental or other bottlenecks are likely to occur in the medium to longer term. Projects in this category aim at addressing these bottlenecks before they become too acute and costly to the users and operators. This category includes typically the second stage of a project that increases the infrastructure capacity gradually, the first phase being among projects ready to start prior to 2010. The cost of these projects is estimated at app. € 10 billion.

In addition the Group members proposed a number of other major projects that were considered of more regional or national importance. These projects are on a transnational axis but they seem today relevant mainly for regional traffic between just two countries or aim at improving the functioning of an urban transport system.

The different lists of projects are presented in technical annex 9.4 for each of the five axes adopted by the Group. The Group also underlines the importance of improving transport connections to countries beyond the Group to ensure sustained development of exchanges with other important trade partners.

The Group understands that the lists of projects are just a starting point, not necessarily exhaustive, and that there is need for further studies and analyses before these projects are may be considered for implementation. These should concern particularly financing and fiscal space issues, the project's economic viability, technical specification as well as environmental impact (see ch. 5.2 and 5.3 below).

It is also important to stress that the projects should respect relevant EU legislation, where appropriate or when EU funding is envisaged, and international conventions and that environmental assessment, public procurement procedures etc. are carried out in accordance with donors' funding rules and best international standards and practice. **The Group invites the Banks and the European Commission to further assess the interest of the proposed projects,** when defining the cooperation programmes with the countries concerned.

5.2. Socio-economic impact of projects

Transport infrastructure projects aim at improving the quality of the transport system by removing bottlenecks, reducing travel times and by improving safety and security as well as by providing access from peripheral regions to services and to the market. Also, the technical specification and optimal timing of the project should be carefully assessed and compared with the investment cost and expected user and other benefits of alternative scenarios.

The Group acknowledges that value-for-money and broader socio-economic impacts can be analysed by adapting the methodology of the Group to the local context and traffic situation (see ch. 3.3). The Group also takes note of the methodologies used by the Banks[22] to assess the feasibility of projects as well as of the HEATCO[23] project, which is developing a harmonised approach for project appraisal for the trans-European transport network of the EU. These methodologies could also be used as a reference for further analysing the projects proposed by the Group.

5.3. Environmental dimension

The impact of transport infrastructure on the global and local environment and their related effects may significantly threaten human health, climate change, biodiversity, limited natural resources etc. International commitments[24], standards and recommendations already exist for various environmental issues relating to transport. Together with vehicle manufacturers, authorities responsible for transport planning, building, operating and

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22 See e.g. Railway Project Appraisal Guidelines ("RailPag") that were prepared by the EIB and the European Commission at www.railpag.com; or the World Bank's handbook on Transport Project Appraisal.

23 HEATCO is been financed under the Community Framework Programme for Research, for further details of the proposed methodology see http://heatco.ier.uni-stuttgart.de/

24 By e.g. UNECE, WHO, ICAO, IMO, OECD, EU etc.

public procurement have an important role to play in order to control environmental impacts of the transport infrastructures.

It is essential to accurately assess the environmental impact of transport activities already at the initial planning stage so as to avoid unnecessary environmental harm that could involve e.g. air quality, noise, greenhouse gas emissions, fragmentation of habitats, and loss of biodiversity and water resources. If identified early in the process, environmental control mechanisms can then be more easily developed. In this context promoting alternative modes of transport to road is also an important policy option to be considered.

The Group highlights the need to pay a special attention to environmental sustainability at the stage of project definition and analysis as well as when implementing the horizontal priorities. The BEACON[25] project has developed a methodology for the strategic assessment of environmental effects/impacts of transport plans and programmes. This methodology could be extended and adapted to be used as a basis for analysing the environmental impact of the projects put forward by the Group.

6. HORIZONTAL MEASURES - THE ISSUES AND GROUP'S RECOMMENDATIONS

6.1. The process

In many cases, obstacles and bottlenecks occur, especially at borders, due to the lack of policy and administrative interoperability and harmonisation. Common market rules, that reflect the best international practice, are important for the development of international trade and exchanges and the effective implementation of the priority axes and projects. The huge diversity in signalling, information and telecommunication systems used in the different countries constitutes a major obstacle to the integration of the different national transport systems. Technical interoperability is a key element facilitating cross-border traffic and a major factor in the reduction of equipment costs. On the other hand, transport infrastructure should also be supported by efficient integrated traffic management systems.

Enhancing specific cooperation in the areas of road and rail transport safety and the transport of dangerous goods, including hydrocarbons, and strengthening the bilateral relations in the area of aviation and maritime sector, notably regarding the improvement of safety, are also important issues for transport facilitation.

The Group therefore put a considerable emphasis on policy harmonisation as well as technical and administrative integration when relevant to the efficient operation of the selected priority axes and projects. At its second meeting on 29 November 2004, the Group agreed on a number of so called horizontal priorities to be analysed in more detail with a view of coming up with suggestions for strengthening cooperation where necessary. These include e.g. promotion of intermodal transport, standardisation, technical and administrative interoperability, traffic management systems, cross-border and operational procedures, quality and environmental sustainability requirements. It is worth mentioning that in the framework of the European Neighbourhood and Partnership Policy, the EU is

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25 BEACON is been financed under the Community Framework Programme for Research, for further details of the proposed methodology see http://www.transport-sea.net/results.phtml

already developing with a number of partner countries concrete action plans in order to address such horizontal issues.

The Group appointed a rapporteur and a co-rapporteur for each topic from its members. They were given the task of preparing a discussion paper for the Group's consideration. To provide input to this process, experts from the Commission services[26] were also invited to make presentations on the various topics. At its plenary meeting on 19-20 September 2005, the Group adopted a series of recommendations, which are presented in the next chapters 6.2 – 6.10.

To implement the Group's recommendations on these horizontal measures, the Group considers twinning of an EU Member state and a neighbouring country as a useful and effective instrument (see ch. 6.2-6.10 below for further details on these recommendations)**.** To support the creation and implementation of the proposed measures, support studies should also be launched and considered for financing under the relevant instruments. Furthermore, the Group noted that on-going or planned projects should take under consideration the recommendations made by the Group.

6.2. Motorways of the Sea and intermodality

The modes of transport differ considerably in terms of infrastructure capacity and congestion, levels of safety, flexibility, energy consumption and environmental impact. Supporting intermodal transport is a major element of the Commission's White Paper[27]: "*European Transport Policy for 2010 : Time to decide*". The aim is to enable efficient door-to-door movements of goods, using two or more modes of transport, in an integrated transport chain, in which each mode plays its role and which will lead to a more efficient, cost effective and sustainable transport system. Intermodal transport also requires well functioning transfer points and terminals. These are the physical links between the modal systems and allow direct access to the network. Without efficient links it becomes difficult to combine the inherent advantages of the different modes.

Maritime transport plays a crucial role in freight traffic between the EU and the neighbouring countries, particularly in the Mediterranean, where direct land connections across the sea are scarce. The Group therefore paid particular attention to actions related to the improvement of the organisation of intermodal freight transport, particularly in the context of the implementation of the Motorways of the Sea concept.

The Group identified the extension of the Motorways of the Sea of the EU to all the sea regions (Atlantic, Baltic, Barents, Mediterranean, Black and Caspian Seas) as a priority for transport facilitation between the EU and the neighbouring regions. An important precondition for successful implementation of the Motorways of the Sea concept is the concentration of cargo flows to create sufficient critical mass. Therefore, **the Group agrees that it is necessary to focus investment efforts and to concentrate traffic to a limited number of Motorways of the Sea connections**. This in general means that there should be one port or port system per country per sea area. To implement the Motorways of the Sea concept, the Group considers essential measures to improve the quality of

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26 These included experts from the following directorates general: energy and transport, environment, taxation and customs union, justice liberty and security, external relations and enlargement.

27 See http://europa.eu.int/comm/dgs/energy_transport/index_en.html

infrastructure and services in ports, to ensure good intermodal connections from the ports to their hinterland but also to stimulate more frequent (at least once a week) and reliable shipping services are crucial.

At its meeting on 25 October 2005, the Group adopted a list of Motorways of the Sea ports located in the neighbouring countries. These ports are illustrated in the map below and listed in annex 9.3.

The Group agrees that the ports selected under the Motorways of the Sea concept should fully apply the international (IMO, ILO) rules on maritime safety and security. They should also commit to certain quality criteria related to port infrastructures and port services, administrative procedures and co-ordination of inspections, maritime and intermodal services. The vessels used for the Motorways of the Seas shall be vessels that comply with the IMO norms for ships and, wherever possible, be aligned to higher standards following specific agreements between the entities responsible for the Motorways of the Sea.

The Group takes note of the plans to designate a European co-ordinator for the EU Motorways of the Sea. The Coordinator would ensure coordination between initiatives involving ports, authorities and operators from the EU countries (see ch. 8.1 for further details). It needs to be explored whether he/she should cooperate also with the neighbouring countries.

6.3. Maritime safety

6.3.1. Introduction

A number of shipping routes are being launched and developed to shift freight from road to sea and to ensure seamless door-to-door services. Maritime safety and security are the key areas where reinforced co-operation and co-ordination is needed. For maritime safety the Group looked at the following interrelated areas:

- Safety of the ship, its crew, passengers and/or cargo and related port state control
- Traffic safety and protection of the environment, in particular the prevention of pollution from ships and the adequate protection of the coastal regions
- Accident investigation.

6.3.2. Port state control and maritime safety

In terms of safety of the ship, its crew, passengers and/or cargo, rules are defined at worldwide level. However, these rules, still today, have not been able to adequately combat substandard shipping. Port state controls (PSC), which are defined regionally through a Memorandum of Understanding (MoU), can be more effectively used to control vessels from flag states that do not inspect their ships in accordance with the international (IMO) rules.

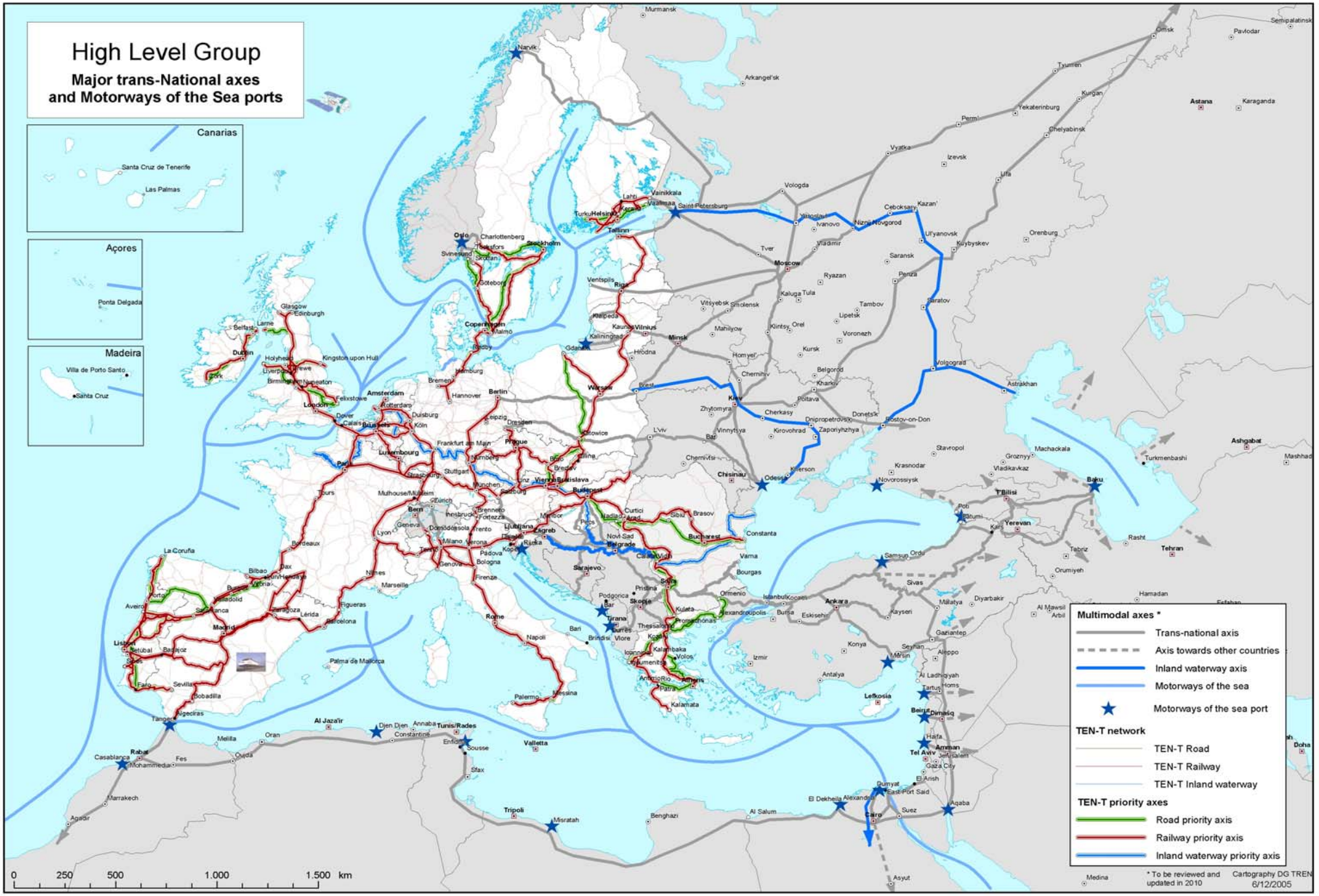

Figure 4 – Motorways of the Sea ports in the neighbouring countries

The sea areas of the Group countries fall under three MoUs: the Paris[28] MoU, the Mediterranean[29] MoU and the Black Sea[30] MoU. The effectiveness of the Paris MoU is recognised world-wide and it should be taken as an example to be followed. **Both the Mediterranean MoU and the Black Sea MoU are invited to align their practices and procedures with those of the Paris MoU in view of harmonisation at the highest level of performance.** Also, the Group invites the Mediterranean and the Black Sea MoUs to pursue their efforts with the Paris MoU in order to identify a preliminary assistance programme. Particularly, the Group recommended the following concrete forms of cooperation:

- The European Commission has already committed, under the MEDA programme, a study on the difficulties encountered by the Mediterranean MoU, with the aim to improve its effectiveness and to identify the actions which might be required for aligning it with the Paris MoU standards. **The Group recommends to the European Commission in co-operation with the Black Sea MoU and its partners to expand the on-going MEDA study to the Black Sea MoU**, with the aim to identify all possible actions promoting the alignment of the Mediterranean, the Black Sea and the Paris MoUs with the highest standards as an objective, and to identify appropriate channels for providing financial assistance to co-operation efforts on port state control in the wider European area.

