

**TEN-T POLICY REVIEW**  
**EXPERT GROUP 4**  
**METHODOLOGY FOR TEN-T PLANNING**  
**Ten-T Extension outside the EU**

**FINAL REPORT**

### **The Mandate of Expert Group 4**

Further EU enlargement is forthcoming, and the networks of future Member States will need to be integrated into the TEN-T at the given time. Coherence between the network development within the current EU and future Member States has therefore to be ensured in the TEN-T policy review process.

With regard to neighbouring countries in Europe (including EEA States and Switzerland), coherence between network developments shall be sought on the basis of the relevant *acquis communautaire*.

Furthermore, connections with the EU's neighbouring regions need to be developed in accordance with the Community's relevant ongoing policies. This involves in particular the connection with the trans-national axes identified in the Commission's Communication COM (2007) 32 on the extension of the most important trans-national axes to the neighbouring countries. On this basis, the perspectives of connections between the EU network and the existing and future networks of neighbouring regions (in particular Africa and the Mediterranean region) shall be explored.

In accordance with Council Conclusion of 8 May 2007, due attention shall also be given to the further extension of the approach towards China, India, Central Asia and the Far Middle East.

## Introduction

The work of the Expert Group started from the results of the De Palacio High Level Group which identified main axis and the main step for the implementation and other horizontal measures. On 2007 the Guidelines for Transport in Europe and Neighbouring region (COM/2007/0032) identified the main 5 transnational Axis and established other measures for the creation of an effective transport market. The conclusions of the Ministerial Conference hold in Naples on October 2009 paved the way for next developments and are the basis for the work of this group. On the declaration, EU and Neighbours agreed on the identification of a integrated network and a core network, the definition of methods and shared priorities the elimination of bottlenecks, the strengthening of regional cooperation and on other issues. Among regional transport organizations **several positive advancement have been already reached.**

EU is negotiating a cooperation agreement with Western Balkan countries. which are already members of the South Eastern Europe Transport Observatory (SEETO), to establish a Transport Community. In draft, the most important provision is the incorporation of all the relevant *acquis communautaire* on the SEETO core network, which have already been defined on 2004, applying the same criteria on the Community Guidelines.

Turkey, applying TINA methodology has already individuated a core network which has been slightly modified in 2008.

After some studies based also on TINA methodology, the definition of a comprehensive Trans Mediterranean Transport Network is almost completed and in the next ministerial conference it will be formally adopted.

The Partnership on Transport and Logistics between EU member states and the Nordic dimension has been recently signed and will be the basis for further development.

Despite the TRACECA corridor did not made relevant progresses and it still limited at the corridor which were individuated in 2005 other regional cooperation platform such as the Black Sea Economic Cooperation made some advancement in transport infrastructure (the Black sea ring motorway programme or the recently launched Motorways of the Sea under definition).

The EU Core Ten-T Network is supposed to be a subset of the EU Comprehensive Ten-T Network. The Core Ten-T Network is made of an **indivisible** and **affordable** set of links connecting EU Core Nodes . Where, **Indivisible** means that the core network is not a group of standing alone projects, as it is today, but one whole object which will exist only when the last section of the last priority project will be completed; and **affordable** means that the core network should include only those pieces of infrastructure --links and nodes-- which can be, and will be, fully financed by the EU and its Member States within a given time deadline.

As for the “**affordability**”: some experts argued that this feature should not be discussed at a planning level, but should be left to a later planning analysis. During the discussion it was recognized that what is affordable is not an „absolute“ or fixed quantum that is unchangeable over time. Clearly, what is affordable depends in part on funding (and financing) arrangements (eg source of funding, use of borrowings and dedicated revenues such as user pays and polluter pays charges).

## **Recommendations of the Expert Group**

Extending the Core Ten-T Network outside the EU means identifying those external and internal core nodes (EU ports and airports) that have to be connected to the EU Ten-T Network for:

- a) “**closing**” the EU infrastructure system, which means to extend to the potential and candidate countries the TEN-T to support the internal market
- b) “**opening**” the EU infrastructure system to the rest of the world, aimed at ensuring the insertion of the TEN-t in the world international trade flows to feed the internal market

At **the planning level**, one should consider several factors, which will have a strong impact on freight and passenger flows influencing the demand for building and operating connections inside and outside the EU.

The **restructuring** of the world economy with the raise of Asia and the **eastward tilting of the European economy** are the main driving forces to be considered.

Faster future economic growth can be expected in industrializing and developing countries (particularly in China and India) than in the developed countries group. On transport market an increase of traffic is expected. Maritime transport will be influenced by the size of vessels, by the opening of the new Panama Channel (2