- **The Group recommends to the Paris MoU**, without prejudice to the outcome of the above mentioned study, **to identify in co-operation with the EU countries and the members and the secretariats of the Black and Mediterranean Sea MoUs a possible preliminary assistance programme.** This would focus on training and on quantification of the resources required for the implementation of such programme.

- **The Group invites the European Commission to approach the 3 MoUs in view of launching a dialogue for further cooperation.**

To combat substandard shipping more effectively, the Group asks the 3 MoUs to mutually recognise ships blacklisted by the other MoUs. It also recommended to the Mediterranean and Black Sea MoUs to focus their inspections on those ships which do not visit EU ports and which did not have recent Paris MoU inspection. Furthermore, the Group asked the MoUs to work out harmonised procedures aiming at mutual recognition.

6.3.3. Maritime safety and protection of the environment

All countries concerned have agreed and committed themselves to apply the rules on maritime safety and pollution prevention from ships, laid down in the IMO Conventions (SOLAS, MARPOL, STCW). In implementing the IMO rules EU Member states as well as the acceding countries, are bound by an extensive set of regulations and directives giving mandatory guidance in order to ensure a harmonised and coherent implementation of the rules at EU level, whilst the non-EU countries implement the IMO rules at their discretion. Consequently, the adoption of new EU legislation can widen the differences between the EU countries and the non-EU countries of the Mediterranean and Black Sea areas.

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28 The Paris MoU members are: 21 coastal EU Member States, Iceland, Norway, Croatia, Russia and Canada

29 The Mediterranean MoU countries are: Algeria, Cyprus, Egypt, Israel, Lebanon, Malta, Morocco, Tunisia, Turkey, Palestinian Authority, Jordan

30 Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine are members of the Black Sea MoU

Given the predominant role of maritime transport for trade, the Group stresses the importance of improving maritime safety and marine environment in all the sea areas. **The Group recognises the utmost importance of international (IMO) rules and conventions in achieving a safer and environmentally friendlier maritime sector and invites its members to ratify and implement them in full and without delay.**

Though acknowledging the fact that over 90% of marine pollution, particularly in closed seas such as the Baltic sea, comes from coastal sources and agricultural activity, the Group identified two main issues that pose a threat to the environment as a result of shipping and maritime transport activity.

1. Single hull tankers

Uniform implementation of the provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL Convention) related to single hull tankers are lacking. A coherent implementation of the MARPOL Annex I 13 G and H regulations, which came into force on 5 April 2005, are essential to adequately protect the Sea areas. Such a coherent implementation has already been ensured at EU level.

The Group invites the Black Sea, the Mediterranean and Baltic Sea neighbouring countries to consider, when appropriate:

a) To refrain from making use of the provisions of paragraph 7 of the amended regulation 13 G of MARPOL Annex I and of paragraphs 5, 6 and 7 of the new regulation 13H for oil tankers entitled to fly their flags

b) To make use of the provisions of:

- *paragraph 8(b) of Regulation 13G in order to deny entry into the ports or offshore terminals under their jurisdiction of oil tankers operating in accordance with the provisions of paragraph 5 of Regulation 13G beyond the anniversary of the date of delivery of the ship in 2015 or paragraph (7) of Regulation 13G*
- *paragraph 8(b) of Regulation 13H in order to deny entry into the ports or offshore terminals under their jurisdiction, or deny ship-to-ship transfer of heavy grades of oil in areas under their jurisdiction, except when this is necessary for the purpose of securing the safety of a ship or saving life at sea, of oil tankers operating in accordance with the provisions of paragraph 5 or 6 of Regulation 13H.".*

2. The use of TBT as anti-fouling systems on ships

The IMO has adopted an international Convention (ASF Convention) prohibiting the application of TBT as an antifouling system for ships and in 2008 a total ban will take place. At EU level a regulation ensures that by January 2008 no ship which has noxious TBT paint on its hull will be allowed to enter a port of the EU. **The Black Sea, Baltic Sea and Mediterranean Sea neighbouring countries are invited to consider the earliest possible ratification of the AFS convention** and close co-operation with EU Member states and the European Commission in this field.

In order to help to find unified approaches, a 3-year project called SAFEMED will be implemented under the MEDA programme for the Mediterranean region. The general objectives of the project are to procure a sustainable improvement in the protection of Mediterranean waters against the risks of accidents at sea and marine pollution. Also it is

aimed to further reduce the capacity gap between the application of the international regulatory framework set up and developed within the IMO and the EU legislative framework, in order to ensure a coherent, effective and uniform implementation of the international rules in both the Mediterranean area and the European Union. The project will be implemented by REMPEC[31] and will cover the following fields:

- Effective flag State implementation and monitoring of classification societies.
- Safety of navigation through development of traffic monitoring systems.
- Protection of the marine environment
- Human element, a permanent source of concern for maritime safety

The development of traffic monitoring systems (VTMIS) is also addressed in the SAFEMED project. Incentives to promote a coherent information system, reducing the burden of shipping, will be further identified. The Group acknowledges the usefulness of compatible traffic management systems to monitor the activities of ships in transit in all Group sea regions. In order to avoid duplication of initiatives and to put all countries on an equal footing, **the Group invites the European Commission and the neighbouring countries, which are not beneficiaries of the SAFEMED project, to consider the feasibility of initiating a project achieving similar objectives for the period 2006-2008.**

6.3.4. Accident investigation

Today, there are no consistent procedures and practices for accident investigations in the neighbouring countries. Particularly, very few countries conduct systematic technical investigations exclusively aimed at the prevention of new casualties occurring. A harmonised approach, entirely based on IMO rules, will soon be proposed by the Commission. **The Group invites the EU and the neighbouring countries to consider adherence to procedures and best practice in order to promote co-operation in the field of accident investigation on a common basis**. In this context, the European Commission and the countries concerned are invited to investigate how training of accident investigators, the use of a common methodological approach for investigating accidents and the participation in a co-operation framework of investigative bodies could be best promoted.

6.4. Satellite navigation systems

Satellite radio navigation systems play a crucial role in enhancing the sustainability, navigability and management of transport infrastructure but also in improving safety and security for transport. With the GALILEO programme[32] comprising a constellation of 30 satellites connected to land transmitters, the EU aims at putting into place worldwide satellite navigation and global positioning infrastructure, specifically for civil purposes. When operational, GALILEO will improve traffic management, safety and security of all modes of transport by providing a solid technical base for positioning and the identification of vehicles, trains, ships and aircraft across borders all over the world. One major advantage of this space-based technology is that the users do not need to invest in expensive ground infrastructures. **The Group considers the GALILEO project and its**

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[31] Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea.

[32] See http://europa.eu.int/comm/dgs/energy_transport/galileo/index_en.htm for more details.

compatibility with the GLONASS system as presenting a particularly high strategic interest for the EU and for the neighbouring countries.

Several countries are interested in cooperating with the EU in the GALILEO programme. The agreements with China, USA, and Israel were a decisive element in promoting the system worldwide. **The Group welcomes the many on-going talks between the EU and neighbouring countries**, namely:

- the Russian Federation to ensure interoperability between their respective GALILEO and GLONASS satellite navigation systems;
- Norway, Ukraine and Morocco on a cooperation agreement on GALILEO;
- The MEDA study promoting access to GALILEO and the EGNOS[33] services;
- The launching of the Euro-Med satellite navigation project and the establishment of a GALILEO office in Cairo.

The Group recommends to the European Commission and to the relevant Group members to initiate such negotiations as soon as possible. The Group also raises the idea of using the proposed priority axis in the Caucasus (Traceca) as a pilot project to assess the benefits of the GALILEO system outside the EU.

6.5. Ensuring interoperable rail systems

Effective and efficient rail freight traffic between the EU and the neighbouring countries as well as between the neighbouring countries themselves is of great importance to sustainable economic development and integration. For railways, borders remain obstacles because of organisational differences and technical incompatibilities, which have developed since the 19th century. Time losses stemming from lack of interoperability between the national systems become even more evident with reduced customs and passenger controls and in a liberalised transport market. Gradually eliminating unnecessary delays at borders, whilst at the same time aiming at efficient controls and security levels, will be crucial for the future competitiveness and viability of railway as a transport mode.

Apart from political problems that in some cases prevent rail traffic between neighbouring countries, the Group has identified two types of problems – technical and organisational – that prevent full interoperability of rail transport between the EU and its neighbours. These obstacles affect border crossing times to a different extent, the organisational obstacles generally being the more time consuming ones. For instance, changing locomotives at a border would not take more than 10-15 minutes under ideal conditions, whilst at the moment the delays at borders are in the order of hours or even of days in some cases.

The Group highlights that in the longer term a continental railway area should be established with cross-border services under a joint authority for each border crossing to ensure quality of services to the end user. This objective can only be reached step by step, reasonably starting with the most effective measures in terms of cost and effectiveness and along the selected major transnational axes.

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33 European Geostationary Navigation Overlay Service

6.5.1. Overcoming technical obstacles to interoperable rail systems

The Group identified several obstacles in relation to technical interoperability, ranging from different track and structure gauges (tunnel widths, track clearances, platform levels, etc.) to braking and signalling systems. As it is not possible to remove all the technical obstacles within a reasonable cost and timeframe, the Group believes that by focusing on a limited number of measures, which can be implemented rapidly, noticeable improvements in border crossing time can be achieved. **The Group recognises that there are basically three ways to address the problem of different gauges and other technical standards at borders and that each of them had a role to play** depending on the existing infrastructures, traffic volumes and type of traffic crossing borders, namely:

1. Particularly as regards freight, an option is to extend the track until the nearest multimodal logistic centre in the neighbouring country. Such practice is already operational between e.g. Poland and Ukraine.
2. For border crossings with high shares of containerised transport, transhipment of just the containers becomes a viable option. Equally, in many cases changing the train seems to be an adequate solution in passenger traffic.
3. For axes that carry the heaviest and most frequent flows of non-containerised traffic special devices can be adopted at the border crossing points along the major transnational axes. Investment in special locomotives and/or rolling stock will however be required.

The European rail traffic management system (ERTMS) has been developed to overcome the problem caused by a variety of national systems, consisting of a harmonised control-command and signalling system and of a radio system for voice and data communication. Provided that locomotives are equipped, this system can be used simultaneously with existing signalling systems. **The Group appreciates the technological capacities of the ERTMS and recommends step-by-step implementation of ERTMS or an equivalent compatible solution[34], where appropriate, starting at the main transnational rail axes identified by the Group.**

The Group also recommends encouraging further technological research, e.g. in the framework of the 7th Community Framework Programme, involving the EU neighbouring countries through appropriate instruments. This research should focus on integral rail design and construction characteristics so as to ensure an operation that is reliable and can economically be developed. The interoperability should guarantee at least the existing national safety level. The research should aim at determining the best possible technical solution(s) to rail interoperability between the EU and the neighbouring countries.

6.5.2. Addressing organisational obstacles

In relation to organisational and institutional obstacles to rail interoperability, the Group came up with several problem areas, including e.g. nationally minded railway administrations, language barriers and the lack of electronic management systems.

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34 See e.g. the TEDIM project between Finland and Russia on Telematics, Education, Development and Information Management.

With the aim of streamlining border crossing procedures, **the Group suggests that common procedures be introduced as regards rolling stock acceptance based on mutual recognition and standardisation of inspection and maintenance of rolling stock.** Such support could include the relocation of technical and administrative procedures from international frontiers to nearby shunting yards or stations.

The setting up of joint border stations based on agreements on cross-border rail traffic open to all railway undertakings may in some situations be an appropriate approach to managing border-crossing formalities more efficiently. **The Group welcomes the recent agreement between Bulgaria and Serbia and Montenegro on border control and procedures for railway traffic.** This agreement establishes a common border station between the states and specifies the procedures to be applied for freight and passenger trains as well as the legal status of the official and railway personnel. **The Group recommends that similar agreements be concluded between other states by 2010 at the latest.**

6.5.3. Legal interoperability between the EU/COTIF zone and the OSJD zone

Two different legal systems[35] coexist today, COTIF and OSDJ, in the EU and the neighbouring countries. Whilst acknowledging that convergence of these two legal systems should be aimed at in the longer term, **the Group recommends that Egypt, Israel, Jordan and the Palestinian authority**, which are not yet members of either legal system, **apply for COTIF membership,** as this is the system applicable in their neighbouring countries.

The Group welcomes the on-going efforts of COTIF and OSJD to develop a unified CIM/SMGS[36] consignment note. The result of the joint work is expected to be available by the end of 2005 and the introduction of the joint consignment note is scheduled for September 2006. The objective is to use the CIM/SMGS note as a transit document to the around 200 million tonnes of freight traffic crossing the Eastern Community border every year thus reducing delays for customs formalities at the COTIF/OSJD border. (For simplification of the language regime, see proposal in ch. 6.9.1.)

The Group recommends that attempts are made to render the transport law of the EU/COTIF zone and the OSJD zone more coherent and convergent in the longer term. This could be for instance on a contractual basis for specific axes identified by the Group with highest traffic loads, in order to facilitate international transport between the two zones. Solutions for the main transnational axes should be found by 2010.

6.5.4. Interoperable telecommunication and data exchange systems

The European Commission invited the railway companies in the regions of North and South Eastern Europe, together with the CER[37] to identify constraints and propose solutions to streamlining traffic cross borders, particularly in relation to telecommunication

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35 COTIF Convention concerning International Carriage by Rail is in use in the EU, Norway and Switzerland as well as in Turkey, the Balkans, Algeria, Morocco, Tunisia, Lebanon and Syria. Iraq is also a member of COTIF. The OSJD law is applicable in the former Soviet Union countries, the Central Asian states as well as in China. The new EU Member States, Bulgaria, Romania and Ukraine as well as Iran are members of both systems.

36 CIM International Convention for Carriage of Goods by Rail in COTIF area, SMGS in the OSJD area

37 CER Community of European Railway and Infrastructure Companies

and electronic data-interchange (EDI). Several obstacles remain, ranging from insufficient advance notification or irregular arrival of trains arriving e.g. from Belarus and Ukraine at border stations in Hungary, Poland, Romania and Slovakia to non-standardised EDI systems and general lack of computerisation among traders and agents in some Mediterranean countries.

The Group recognised that there is ample scope for streamlining telecommunication and electronic data-interchange (EDI), particularly as regards traffic between the EU and countries of the North Eastern Europe region, i.e. Russia, Belarus and Ukraine. In order to optimise telecommunication interface between these countries and the EU, it raises the idea of a pilot project on the unification of information flows between the trans-Siberian mainline and the relevant EU systems, including eventually Asian countries.

The Group recommends that standardised telematic applications for freight services should be applied. The technical specification for interoperability - telematic applications for freight Services (TSI-TAF) that were developed as a response to the problem of different national telematic applications within EU territory could serve as a basis for this or even be adopted on a voluntary basis. Furthermore, the Group launched the idea of a single information environment between the EU and its North Eastern neighbours and recommends launching a pilot project on the trans-Siberian mainline and the northern EU Member states, involving potentially also South-Eastern Asian countries.

6.6. Inland waterways

6.6.1. Benefits of inland waterway transport

Inland waterway transport plays an important role in the transport of goods both in the countries of the European Union and in several of the neighbouring countries in Northern and South Eastern Europe as well as along the Nile in Egypt.

Whilst inland waterways enjoy substantial surplus capacity, and are thus in a position to absorb a large proportion of the growth in goods traffic within the European Union, the Russian network is severely congested. The removal of bottlenecks in the inland waterway network is thus important. In addition, inland waterway transport can strengthen its competitive position if logistics processes are improved. Systems derived from communications management, information technology and traffic management can also play a role in optimising the use of inland waterways. They will assist in driving efficiency right through the chain, and in allowing more secure processing of traffic and goods using inland waterways.

Inland waterway transport is particularly energy efficient; its energy consumption per ton-kilometre of transported goods corresponds to one sixth of the consumption on the road and to half of that of rail transport. Its noise and gaseous emissions, as well as other external effects (e.g. accidents, congestion and other environmental impacts) are modest. Inland waterway transport ensures a high degree of safety, in particular when it comes to the transport of dangerous goods. Finally, it contributes to the decongestion of an overloaded road network.

6.6.2. Interoperable traffic information and management systems

In order to improve the safety, security, and efficiency of traffic and transport operations, River Information Services (RIS) are currently being developed along the main European waterways. At EU level, a directive establishing a framework for a harmonised and interoperable development and deployment of RIS, shall ensure interoperability with other modal traffic management services including vessel traffic management and information services. The implementation of this directive will be an important step for the inland waterway industry in Europe. The directive is designed to set up a Community framework for applying river information services on the inland waterways in the EU.

The Group considers that special attention should be paid to traffic information management infrastructure and **recommends that implementation of traffic information systems should be pursued and their compatibility ensured, including with the RIS of the EU**. This will be essential not only for the safety and security of transport, but also in order to facilitate the transition to other transport modes.

6.6.3. Common rules and open access

The Group considers that harmonisation of rules in inland waterway transport should be another priority. Safety standards should be harmonised to guarantee a high safety level for inland waterway transport. **The Group welcomes the establishment of an overall institutional framework, in which neighbouring countries could participate, as a useful tool.** Such an institutional framework would be responsible for preparing harmonised rules on the entire EU waterway network, including the Rhine and Danube. The establishment of this framework would include discussions with the existing international Commissions on the Rhine and the Danube.

The Group proposes to the EU Member states, the acceding countries and the neighbouring countries to mutually open access for international traffic to the inland waterways, especially along the major axes adopted by the Group. This should be done in conjunction with removal of bottlenecks. This could be implemented e.g. through a multi-lateral agreement. In this connection special attention should be paid to the on-going review of the Beograd Convention of 1948 relating to the navigation on the Danube. This review, which is about to reach a decisive stage, should consider the possible accession of the European Union to the revised Convention.

6.7. Road transport

6.7.1. Traffic management systems

In spite of the EU policy priority for modal rebalancing, which will take time to materialise, road transport will continue to be the dominant mode. A better management of road transport can contribute to make this mode as efficient as possible by reducing congestion and environmental nuisances and by making it safer.

In this respect, good progress has already been made at the European level in the deployment of efficient road traffic management systems. **The Group recommends this progress to be continued and extended to the neighbouring countries.** Further cooperation may also include co-ordinated activities in relation to traffic management systems and intelligent transport systems (ITS), which will substantially facilitate the

transport of people and goods. These applications represent a real opportunity to improve road safety and to combat pollution and congestion.

6.7.2. Road safety

Ensuring efficient and sustainable road transport between the EU and the neighbouring countries requires looking at measures to improve road safety, vehicle dimensions and standards as well as visa questions for professional drivers to reduce unnecessary delays at borders. The most important issues of road safety related to the Group exercise are:

- As far as driver behaviour is concerned, it will be very important for the countries to consider the training of drivers, the issue of driver's hours and frequent controls by the appropriate authorities; efficient education and enforcement are key elements.

- Regarding vehicle safety, an efficient system for vehicle controls should be applied, both through periodic roadworthiness tests and, for commercial vehicles, technical roadside inspections.

- As to road infrastructure, safety should be systematically considered at all stages. For new investments, an impact assessment should be done at the pre-design phase and an audit at the design phase. For existing infrastructure, inspection is paramount to allow identifying the most dangerous stretches of roads ("black spots") to be eliminated as priority.

The Group recommends that special attention in the EU cooperation programmes should be given to the implementation of road safety concerns in the national transport plans of the neighbouring countries, e.g. through technical assistance and twinning. In this context, the Group notes, amongst others, the initiative of the Italian EU presidency to organise since 2003 annual road safety meetings in Verona involving EU Member states, EU candidate countries, Russia and the USA.

6.7.3. Vehicle dimensions

Compatible and stable legislation on maximum authorised weights and dimensions for certain road vehicles is important as differences between States could have adverse effects on competition and constitute an obstacle to traffic between countries. A balance is, however, necessary between rational and economic use of commercial road vehicles and requirements on infrastructure, road safety and environment. To ensure effective transnational traffic, **the Group considers it important to gradually upgrade the major international road network, starting with the major axes, to accept vehicle dimensions of 11.5 tonnes maximum authorised axle load and a maximum height of 4 meters**. Priority should be given to the major axes identified by the Group as a first step in a gradual implementation programme.

6.8. Air traffic management

The aviation sector is often the predominant mode of transport for passenger movements between Europe and the neighbouring countries and it is growing rapidly. Efforts should thus be made to develop future air traffic management systems, which ensure the highest levels of safety and efficiency. **The Group recognises that the development of air transport in the countries adjacent to the EU presents a clear strategic interest for**

both the EU and the neighbouring countries, particularly in a context of rapid traffic growth. This depends upon the economic and political relations and, for the air transport sector, the quality of the services, including safety, of the airlines and the air transport service providers.

The EU has adopted the *Single European Sky* (SES) legislative package and supports research and development in a new generation of interoperable air traffic management systems through the SESAR (formerly SESAME) project, aiming to replace the different national systems with a harmonised 'European system'. The aim is to consolidate the organisation and use of airspace, introduce common operational solutions and new technologies, develop interoperability requirements for the existing systems, standardise and progressively implement 'target' architecture for the future European air traffic management system. To improve individual airport capacity and efficiency, local implementation of new technologies and operational solutions are being developed. Interoperability between these local solutions needs to be ensured to maximise benefits for the system efficiency at a European level.

The Group recognises the problems posed by traffic growth, fragmentation and constraints on the airspace and the potential benefits of the SES initiative. It proposes the development of an efficient air traffic management system, ensuring interoperability with that implemented over the EU. This development should be accomplished in a context favourable to the emergence of new areas of co-operation. In certain cases, the solution probably passes through the development of functional airspace blocks, in other cases, solutions could be "more traditional" such as controller training, installation of new radars and/or of new ATM systems, increase in the capacity of the existing infrastructures or adaptation of the aeronautical route network.

The Group considers it very important to associate neighbouring countries in the development of the Single European Sky in order to ensure a harmonious development of air transport at a continental level, and beyond. Therefore the Group wishes to keep the neighbouring countries informed of the progress achieved in the setting up of the Single European Sky, the SESAR project and the satellite navigation systems which may support with their applications the implementation of the Single European Sky. **The Group recommends the extension, where appropriate and justified by traffic demand, of the Single European Sky initiative to the neighbouring regions along with the further enlargement of the EU or on a voluntary basis.** Such an extension over the high seas should be subject to regional air navigation agreements according to the ICAO[38] rules and regulations.

The Group welcomes the establishment of a working group to investigate and potentially implement the functional airspace block approach in the South East of Europe (SES-SEE initiative[39]). **It recommends to the concerned countries of South East Europe to actively involve themselves in the functional airspace block approach**, to support the above investigations and based on positive results to endeavour setting up a functional airspace block in this region as a concrete driving factor for the extension of the SES to

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38 International Civil Aviation Organisation

39 The Group will comprise of two representatives of the Directorates General of Civil Aviation of the participating States and UNMIK/Kosovo, the Stability Pact, Eurocontrol, ICAO and NATO, and could be open to other States and international organisations. Italy and Greece as well as Turkey have expressed their wish to participate.

South East Europe. Furthermore, the Group invites the EU to take into account in the appropriate instruments the necessary support for the implementation of the initiative.

The Group welcomes the progress made in the negotiations for a Euro-Mediterranean Agreement on air transport between the EU and Morocco, and wishes a final agreement can be reached soon. By signing the agreement, Morocco will transpose the *acquis* in the aviation field, and in particular the Single European Sky legislation.

6.9. Facilitation of transport by removing non-physical barriers

6.9.1. The aim: seamless traffic across borders

Besides physical barriers there are various types of non-physical barriers, which are creating bottlenecks in the transport chain between the EU and the neighbouring countries. Some of these barriers are related to administrative procedures and border control procedures, such as slow customs clearance, language barriers, actions in contradiction to international agreements e.g. infringements of the TIR Convention, safety and security deficits, also in terms of law security. They result in lost time and profits, which in turn lead to increased prices of the transported goods, restricted personal travel (tourism, business travel) and to the usage of alternative often longer routes. Ultimately the economic development of the countries responsible for such barriers will be affected. **The Group therefore stresses that the aim should be to achieve the development of homogenous axes between EU and the neighbouring countries as far as transport facilitation is concerned.**

6.9.2. Customs controls and procedures

Customs controls, which nowadays include the fight against international crime and terrorism in addition to the traditional role with regard to the levying of import and other duties as well as veterinary and phyto-sanitary controls, sometimes cause delays at border crossing points. Customs authorities have to strike the right balance between, on the one hand, the need to protect the citizens' security and safety, while on the other, facilitating the flow of goods. To meet this difficult challenge, the development of international standards covering all means of transport within the framework of international fora have not only to be applied between the EU and its neighbours but also between the neighbouring countries themselves.

The harmonisation of international standards in the area of advanced electronic customs information, the standardisation of data requirements for customs declarations, the use of risk management and risk based control procedures, and the interoperability of customs systems, would all contribute to a level playing field, which would reduce delays to the movement of goods and passengers.

As a first step, to facilitate international trade and traffic, **the Group agrees that all transport and trade related documentation should be mutually recognised in the language of the country concerned and in English, or in a mutually agreed language.** In the longer term these documents should also be harmonised in form.

In parallel, **the Group recommends realising the potential benefits offered by the International Convention on the Harmonisation of Frontier Controls of Goods** in order to improve national and international co-ordination of control procedures and so to

reduce delays and backlogs at the frontiers. In particular, it is suggested to undertake controls by customs and other control services in a harmonised manner, to endeavour to arrange for joint control of goods and documents, through the provision of shared facilities, and to endeavour to ensure corresponding opening hours of frontier posts, corresponding control services working there and corresponding categories of goods, modes of transport and international customs transit procedures accepted or in use there.

To speed up custom passage by freight operators and reduce the time of the whole journey the **Group stresses that the pursuit of customs modernisation must continue.** This should be done using as a reference, as much as possible, the rules and recommendations of the revised Convention on the simplification and harmonisation of customs procedures (Kyoto Convention), in particular with regard to the application of risk based customs control, including safety and security of goods imported, exported or in transit and *a posteriori* control. This can be achieved by providing the custom administration with sufficient internal or external laboratory expertise as well as sufficient operational capacity in information technology. Also additional training of customs officials and strengthening of the computerisation of the customs administrations would be necessary.

Particular attention has to be given to activities intended to reduce unnecessary administrative regulations and obstacles hampering the flow of traffic. More concretely the **Group calls on the customs authorities to profit to the maximum from the advantages offered by the International Convention for transport of goods, the TIR procedure**, and to apply this procedure properly in order to decongest borders, revising the present operational procedures and practices of this regime if necessary.

As far as veterinary control is concerned, **the Group proposes to extend the use of the "Traceability system for traded and imported animals and products of animal origin"** (TRACES[40]) **to the neighbouring countries** for the certification of exported animals and products of animal origin to the EU in order to speed up the administrative procedures following sanitary control at the EU border inspection posts. Also in order to facilitate the administrative procedures for the export from EU to the neighbouring countries, it is recommended to set up TRACES at the border inspection post of the neighbouring countries for receiving information from EU Member states for their exported goods.

6.9.3. Promotion of a "one-stop office"

Practical measures like the improvement of the infrastructure of border crossing points and the joint use of buildings by neighbouring customs offices ("one-stop-shops"), the setting up of fast lanes for transport carrying goods moved under international transit arrangements (e.g. TIR) are all measures that will also improve the situation at the borders.

Especially for ports, **the Group recommends that customs authorities commit themselves even more to implementing the electronic concept of «one-stop office»**, in co-operation with the port authority (or the equivalent organisation) and the other public border control services. An action proposed could be regional projects aiming at promoting

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40 TRACES is compulsory from the 1st January 2005 for the 25 EU Member States plus Norway, Switzerland, Iceland, Andorra, San Marino

the development of Electronic Data Inter-exchange systems (EDI) in the various neighbouring regions.

The Group also calls for the development of a single window approach for all international trade related documentation and control starting by increased co-operation between customs services and other agencies working at the border. This approach will be further facilitated by the simplification of the language regimes, as agreed by the Group (see above ch. 6.9.2).

6.9.4. Facilitation of maritime transport

The Group is concerned with the documentary procedures used in maritime transport that hamper the development of the mode to its full potential in the various sea areas and unnecessarily slow down trade between the EU and its neighbours as well as between the neighbouring countries themselves.

The IMO Convention on Facilitation of International Maritime Traffic ('IMO FAL Convention') has provided a set of models for standardised facilitation forms for ships to fulfil certain reporting formalities when they arrive in or depart from a port. Whilst most countries use these facilitation forms, they are, however, not applied in a uniform manner. The EU countries have recently succeeded in reducing the number of documents required from more than one hundred to five[41] for vessels on arrival in and/or departure from their ports.

The Group recognises that uniformity in the forms required should facilitate the documentary procedures for port calls and be beneficial to the development of shipping. For this purpose, **the Group recommends the adoption of the five IMO FAL forms now in use in the EU with the aim of replacing all existing documents by 2008 at the latest.** The categories of information in them should be recognised as sufficient proof that a ship has fulfilled the reporting formalities these forms are intended for. As already mentioned above (ch. 6.9.2), the Group agrees that also these forms should be mutually recognised in the language of the country concerned as well as in English, or in a mutually agreed language.

6.9.5. Visa questions

As far as the movement of people is concerned, this is determined by the Schengen agreement, adopted in the 1990's in the EU[42]. A European Agency has been created for the management of operational co-operation of the external borders of the EU for the control of persons. A new regulation is currently under discussion, which would establish a Community code on the rules covering the movement of persons across the borders. Movements of people, living close to the external borders of the EU and frequently crossing the EU borders should be facilitated without hampering the effectiveness of border controls. This situation is frequently dealt with on a bilateral level[43]. The new

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41 Directive 2002/6/EC of the European Parliament and of the Council of 18 February 2002 on reporting formalities for ships arriving in and/or departing from ports of the Member States of the Community

42 The EFTA countries Norway and Iceland also participate in the Schengen agreement.

43 The Group welcomes the finalisation of texts of the Agreements between the Russian Federation and the European Community on facilitation of visa procedures and on readmission and expresses its hope that these documents will be signed and enter into force in the near future. Taking note of the successful operation of Facilitated railway travel

regulation would also determine the framework under which these bilateral agreements could be endorsed.

Under the same spirit, among the issues analysed by the Group, was the possibility for professionals of the rail and road sector to obtain facilities to cross borders similar to those for pilots and merchant seamen. **The Group raised the idea of an international drivers' permit that would grant similar advantages as for instance for marine crew.** Such a permit would allow speeding up the border-crossing delays which currently are slowing down trade whilst at the same time ensuring that common standards apply e.g. to the inclusion of safety in the training programme of drivers.

6.10. Security

Events in the world have undeniably demonstrated the vulnerability of the transport system to terrorism, creating a pressing need for a sector-specific approach to security. Extending the trans-European networks beyond the borders of the EU may have two different implications for security. Firstly, the extended connections *per se* may be a target for attack. Secondly, security inside the Community may be affected by reinforcing the connections. This second dimension goes further than transport security only, and one of the main policy tools in the area is efficient border control.

Efficient security measures will not only protect persons and goods, transport means and infrastructure, but may also facilitate transport operations and reduce unnecessary delays to transport. Efficient security and border controls are also a means to fight against all sorts of smuggling, illegal migrants, trafficking of human beings, weapons and drugs.

International co-operation is a key aspect of transport security. It shall be fostered in order to create and maintain a high-level, uniformed and constant security presence on the major axes adopted by the Group and using appropriate technical surveillance systems including particularly satellite navigation systems (GALILEO).

However, as final consumers, factories or storage facilities are in general not located on the main axes, security measures cannot be limited solely to the main axes: it depends on the implementation of more general security measures across the entire territory of the EU and neighbouring countries. Under the framework of the Organisation on Security and Co-operation in Europe (OSCE) these issues are being addressed.

The Group suggests to take the necessary steps to introduce, apply and control security measures (for example measures to ensure the integrity of freight along the transport chain) **and to ensure a sufficient level of coordination between enforcement authorities, customs and transport operators.** It also undertakes to take measures to identify suspicious consignments in order to focus checks on them, and to take measures to identify persons responsible for security along the transport chain) resulting from the relevant international agreements and standards (ISO standards). The countries are committed to participate in the Fora where these international agreements are adopted and to give priority to the elaboration of multilaterally agreed security solutions.

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documents (FRTD) system, the Group stresses the importance of ensuring facilitated movement of people between Kaliningrad and mainland Russia and expressed its hope that the conditions thereof will not worsen after coming into force of the abovementioned Agreements between the Russian Federation and the European Community and the accession of Lithuania to the Schengen agreements

The Group recommends carrying out common security exercises and twinning between security enforcement authorities and infrastructure managers of the EU Member states and neighbouring countries with a view to improving confidence and security and bringing about the necessary occupational liaisons. Also joint surveys should be carried out in coordination with international organisations at border crossing points of the trans-national axes in view of improving detection of illegal trafficking from the neighbouring countries to EU and vice versa.

The Group agrees with the importance of performing a security assessment at the design stage for all new transport infrastructures on the transnational axes, to introduce security audits and emergency plans for the existing infrastructure, focussing first at the major transnational axes and to create the necessary operational liaison with their neighbours. EU and neighbouring countries shall rapidly set up permanent operational liaison between their competent services and companies based on state-of-the-art protocols and procedures. The Group takes note that the EU will only finance projects, which have benefited from security audits; should these audits show that there are security concerns, security plans shall be established and approved and financed by the beneficiary countries prior to the first disbursement.

7. OPTIONS FOR FINANCING

Funding transport investments is a difficult issue worldwide and budgetary constraints will continue to weigh heavily on the public sector's capacity to finance necessary transport investments. These problems are particularly acute in the Group countries, which are faced with a funding problem: transport networks need to be adequate if they are not to hamper economic development, but difficult financial conditions coupled with public deficits makes it difficult to improve them. As a consequence, the countries do not benefit fully from international trade and economic growth is slowed down. The Group therefore decided to examine the potential of various financing sources in providing the necessary funding for the priority investments put forward by the Group.

7.1. Support from public budgets and international financing institutions

7.1.1. European Commisison support

At present Community assistance and cooperation is delivered through more than 30 different legal instruments[44] and through the arrangements set out for the European Development Fund[45] in the Cotonou agreement. The overall contribution of these instruments to the transport sector in the Group countries amounts to some € 300 million annually. The possibilities for the Community to finance infrastructure investments in the neighbouring countries through the current financial instruments are however limited and

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44 In addition a number of thematic instruments, the most important regional instruments for the High Level Group countries are: CARDS (Community Assistance for Reconstruction, Development and Stabilisation), which covers the 5 Western Balkan countries; TACIS (Technical Assistance for Commonwealth of Independent States) programme provides grant-financed technical assistance to 12 countries of Eastern Europe and Central Asia; and MEDA, which is the principal financial instrument of the European Union for the implementation of the Euro-Mediterranean Partnership (the Barcelona process) in the Mediterranean region.

45 The EDF covers countries in Africa, Caribbean and Pacific (ACP).

the assistance provided has been mainly in the form of studies, training and assistance for administrative capacity building.

The Community is currently preparing the priorities for the period 2007-2013 and for external cooperation a gradual increase, up to 40% from 2006 to 2013, has been proposed[46]. In this proposal the Commission also suggests replacing the numerous regional and thematic instruments by just six instruments[47]. It is foreseen that these new instruments will operate in the framework of the existing bilateral cooperation agreements between the Community and the neighbouring countries. As today, Community support would be limited to a large extent to technical assistance and support to institution building but in certain cases it could go beyond and include limited investments in critical infrastructures, notably cross-border, or in key horizontal measures.

The Group welcomes the Commission's effort to simplify and rationalise its legal instruments for external cooperation. **The Group stresses the need to ensure good articulation and synchronisation of the new instruments** in the planning and implementation phases so as to ensure the continuous and harmonious development of policies and extension of networks, particularly along the priority transnational axes identified by the Group.

A specific and innovative feature of the instruments is the cross border co-operation component the aim of which is to finance joint programmes bringing together regions of the EU Members States and partner countries sharing a common border. **The Group notes that these actions could be particularly relevant for the implementation of the horizontal measures proposed by the Group.**

The Group also emphasises the importance of adequate budget allocations for the transport sector, particularly to ensure adequate maintenance of the existing core network and including also investments in critical, mainly cross-border infrastructure. **It reminds its members to ensure that the priorities identified by the Group are adequately reflected in country strategy documents** and other policy planning documents, when overall cooperation strategies are being prepared for the countries.

7.1.2. Important role of the Banks

In the neighbouring countries of the EU, the role of the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD) and the World Bank is crucial in funding transport infrastructure investments. Whilst the World Bank and the EIB are active in almost all of the Group countries, the EBRD has a more limited geographical scope.

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46 Communication on *European Neighbourhood Policy, strategy paper*

47 These are: (i) Instrument for Transition and Pre-Accession will cover the candidate countries (Turkey and Croatia) and the potential candidate countries (the Western Balkans); (ii) European Neighbourhood and Partnership Instrument addressing Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Palestinian Authority, Russian Federation, Syria, Tunisia and Ukraine; (iii) Development Cooperation and Economic Cooperation Instrument, (iv) Instrument for Stability, (iv) Humanitarian aid regulation; and (vi) Macro economic assistance mechanism.

European Investment Bank[48]

The EIB's loans to transport sector investments in the Group countries amount to approximately € 3,220 million over the period 1995-2005. The modal balance of infrastructure investments was some 72-78% for road, 13-20% for rail, 2-6% for ports, and 6-7% for airports and air traffic control.

EIB's main lending focus in the sector lies in the provision new and rehabilitation of existing physical infrastructure and associated assets. It will generally advise promoters, authorities and other participants on how to improve the efficacy of their investments through associated organisational, managerial and other measures. In some cases, this has been accomplished with support from EIB technical assistance funds, especially under FEMIP in the Mediterranean region. In other cases, the EIB has co-operated with EU programmes, such as PHARE or the European Agency for Reconstruction.

All projects financed by EIB are subject to a full technical, economic, environmental and financial due diligence on the basis of studies provided by promoters. This due diligence also includes, *inter alia*, aspects of appropriate procurement, environmental compliance, regulatory and legal issues.

European Bank for Reconstruction and Development[49]

The EBRD has currently almost 70 on-going projects in the countries concerned with an overall budget envelope of € 2,284 million; 57% of the investments are in road, 21% in rail and 13% in waterborne transport.

The EBRD has financed projects aimed at reducing bottlenecks and/or border crossing times (e.g. Brest-Minsk highway in Belarus) but has also supported institutional development of "soft measure" by securing funding through technical cooperation funds. The EBRD has actively been, or is actively involved in financing specific projects along the main transnational axes in Belarus, Ukraine and in Croatia, Serbia and Montenegro, former Yugoslav Republic of Macedonia as well as in Bosnia and Herzegovina, Croatia and in Albania.

The EBRD insists on high quality projects, and selects feasible projects according to their transition impact and ability to bring additional value to them. The Bank must constantly ensure its projects have a "multiplier effect", such as demonstrating additional benefits to the local economy, mobilising co-financing or relieving infrastructure bottlenecks.

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48 The EIB is active in Turkey and in all of the Western Balkan countries. Following the Barcelona European Council in 2002, a reinforced investment mechanism (FEMIP) in favour of the Mediterranean region was also set up within the EIB. The extension of the EIB's lending mandate to cover Russia as well as Belarus, Ukraine and Moldova has recently been adopted.

49 The EBRD is active in Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Georgia, Moldova, Romania, Russian Federation, Serbia and Montenegro and in Ukraine.

World Bank[50]

There are currently almost 50 projects, either on-going or in the pipeline, funded under the trade facilitation and transport instrument of the World Bank in the countries concerned with an approximate lending amount of up to $ 2,150 million. These projects typically aim at reducing transport costs and improving access, mainly on roads, and at restructuring the transport sector in view of trade facilitation and economic development.

World Bank's main vehicle for making strategic choices about its program and resource allocations for individual countries is the Country Assistance Strategy, which is based on extensive analysis of the economic and social situation of the country concerned in view of poverty reduction. Lending limits are determined e.g. by the creditworthiness of the country in terms of its fiscal space/debt position and individual projects are subjected to an extensive and rigorous assessment of their micro-economic viability, and their macro-economic fit, given the often constrained public finances in these countries.

The World Bank is also active in financing horizontal measures across borders. A good example is the programme on Trade and Transport Facilitation in South-East Europe[51], which is a collaborative effort between the national governments, the World Bank and the US with the collaboration of the EU. The programme was designed to foster trade by promoting more efficient and less costly trade flows across the countries of the region, and the introduction of European Union-compatible customs standards.

7.1.3. The proposed complementary role for Community support, Member states' and the Banks' involvement

The Group recognises that the EU together with the Banks and the neighbouring countries share the same objectives – sustained trade and economic development through better transport systems – and that they can work together to meet them more effectively. It also acknowledges that the capacity of the countries to mobilise the necessary funding, both at the national level and internationally, will be the key factor for successful implementation of the major axes. **The Group recommends that the European Commission, the EU Member states as well as the Banks focus their cooperation and financing actions on the priority axes, sound and feasible projects as well as on the horizontal measures put forward by the Group.**

To achieve this, **the Group recommends the EU and the Banks continue building their strategies and programmes in line with strong complementarity between their respective strengths.** These include e.g. financing capacity vs. project implementation capacity or political and institutional knowledge vs. technical and development knowledge. The Group also recognises that there are areas of common competence between the Banks as well as between other international financing institutions, and invites the Banks to reflect upon a new collaborative arrangement to advance the common objectives. The example of the Western Balkans where the Banks cooperate in the framework of the Infrastructure Steering Group with the European Commission and other partners may inspire this cooperation.

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50 The World Bank is active, to a greater or lesser extent, in all of the countries of the Group, with the singular exception of Israel.

51 The programme includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the former Yugoslav Republic of Macedonia, Moldova, Romania and the State Union of Serbia and Montenegro.

7.2. Role of public-private-partnerships

Investments in the transport sector are particularly complex. They are characterised by lengthy planning and implementation phases whilst the benefit stream is often spread over many decades. Therefore only certain types of transport infrastructure projects can be financed with private capital. Whilst some major roads, airports and ports in densely populated regions may lend themselves for partial private financing and provision of services, investments in regions with low traffic volumes as well as in railways and inland waterways always require a stronger public sector contribution to become financially viable. **The Group thus acknowledges that public sector involvement in transport infrastructure financing remains crucial.**

The Group emphasises that sound economic analysis is fundamental to a successful PPP and that robust demand and tariff studies are particularly important, capacity and the technical characteristics should not be over-dimensioned. Setting up a PPP scheme cannot turn a weak project into a stronger one.Complementing public funds with private capital in the form of a public-private partnership (PPP) can nevertheless have an essential virtue. PPP projects require greater transparency of the procurement process and costs and can thus encourage the public authorities to more strict and efficient management practices leading to savings in overall project costs.

PPPs still face major economic, legal and, in some cases, political obstacles that make it often difficult or even impossible to set up a PPP scheme. PPP arrangements work best where there is an explicit policy commitment by national governments to involve the private sector in projects that have traditionally been carried out by the public sector. When examining the potential role of PPPs in the implementation of the priority projects, the Group has identified a range of key issues that required a more detailed analysis.

7.2.1. Clear and transparent legislative framework

Public procurement

The prerequisites for private sector involvement in transport infrastructure investments are a clear legal environment and its strong enforceability. The most important qualifications for the public procurement legislation are openness, transparency and equality for all parties involved. Open competition, with the possibility of a structured international tendering process, is a prerequisite for higher quality proposals and best value for money for the government. A simple, yet efficient way to increase the openness and transparency of the bidding process is to present the bidding rules and selection process in the bid documents.

In a number of EU Member States, a start has been made to provide private sector investors with a legal framework commensurate with the challenges of PPPs at the national level. This has been done e.g. in the UK, Spain, France and Portugal through the establishment of PPP guidelines, specific PPP laws or revision of existing concession and procurement legislation. Also, the EU recently adopted a new legislative package[52] on public procurement to further benefit from private sector skills and experience.

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[52] The package includes: Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services

The Group underlines the primordial role of transparent and clear public procurement legislation in attracting private sector financing - both national and international - to transport sector investments. **It urges all the countries concerned to put in place such a legislative framework or to review the existing national legislation in the light of international best practice**, particularly in the EU and by the Banks.

Cross border projects

Although international cross-border PPP projects are still rare in the transport sector, their share is bound to increase in the future. However, today no legislative framework exists for international cross-border projects and the setting up of an international project involving several states is typically a complex and lengthy process requiring the signing of an international agreement. **To respond to the increasing role of cross-border investment projects, the Group considers that it would be important to address the gap in the legal framework and come up with a common framework.** This could be for example in the form of Community legislation for the territory of the EU. For projects crossing the borders of the EU and a neighbouring country, provisions could be incorporated into existing bilateral or multilateral cooperation agreements between the countries concerned and the EU (see also ch. 8.3 on coordination modalities).

7.2.2. Sound financial package

Managing public spending

Sound management of public spending focuses on achieving value-for-money and ensuring fiscal space. It is also a precondition for sustainable economic growth and to avoid major shocks to the national and global economy and financial markets. Sound fiscal policy is also a public policy requirement put forward by multilateral surveillance institutions, including the international financing institutions. **The Group acknowledges that sound public spending combined with a more commercial transport sector management are keys for the success of PPP initiatives.**

Efficient use of PPP schemes in delivering necessary transport investments can help to ease the pressure on public finances and deficit and to contribute to more stable economic growth and the emergence of a viable private sector industry. **The Group is of the opinion that risks in PPP schemes should be appropriately allocated between the public and private sector and recommends the adaptation of national accounting systems to reflect this according best practice of the EU and the financing institutions**, notably the International Monetary Fund (IMF)**.**

Infrastructure charging

Development of the transport system is part of sound management of public spending. The traditional way of financing the sector through annual public budgeting is not suitable for PPP schemes that typically require commitments over many years. Several ways of ensuring sufficient financing of transport infrastructure and services exist. **The Group recognises the need to tailor the financial package of a PPP project to the local context and specificities of the project**, particularly with regard to transport demand,

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sectors; directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts. On 30 April 2004 the Commission has furthermore adopted the Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions (COM(2004) 327, 30.4.2004)

investment cost and plans in alternative modes and competing corridors. The Group emphasises the primordial role of public budgets and the need to ensure transparent and non-discriminatory charges.

The reliance on taxation is not the best instrument to address the growing problems of congestion and environmental damage in an optimal way. Infrastructure charging, whereby tariffs vary according to the costs caused by the use of the transport system, would allow combining the objective of financing of infrastructure with the aim of managing traffic and its negative side effects. The European Commission has advocated a reform of transport pricing for over a decade. In the EU such a charging policy is already implemented in the rail sector and the revision process is on-going for the road sector, where a distance based charging scheme is proposed for heavy goods vehicles[53], whilst it is still to happen in the air and maritime sectors. **The Group proposes to examine the feasibility of a distance related user charging system whereby revenues are ear-marked to an investment fund covering the major axes as identified by the Group.**

The Group recognises that in some cases inconsistencies occur in pricing/tariff systems, which lead to choices of routes, which are not necessarily the shortest or the most economical. Particularly in relation to traffic between the EU and China, it is required for the development of sustainable transport systems that pricing gives an incentive to customers to choose the shortest connections irrespective of the national interests of transit countries. **The Group stresses the importance of stable transit conditions and transparent, cost related, efficient and predictable pricing principles throughout the EU Member States and the neighbouring countries.**

Guarantees

Risk allocation lies at the heart of an effective PPP design. The well known principle is that risk[54] should be borne by the party best able to manage its costs most effectively. Each project is, however, different and an individual risk allocation must be carefully examined. Guarantees provide an essential service for loan activity since they cover associated risks. Sovereign guarantees may therefore ensure the flexibility needed to cope with the current budgetary constraints and to ensure a successful PPP scheme. **The Group suggests to all the countries concerned to examine the feasibility of a different guarantee schemes as a complementary part of the financial package of PPP projects.** The international financing institutions have a particularly useful and wide experience in this domain and should be involved as an inherent actor when setting up a PPP project.

The Group is of the opinion that non-commercial risks may be particularly acute in many of the regions neighbouring the EU. This is especially the case when projects are cross-border in nature or when delays in investment in one country create bottlenecks and affect the viability of an investment in another country. **The Group therefore suggests that the Banks together with the EU analyse the feasibility and the usefulness of regional Guarantee Trust Funds to manage such risks.**

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53 The so-called Eurovignette proposal. In the road sector, Austria and Germany have already taken the first steps and implemented a kilometre based charging scheme for heavy goods vehicles that vary according to the environmental characteristics of the vehicle.

54 The risks include typically commercial (construction, demand) and political risks.

7.2.3. Exchange of best practice

The Group underlines that private financing is not a panacea. However, public-private-partnerships have demonstrated their usefulness in certain cases, e.g. in the development of motorways, ports and airports in certain regions as well as in large scale technological projects. The Group believes that the experience gained in the EU, by the Banks as well as in countries neighbouring the EU can be mutually beneficial.

The Group therefore recommends regular exchange of best practice on PPP projects with a focus on addressing efficient solutions to the key issues identified by the Group. As a first step **the Group proposes that the international organisations like the Banks and the European Commission organise a series of regional workshops to discuss project financing** in more detail, to present successful and innovative PPP schemes and to make recommendations on how the legal frameworks could be improved and brought closer together. Such a seminar was jointly organised by the European Commission and Russia in Moscow on 28 October 2005 to discuss transport financing and PPPs, international experience and legislative issues. Ultimately the outcomes of such workshops could be translated into a PPP handbook for transport investment projects.

8. COORDINATION MODALITIES

8.1. Aim and existing mechanisms

Coordination of actions and investments along a transport axis is an important part of the process of improving the functioning of the axis. Coordination makes it easier to synchronise investments, plan cross-border projects, agree on measures to eliminate non-physical barriers etc. The objective of the coordination is to ensure that especially the axes and projects, but also the recommendation on horizontal priorities, that have been agreed by the Group are implemented in a coordinated and timely fashion.

There are various types of coordination mechanisms in existence both inside and outside of the EU.

Trans-European transport networks

Inside the EU, the revised guidelines for the development of the trans-European transport network (TEN) called for the appointment of European Coordinators, who will be responsible for the facilitation of implementation of the TEN priority projects along a major transport axis. The tasks of the Coordinators are to:

- promote joint methods for the evaluation of projects,
- advise project promoters on the financial package for the projects,
- draw up a report every year for the European Parliament, the Commission and the Member States concerned on progress achieved in the implementation of the project(s),
- consult regional and local authorities, operators, transport users, and representatives of civil society with a view to gaining fuller knowledge of the demand for transport

services, the possibilities of investment funding and the type of services that must be provided in order to facilitate access to such funding.

The Commission has high expectations of the European Coordinators in facilitating and speeding up the implementation of the major TEN-T axes/projects. **The Group considers the model of the European Coordinators interesting and suggests that the Commission explores whether they should cooperate with the neighbouring countries along a major axis.**

Pan-European Corridors

As a way of coordination, for each of the pan-European Corridors a Memorandum of Understanding (MoU) was signed by the countries concerned and by the Commission. This in turn set up a Steering Committee, composed of representatives of national Ministries of transport and the European Commission. From amongst the members of the Steering Committee a Chairperson was elected and quite often the country of the chair also provided the Secretariat for the Corridor. These instruments have been the main way of coordination, cohesion and continuity for the development and implementation of each Corridor.

Following the enlargement of the EU in 2004, the pan-European Corridors are mainly within the EU territory and thus parts of the trans-European transport network. For example most of Corridor I is now a TEN priority project (n^{o} 27) and a European Coordinator has been nominated to facilitate its implementation.

In South Eastern Europe, the countries have developed the pan-European Corridors further and defined a core regional transport network and are actively implementing it in the framework of an MoU. This MoU follows closely the model of the Corridor MoUs, but in addition a Transport Observatory has been established, which acts as a Secretariat for the Steering Committee and provides technical expertise and monitoring. In South Eastern Europe the international donors, led by the World Bank and the European Commission and including other donors active in the transport sector, have set up an Infrastructure Steering Group to coordinate donor activities at the regional level.

The Group notes that the Pan-European Corridors/Areas have been successful in varying degrees and much depends on the personalities of the people involved. **The Group thus recognises that there could be a need to further develop the cooperation and coordination framework beyond the MoU structures.**

North South Corridor

Regarding the North-South transport corridor an intergovernmental Agreement is in place since 2002, binding 7 countries. Armenia, Azerbaijan and Syria are completing their accession to this Agreement. Bulgaria, Turkey and Ukraine have applied for joining the Agreement. **The Group takes note of the cooperation framework for the implementation of the North-South corridor.**

Traceca Corridor

For the development of the Traceca[55] Corridor, the participating countries signed an international agreement in 1998 setting up a clear framework for cooperation including an Inter-governmental Commission with a Permanent Secretariat. However, the role of the national governments is still very dominant in all decision-making concerning the development of the transport Corridors. The Traceca corridor has also been very dependant on financial support from the European Commission. This however is changing and the participating governments are more and more taking over the responsibility of financing the institutional structures. **The Group considers the Traceca process, based on a legally binding agreement, as an important model in developing an international transport corridor.**

8.2. Stronger coordination modalities for transport

In the framework of the Group, it is obvious that there is a need to coordinate between different existing instruments and also to consider possibilities for improving the functioning of these instruments in order to ensure effective and timely implementation of the transport axes and priority projects. Coordination structures based on the MoUs have proven quite successful but they are sometime limited in scope and effect. It is difficult to make firm commitments and follow-up these in a very effective way. **The Group highlights the need to improve and where necessary to strengthen the coordination framework to ensure coherence between the different mechanisms and also to make them more effective.** The commitment of the countries concerned to implement the agreed axes/projects and horizontal priorities should also be increased.

The Group recommends that for the implementation and improvement of the functioning of the major transport axes, targeted cooperation frameworks should be put in place, taking into account the existing cooperation modalities, political situation and transborder traffic. More specifically, the Group recommends the following approach to the different regions:

- In South Eastern Europe the effectiveness of the MoU structures should be analysed and if it is found necessary then the Energy Community Treaty should be extended to the transport sector in those countries.

- In the Mediterranean region an MoU should be developed and signed by the countries concerned and the EU.

- For the other areas, the existing Pan-European Corridor MoUs should be merged to ensure effective implementation of the new axes and if found necessary specific agreement in the form of an international Treaty should be drafted between a geographically defined group of countries concerned by each axis/region and the EU.

- In the Southern Caucasus for parts of the transport axis, which are part of the Traceca corridor, effective implementation should be guaranteed as part of that exercise.

[55] Traceca Transport Corridor Europe, Caucasus, Asia

In this way it would be possible to set clearer objectives and a timetable for actions (including financial engineering) and these could be endorsed and followed-up more effectively on the major trans-national transport axes identified by the Group.

When setting up these new coordinating mechanisms, **the Group considers it important to establish a Secretariat per transport axis/region and to reflect upon the integration of the existing structures of the Pan-European Corridors' Steering Committees** into the new mechanisms, whenever possible. Sustainable, sufficient and long-term financing for the Secretariat should be guaranteed jointly by the European Union and the countries concerned by the axis/region.

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9. ANNEXES

9.1. List of members

Albania	**Mr Eduard PRODANI** Secretary General Ministry of Transport and Telecommunications
Algeria	**Mr Messaoud NEMCHI** Conseiller de Monsieur le Ministre des Transports Ministère des Transports
Armenia	**Mr Gagik GRIGORYAN** Head of External Relations Department Ministry of Transport and Communication
Azerbaijan	**Mr Mikayil JAFAROV** Cabinet of Ministers Head of Transport and Communication Department Ministry of Transport
	Deputy **Mr Ramiz SHARIFOV** Deputy Chief of International Relations Department Ministry of Transport
Belarus	**Mr Aleksandr Nikolaevich CHERNYSHEVICH** Deputy Head of Road Network Development Division Ministry of Transport and Communications
Bosnia and Herzegovina	**Mr Izet BAJRAMBASIC** Assistant Minister for Transport Infrastructure Ministry of Transport and Communications
Croatia	**Mr Mate JURISIC** Assistant Minister Ministry of the Sea, Tourism, Transport and Development
Egypt	**Mr Atef M.LABIB M. GARIB** Deputy Minister Ministry of Transport
	Deputy **Dr. Abdallah Hassan WAHDAN** Director of National Institute for Transport Ministry of Transport

Former Yugoslav Republic of Macedonia	**Mrs Svetlana GLIGOROVSKA** Assistant Minister Ministry of Transport and Communications
Georgia	**Mr David TSIKLAURI** Deputy Minister Ministry of Economic Development
Israel	**Mr Abraham YERUSHALMI** Director Policy Department Ministry of Transport
Jordan	**Mrs Arwa ALHYARI** Advisor of Minister of Transport/EU Transport Relations Ministry of Transport
Lebanon	**Mr Abdel Hafiz EL- KAYSSI** Director General of Land and Maritime Transport Ministry of Public Works and Transport
Libya	**Mr Sulaiman A. BENSASI** Ministry of Transport
Moldova	**Mr Nicolae CIOBANU** Director of General Directorate for Road Economy Ministry of Transport and Communications
Morocco	**Mr Younes TAZI** Directeur des Programmes et des Etudes par Intérim Ministère de L'équipement et du Transport
	Deputy **Mr Mohammed ABDEJALIL** Directeur des Programmes et des Etudes Ministère de L'équipement et du Transport
Norway	**Mr Kjell ROSANOFF** Deputy Director General Ministry of Transport & Communications
	Deputy **Ms Jane BAEKKEN** Senior Advisor Ministry of Transport & Communications

Palestinian Authority	**Mr Ali SHAAT** Secrétaire Général /Deputy Minister of Transportation Ministry of Transport
Russian Federation	**Mr Serguei O. SOKOLOV** Director of the International Co-operation Department Ministry of Transport
Serbia & Montenegro	**Mr Miodrag JOCIC** State Secretary Ministry of Capital Investments
Serbia & Montenegro	**Mr Andrija LOMPAR** Minister of Maritime Affairs and Transport Ministry of Maritime Affairs and Transport
	Deputy **Mr Srdjan VUKCEVIC** Deputy Minister Ministry of Maritime Affairs and Transport
Kosovo/ UNMIK	**Mr Jozef ZUALLAERT** Senior Advisor Road Infrastructure & Transport Policy Ministry of Transport and Communications
	Deputy **Mr Florim GRAVCEVCI** Advisor to Minister of Transport and Communications Ministry of Transport and Communications
Switzerland	**Mr Max FRIEDLI** Directeur de l'Office fédéral des transports Département fédéral de l'environnement des transports, de l'énergie et de la communication
	Deputy **Mr Peter TESTONI** Vice Directeur Département fédéral de l'environnement des transports, de l'énergie et de la communication

Syria	**Mrs Souha NASSAR** Director for Arab and International Relations Ministry of Transport
	Deputy **Mr Yarob BADR** Member of the Advisory Board Ministry of Transport
Tunisia	**Mr Mokhtar RACHDI** Directeur Général de la Marine Marchande Ministry of Transport
Turkey	**Mr Muammar TÜRKER** Deputy Undersecretary Ministry of Transport and Communications
Ukraine	**Mr Hrihorii LEHENKYI** Director of Department of development and coordination of transport and communications systems Ministry of Transport and Communications
EIB	**Mr Ivan PILIP** Vice President European Investment Bank
	Deputy **Mr J.L. ALFARO** Head of Division Rail and Road European Investment Bank
EBRD	**Mr Riccardo PULITI** Director, Transport Team EBRD
	Deputy **Mrs Agnieszka LUKASIK** Senior Banker Transport EBRD
World Bank	**Mr Marc H. JUHEL** Transport and Logistics Adviser World Bank
	Deputy **Mr Paul GUITINK** Senior Transport Specialist World Bank

Austria	**Mr Helmut ADELSBERGER** Head of Department of International Networks Federal Ministry of Transport, Innovation and Technology
Belgium	**Mr Henri MAILLARD** Conseiller DGTT/Intermodalité SPF Mobilité & Transport
Cyprus	**Mr Iacovos PAPADOPOULOS** Director of Administration, National Coordinator Ministry of Communications and Works
	Deputy **Mr Andreas CONSTANTINOU** Department of Merchant Shipping Ministry of Communications and Works
Czech Republic	**Mr Vit SEDMIDUBSKY** Councillor – Department of Strategy Ministry of Transport
	Deputy **Mr Miroslav VANCURA** Department of Strategy Section of Transport Policy and Environment Ministry of Transport
Denmark	**Mr Michael HANSEN** Chief Adviser Ministry of Transport and Energy
Estonia	**Mr Andres TINT** Deputy Secretary General of Ministry of Economic Affairs and Communication
	Deputy **Mr Anti MOPPEL** Counsellor for Transport and Logistics Ministry of Economic Affairs and Communication
Finland	**Mr Juhani TERVALA** Director of Transport Services Ministry of Transport and Communications
	Deputy **Mr Juha PARANTAINEN** Senior Infrastructure Expert Ministry of Transport and Communications

France	**Mrs Alexandra SUBREMON** Responsable de la Mission Europe au Conseil Général des Ponts et Chaussés Ministère de L'équipement, des Transports, du Logement, du Tourisme et de la Mer
Germany	**Mr Ralph KELLERMANN** Deputy Head of Division Federal Ministry of Transport, Building and Urban Development
Greece	**Mr Dimitrios A. TSAMBOULAS** Associate Professor National Technical University of Athens Ministry of Transport and Communications
	Deputy **Mr Ioannis PROTOPAPAS** Director General Secretariat of Ports and Ports Policy Ministry of Mercantile Marine
Hungary	**Mr Tamås ZSOLNAY** Director for EU Affairs Ministry of Economy and Transport
Italy	**Mr Ercole INCALZA** Counsellor to the Italian Minister for Infrastructure and Transport Ministry of Infrastructure and Transport
	Deputy **Mrs Maura SABATO** Cabinet Adviser to the Minister Ministry of Infrastructure and Transport
Latvia	**Mr Vigo LEGZDINS** State Secretary Ministry of Transport
	Deputy **Mr Andulis ZIDKOVS** Director of Investment Department Ministry of Transport
Lithuania	**Mr Alminas MACIULIS** State Secretary Ministry of Transport and Communication

	Deputy **Mr Arenijus JACKUS** Director of Strategic Planning and Finance Department Ministry of Transport and Communications
Luxembourg	**Mr William HELMINGER** Attaché Questions Horizontales, transport terrestre. Ministry of Transport
Malta	**Mr Charles Carmero ABELA** Deputy Executive Director (Ports) – Malta Maritime Authority Ministry of Competitiveness and Communications
Netherlands	**Mr Roel GANS** Director for International and European Affairs Ministry of Transport, Public works and Water Management
Poland	**Mr Wojciech ZARNOCH** Deputy Director of Department for European Affairs Ministry of Infrastructure
Portugal	**Mrs Heloisa CID** Vice Deputy – Cabinet of European Affairs and External Relations Ministry of Transport
Slovak Republic	**Mr Peter BAREK** Director General Ministry of Transport, Posts and Telecommunications
Slovenia	**Mr Peter VERLIC** Deputy Minister and State Secretary Ministry of Transport
Spain	**Mr Pablo VAZQUEZ** Director Prospectiva y Estudios de Transporte Ministero de Fomento
	Deputy **Mrs M. Pilar CASTRO** Jefe Servicio Ministero de Fomento

Sweden	**Mr Peter FALDT** Director, Special Adviser Ministry of Industry, Employment and Communications
United Kingdom	**Mr Ian MACKAY** Head of Branch, TENs Policy & Programme Europe & International Division Department for Transport
	Deputy **Mr Nick MILFORD** TENs Policy & Programme Europe & International Division Department for Transport
Bulgaria	**Mr Dimitar SAVOV** Head of Investment Policy Department Ministry of Transport and Communications
Romania	**Mrs Dana CONSTANTINESCU** Director General Department of EU and International Co-ordination Ministry of Transport, Construction and Tourism

9.2. List of meetings

The Group met in Brussels on 10 occasions between October 2004 and November 2005. Most of the meetings were in plenary formation but in order to discuss technical matters in detail, some of the meetings were in regional groups. The regional groups were partly overlapping and were the following: North Eastern Europe, South Eastern Europe, Black Sea region, Eastern and Western Mediterranean regions. The meetings took place on the following dates:

18-19 October 2004 (plenary)

29 November 2004 (plenary)

11-12 January 2005 (regional)

14-15 February 2005 (regional)

7 March 2005 (plenary)

30-31 May 2005 (plenary

11-12 July 2005 (regional and plenary)

19-20 September 2005 (regional and plenary)

25 October 2005 (plenary)

30 November (plenary)

9.3. List of Motorways of the Sea ports

Albania	Port of Durres
Algeria	Port of Djen-Djen
Azerbaijan	Port of Baku
Croatia	Port of Rijeka
Egypt	Port of Damietta and East Port Said (a port system) Port of Alexandria (El Dekhela)
Georgia	Ports of Poti and Batumi (a port system)
Israel	Port of Haifa
Jordan	Port of Aqaba
Libya	Port of Misurata
Morocco	Port of Casablanca and Mohamedia (a port system) Port of Tanger
Norway	Port of Narvik Port of Oslo
Russia	Port of St. Petersburg (port system) Port of Kaliningrad Port of Novorossiysk
Serbia & Montenegro	Port of Bar
Syria	Port of Tartus
Tunisia	Port of Rades and Enfidha (a port system)
Turkey	Port of Mersin Port of Samsun
Ukraine	Port of Odessa and Illyiehevsk (a port system)

9.4. Priority axes / projects as identified by the Group

9.4.1. Motorways of the Seas

Alignment of the axis

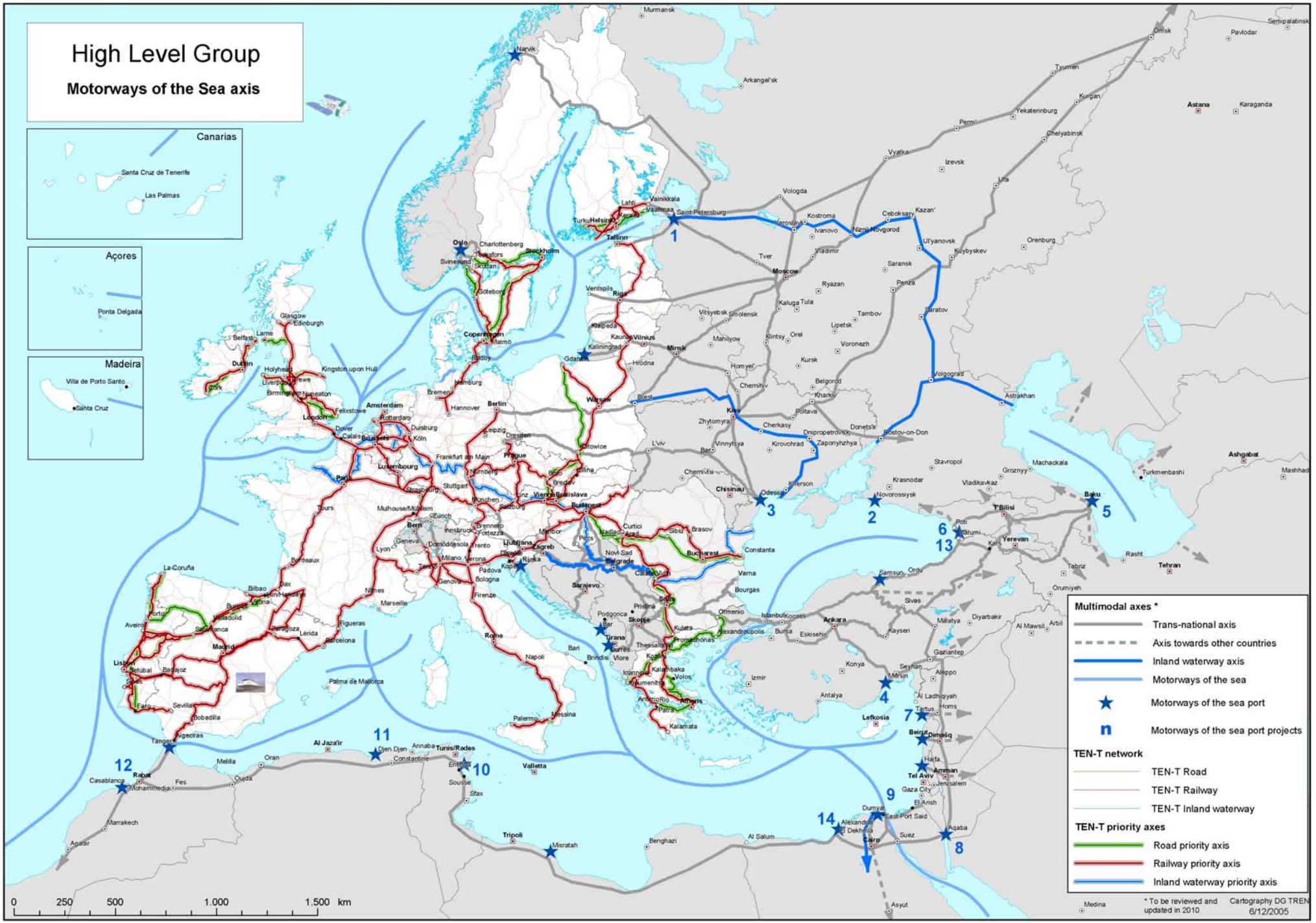
- Extension of the motorway of the Baltic Sea towards Russia including Kaliningrad
- Extension of the motorway of the sea of western Europe towards Norway in the north and towards Morocco in the south
- Extension of the motorways of the Mediterranean Sea towards North Africa and Middle East, including the Red Sea and beyond
- Extension of the motorways of the Mediterranean Sea to the Black Sea

List 1 - Projects of short to medium term interest

Russia	1	Port of St. Petersburg (Ust-Luga + railway terminal)
	2	Port of Novorossyisk (upgrading + logistic centre)
Ukraine	3	Port of Illyiehevsk (container terminal)
Turkey	4a	Port of Mersin (capacity increase, phase 1)
Azerbaijan	5	Port of Baku (railway handling etc.)
Georgia	6	Port of Poti
Syria	7	Port of Tartus
Jordan	8a	Port of Aqaba (master plan, capacity increase, phase 1)
Egypt	9	Multipurpose platform East Port Said Port
Tunisia	10	Deep water port in Enfidha
Algeria	11	Port of Djen-Djen
Morocco	12	Container terminal of Mohamedia port

List 2 - Projects of longer term interest

Turkey	4b	Port of Mersin (capacity increase, phase 2)
Jordan	8b	Port of Aqaba (capacity increase, phase 2)
Georgia	13	Port of Batumi
Egypt	14	Extension of existing breakwater and new platform of El Dekhela Port


High Level Group
Motorways of the Sea axis
Canarias
Santa Cruz de Tenerife
Las Palmas
Açores
Ponta Delgada
Madeira
Villa de Porto Santo
Santa Cruz
Multimodal axes *
Trans-national axis
Axis towards other countries
Inland waterway axis
Motorways of the sea
Motorways of the sea port
Motorways of the sea port projects
TEN-T network
TEN-T Road
TEN-T Railway
TEN-T Inland waterway
TEN-T priority axes
Road priority axis
Railway priority axis
Inland waterway priority axis
0 250 500 1.000 1.500 km
* To be reviewed and updated in 2010
Cartography DG TREN 6/12/2005

9.4.2. Northern and Central Axes

Alignment of the axes

Northern axis

- Multimodal connection Berlin – Warsaw – Minsk – Moscow – trans-Siberian
- Multimodal connection Finnish border – St Petersburg – Moscow
- Rail freight connection St Petersburg – Vologda – Moscow/trans-Siberian
- Multimodal connections from Baltic ports to Minsk/Moscow:
  - Tallinn – St Petersburg – Moscow
  - Ventspils – Riga – Moscow
  - Klaipeda/Kaliningrad – Vilnius – Minsk – Moscow
- Multimodal connection in Norway of the TEN priority axis n° 12 (Nordic Triangle)
- Multimodal connection St Petersburg – Vartius – Tornio – Haparanda – Narvik

Central axis

- Multimodal connection Dresden – Katowice – Lviv – Kiev
- Multimodal connection Budapest – Lviv
- Multimodal connection Moscow – Kiev – Odessa
- Inland waterways Belarus – Kiev – Odessa (Dneper)
- Inland waterways Don/Volga linking the Caspian Sea – Black Sea and a connection from Volga to the Baltic Sea
- Multimodal connection Minsk – Kiev
- Multimodal connection Kiev – Kharkiv – trans-Siberian/Caucasus

List 1 - Projects of short to medium term interest

Inland waterway

Russia	1	Inland waterway Volga-Don

Rail

Belarus	2	Railway line section Brest-Osinovka
	3	Railway line Lithuania border-Minsk-Gomel-Ukraine border
Russia	4	High-speed passenger railway line Moscow-St Petersburg-Buslovskaia
	5	Reconstruction of railway sections and bridges to increase capacity on the Trans-Siberian, including transport logistics
	6	Reconstruction of railway section St Petersburg-Vologda-Kotelnitch
Ukraine	7	Construction of railway tunnel on section Beskyd-Skotarske
	8	Creation and development of logistic centres as well as infrastructure in Chop
Norway	9	Railway upgrading on the Nordic Triangle

Road

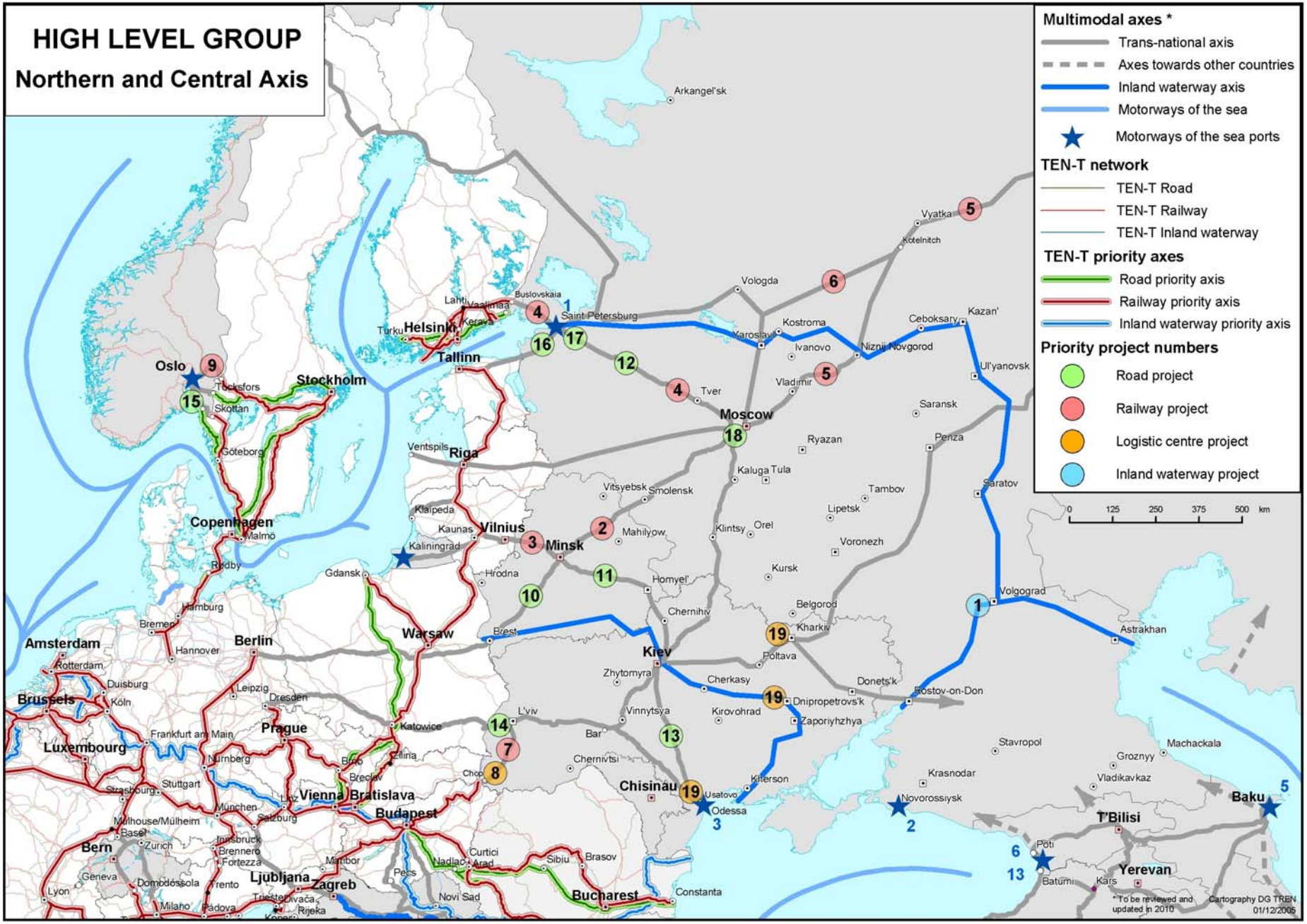
Belarus	10	Road connection Brest-Minsk-Russia border
	11	Road connection Lithuanian border-Minsk-Gomel-Ukraine border
Russia	12	Construction of motorway St Petersburg-Moscow
Ukraine	13	Upgrading of sections Kiev-Zhashkiv and Chervonoznamenka-Odessa on the road Kiev-Odessa
	14	Upgrading of road Lviv-Krakovets (Poland border)
Norway	15	Road upgrading on the Nordic Triangle

List 2 – Projects of longer term interest

n/a

List 3 – Other major projects on multimodal axes, projects of regional or national interest

Russia	16	Construction of west high speed diameter road in St Petersburg
	17	Construction of St Petersburg ring road
	18	Construction of Moscow oblast ring road
Ukraine	19	Creation and development of logistic centres and related infrastructures in Usatovo (Odessa region), in Dnepropetrovsk and in Kharkov


HIGH LEVEL GROUP
Northern and Central Axis
Multimodal axes *
Trans-national axis
Axes towards other countries
Inland waterway axis
Motorways of the sea
Motorways of the sea ports
TEN-T network
TEN-T Road
TEN-T Railway
TEN-T Inland waterway
TEN-T priority axes
Road priority axis
Railway priority axis
Inland waterway priority axis
Priority project numbers
Road project
Railway project
Logistic centre project
Inland waterway project
0 125 250 375 500 km
Arkangel'sk
Vologda
Vyatka
Kotelnitch
Buslovskaia
Lahti
Vaalimaa
Saint Petersburg
Kostroma
Yaroslavl
Ceboksary
Kazan'
Ivanovo
Nizniji Novgorod
Ul'yanovsk
Helsinki
Turku
Keava
Tallinn
Vladimir
Tver
Moscow
Saransk
Ryazan
Penza
Oslo
Stockholm
Tocksfors
Skottan
Göteborg
Ventspils
Riga
Kaluga
Tula
Tambov
Saratov
Vitsyebsk
Smolensk
Lipetsk
Klaipeda
Kaunas
Vilnius
Minsk
Mahilyow
Klintsy
Orel
Voronezh
Kaliningrad
Copenhagen
Malmö
Ronby
Gdansk
Hrodna
Kursk
Homyel'
Volgograd
Hamburg
Bremen
Chernihiv
Belgorod
Warsaw
Brest
Kharkiv
Astrakhan
Amsterdam
Berlin
Hannover
Kiev
Poltava
Rotterdam
Zhytomyra
Duisburg
Cherkasy
Donets'k
Leipzig
Dresden
Rostov-on-Don
Brussels
Köln
L'viv
Vinnytsya
Kirovohrad
Dnipropetrovs'k
Zaporiyhzhya
Prague
Katowice
Bar
Frankfurt am Main
Luxembourg
Nürnberg
Chernivtsi
Stavropol
Machackala
Groznyy
Zilina
Brno
Breclav
Krasnodar
Vladikavkaz
Strasbourg
Stuttgart
Chisinau
Kherson
Vienna
Bratislava
Usatovo
Odessa
Novorossiysk
Baku
München
Linz
Budapest
Salzburg
Mülhouse/Mülheim
Basel
T'Bilisi
Innsbruck
Bern
Zurich
Brennero
Fortezza
Curtici
Arad
Sibiu
Brasov
Maribor
Nadlac
Pecs
Poti
Geneva
Domodossola
Trento
Ljubljana
Zagreb
Batumi
Kars
Yerevan
Lyon
Milano
Padova
Trieste
Rijeka
Novi Sad
Bucharest
Constanta
*To be reviewed and updated in 2010
Cartography DG TREN 01/12/2005

9.4.3. South Eastern Axis

Alignment of the axis

- Multimodal connection Salzburg – Ljubljana – Zagreb/Budapest – Belgrade – Nis, including the following connections:
  - Sofia – Istanbul – Ankara – Georgia/Armenia – Azerbaijan (Traceca)
  - Skopje – Thessaloniki
- Multimodal connection Budapest – Sarajevo – Ploce
- Multimodal connections Bari/Brindisi – Durres/Vlora – Tirana – Skopje – Sofia – Burgas/Varna
- Inland waterways Danube[56] and Sava
- Multimodal connection Ankara – Mersin – Syria – Jordan – Suez – Alexandria/East Port Said, including the following connections:
  - Sivas – Malatya – Mersin
  - Turkey towards Iran and Iraq
  - Tartus – Homs towards Iraq
  - Beirut – Damascus towards Iraq and Saudi Arabia
  - Haifa – Israel border
  - Jordan border – Amman towards Iraq and Saudi Arabia
- Multimodal connections Damietta – Cairo and beyond including the Nile river
- Multimodal connections from Armenia, Azerbaijan and Georgia towards North and South

List 1 - Projects of short to medium term

Inland waterway		
Regional	1a	Reconstruction of the Sava river to the 1990 standard (phase 1)
Bosnia & Herzegovina	2	Reconstruction and modernisation of river port Brcko
Serbia & Montenegro	3	Development of navigability on the Danube (river training works, locks and removal of vessels sunken)
Rail		
Croatia	4	Upgrading of railway line Slovenia border-Zagreb-Serbia & Montenegro border
Bosnia & Herzegovina	5	A single track railway tunnel 'Ivan'
Serbia & Montenegro	6	Reconstruction and modernization of railway line Hungary border-Belgrade-Nis- Bulgaria/FYR of Macedonia borders, including bridge over Danube in Novi Sad
	7	Reconstruction and modernization of railways within Belgrade railway node
FYR of Macedonia	8a	Rehabilitation of the railway line Tabanovci-Gevgelija (phase I)
	9	Railway line Kumanovo-Beljacovce-Bulgaria border
	10	Railway line Kicevo-Stuga-Albania border

[56] The exact alignment of the Danube to the Black Sea requires further analysis.

Albania	11	Railway line Lin-Qafe Thane-FYR of Macedonia border
Turkey	12	Railway line Istanbul-Cerkezköy-Bulgaria border
	13	Railway line Ankara-Sivas
Armenia	14	Railway line Gyumri-Ayrum
Azerbaijan	15	Railway line Baku-Georgia border
	16	Cabining of the optical cable on railway line Baku-Yalama
Georgia	17	Railway line Poti/Batumi-Azerbaijan border
Israel	18	Ha'emek railway (from Haifa up to Jordania border)

Road

Croatia	19	Road upgrading Slovenia border-Zagreb-Lipovac-Serbia & Montenegro border
Bosnia & Herzegovina	20	Road upgrading on Croatia border-Saravejo-Mostar-Croatia border
Serbia & Montenegro	21	Road upgrading from section Hungary border-Belgrade-Nis-FYR of Macedonia border
	22	Belgrade city road by-pass section Batajnica-Bubanj Potok
FYR of Macedonia	23	Road upgrading Kumanovo-Tabanovce
	24	Road upgrading Demir Kapija-Udovo-Smokvica
	25	Road upgrading Albania border-Skopje-Bulgaria border
Turkey	26	Road upgrading Gerede-Merzifon
Syria	27	Road upgrading Turkey border-Jordan border, including the branch Tartus-Homs
Jordan	28	Irdib ring road
Egypt	29	Road upgrading Alexandria-Cairo-Suez-Taba (Israel border)
	30	Road upgrading Ismailia-East Port Said

List 2 - Projects of longer term interest

Inland waterway

Regional	1b	Reconstruction of the Sava river to a higher navigability class (phase 2)
Bosnia & Herzegovina	31	Reconstruction and modernisation of river port Samac
Egypt	32	Upgrading transportation through the River Nile (up to Cairo)

Rail

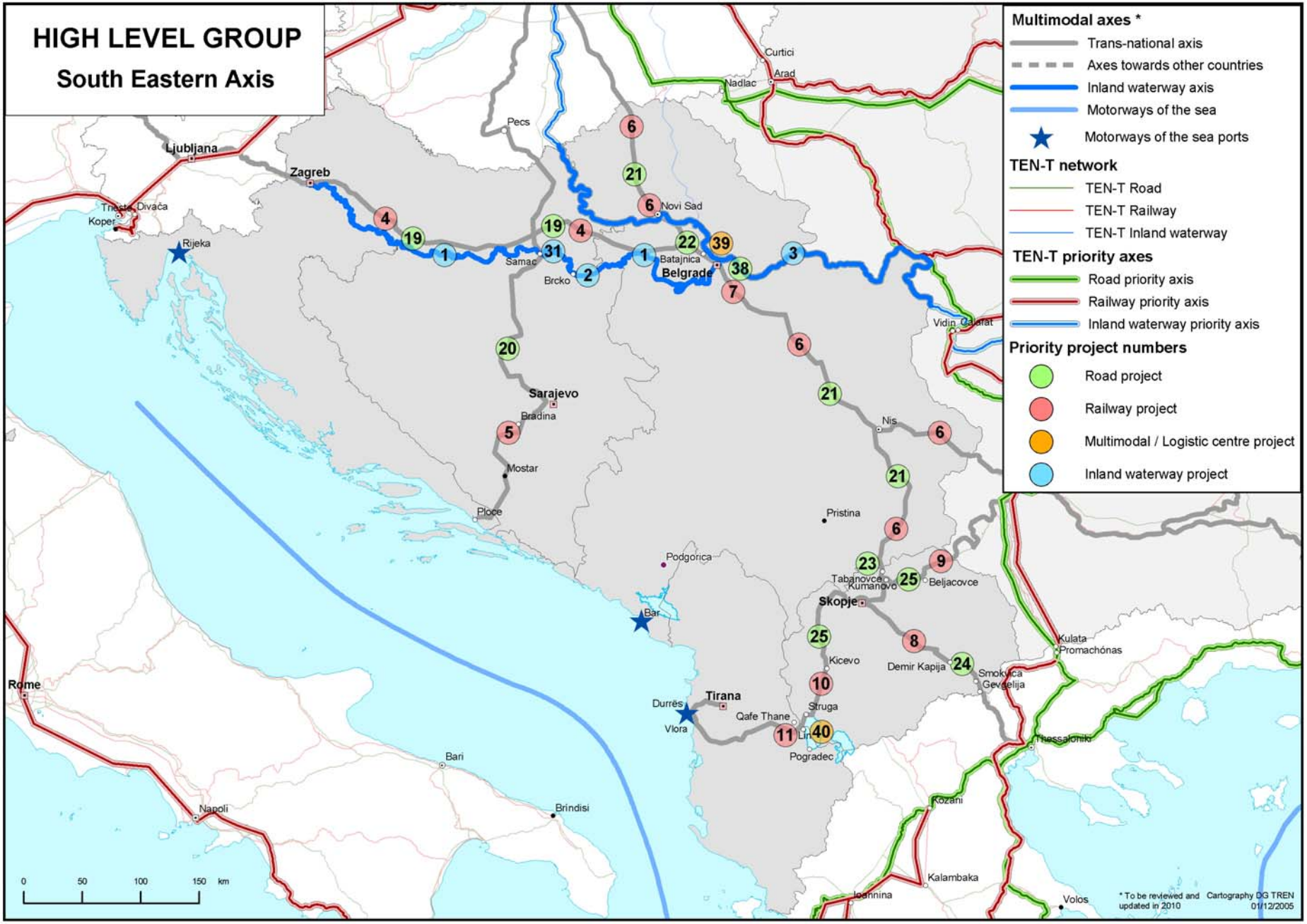
FYR of Macedonia	8b	Rehabilitation of railway line Tabanovci-Gevgelija (phase II)
Jordan	33	Construction of railway line Syria border-Amman-Aqaba
Egypt	34	Signalling system and station infrastructure Beni Suef-El Minya-Asyout

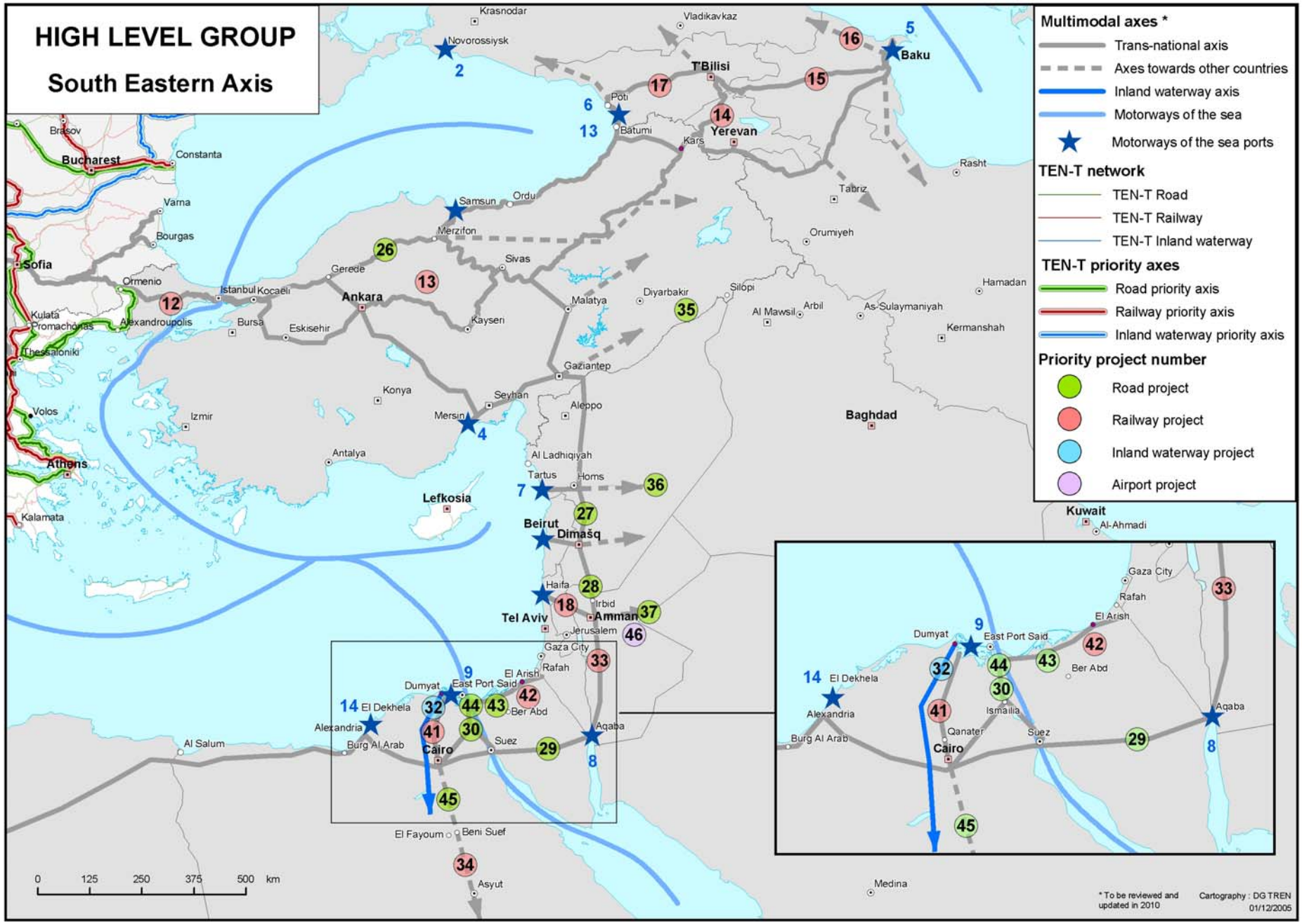
Road

Turkey	35	Road connection Sanhurfa-Silopi
Syria	36	Road connection Homs-Tanf-Iraq border
Jordan	37	Road construction Amman-Iraq border

List 3 – Other major projects on multimodal axes, projects of regional or national interest

Serbia & Montenegro	38	Gazela bridge
	39	Intermodal logistic platform in Belgrade
FYR of Macedonia	40	Construction of the multi-modal terminal located in Struga
Egypt	41	Electrification of Shebin El Qanater-Damietta railway line
	42	Railway line Bir El Abd-Rafah
	43	Upgrading of coastal road Rafah-Damietta-Alexandria-El Saloum
	44	Road tunnel under Suez Canal
	45	Burg Al Arab-Aswan western desert road
Jordan	46a	Airport – supporting air cargo
	46b	Airport – expansions, rehabilitation and modernisation


HIGH LEVEL GROUP
South Eastern Axis
Multimodal axes *
Trans-national axis
Axes towards other countries
Inland waterway axis
Motorways of the sea
Motorways of the sea ports
TEN-T network
TEN-T Road
TEN-T Railway
TEN-T Inland waterway
TEN-T priority axes
Road priority axis
Railway priority axis
Inland waterway priority axis
Priority project numbers
Road project
Railway project
Multimodal / Logistic centre project
Inland waterway project
Ljubljana
Zagreb
Trieste
Divača
Koper
Rijeka
Pecs
Curtici
Arad
Nadlac
Novi Sad
Samac
Brcko
Batajnica
Belgrade
Vidin
Calafat
Sarajevo
Bradina
Mostar
Ploce
Nis
Pristina
Podgorica
Bar
Tabanovce
Kumanovo
Beljacovce
Skopje
Kicevo
Demir Kapija
Kulata
Promachónas
Smokvica
Gevgelija
Thessaloniki
Durrës
Tirana
Vlora
Qafe Thane
Struga
Pogradec
Kozani
Kalambaka
Ioannina
Volos
Rome
Bari
Napoli
Brindisi
0 50 100 150 km
* To be reviewed and updated in 2010
Cartography DG TREN 01/12/2005


HIGH LEVEL GROUP
South Eastern Axis
Multimodal axes *
Trans-national axis
Axes towards other countries
Inland waterway axis
Motorways of the sea
Motorways of the sea ports
TEN-T network
TEN-T Road
TEN-T Railway
TEN-T Inland waterway
TEN-T priority axes
Road priority axis
Railway priority axis
Inland waterway priority axis
Priority project number
Road project
Railway project
Inland waterway project
Airport project
Krasnodar
Novorossiysk
Vladikavkaz
T'Bilisi
Baku
Poti
Batumi
Kars
Yerevan
Rasht
Tabriz
Orumiyeh
Hamadan
Samsun
Ordu
Merzifon
Sivas
Gerede
Ankara
Istanbul
Kocaeli
Bursa
Eskisehir
Kayseri
Malatya
Diyarbakir
Silopi
Al Mawsil
Arbil
As-Sulaymaniyah
Kermanshah
Baghdad
Gaziantep
Konya
Seyhan
Aleppo
Mersin
Izmir
Antalya
Al Ladhiqiyah
Tartus
Homs
Lefkosia
Beirut
Dimašq
Haifa
Irbid
Amman
Tel Aviv
Jerusalem
Gaza City
Rafah
El Arish
Dumyat
East Port Said
Ber Abd
El Dekhela
Alexandria
Burg Al Arab
Cairo
Suez
Ismailia
Qanater
Aqaba
Al Salum
El Fayoum
Beni Suef
Asyut
Medina
Kuwait
Al-Ahmadi
Bucharest
Brasov
Constanta
Varna
Bourgas
Sofia
Ormenio
Kulata
Promachonas
Alexandroupolis
Thessaloniki
Volos
Athens
Kalamata
0 125 250 375 500 km
* To be reviewed and updated in 2010
Cartography : DG TREN 01/12/2005

9.4.4. South Western Axis

Alignment of the axis

- Multimodal connection Algeciras – Rabat – towards Agadir and beyond
- Multimodal connection Rabat – Fes – Oudja – Constantine – Al Jazair – Tunis – Libyan border (the "trans-Maghrebin") including also the connection Tunisia – Egypt
- Extension of the TEN-T priority axis n° 24 through Switzerland

List 1 - Projects of short to medium term interest

Rail

Switzerland	1	Mixed railway link Lugano-Chiasso
	2	Extension of capacity of the Olten-Basel rail link
Morocco	3	High-speed railway line Casablanca-Marrakech (phase 1 of Casablanca-Marrakech-Agadir)

Road

Morocco	4	Upgrading of road Casablanca-Rabat
	5	Upgrading of road Fes-Oujda

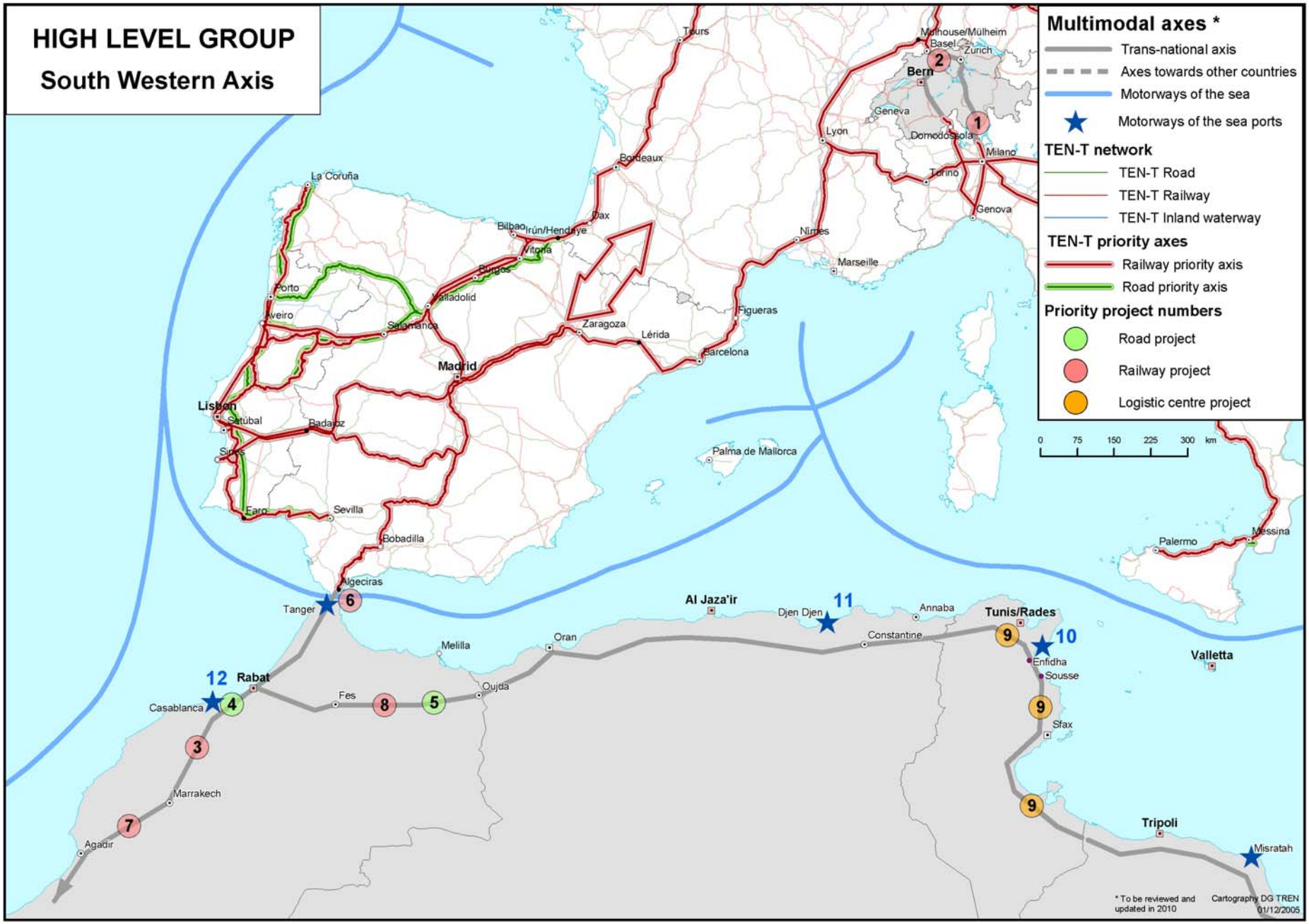
List 2 – Projects of longer term interest

Rail

Morocco	6	Fixed Gibraltar connection
	7	High-speed railway line Marrakech-Agadir (phase 2 of Casablanca-Marrakech-Agadir)
	8	Doubling and electrification of the railway line Fes-Oujda

List 3 – Other major projects on multimodal axes, projects of regional or national interest

Tunisia	9	Development of logistics zones (along the trans-Magrebin)


HIGH LEVEL GROUP
South Western Axis
Multimodal axes *
Trans-national axis
Axes towards other countries
Motorways of the sea
Motorways of the sea ports
TEN-T network
TEN-T Road
TEN-T Railway
TEN-T Inland waterway
TEN-T priority axes
Railway priority axis
Road priority axis
Priority project numbers
Road project
Railway project
Logistic centre project
0 75 150 225 300 km
Tours
Mulhouse/Mülheim
Basel
Zurich
Bern
Geneva
Lyon
Domodossola
Milano
Torino
Genova
Bordeaux
Dax
Bilbao
Irún/Hendaye
Vitoria
Burgos
Nimes
Marseille
La Coruña
Porto
Aveiro
Valladolid
Salamanca
Zaragoza
Lérida
Figueras
Barcelona
Madrid
Lisbon
Setúbal
Badajoz
Sines
Palma de Mallorca
Faro
Sevilla
Bobadilla
Palermo
Messina
Algeciras
Tanger
Al Jaza'ir
Djen Djen
Annaba
Tunis/Rades
Melilla
Oran
Constantine
Enfidha
Sousse
Valletta
Rabat
Casablanca
Fes
Oujda
Sfax
Marrakech
Agadir
Tripoli
Misratah
* To be reviewed and updated in 2010
Cartography DG TREN 01/12/2005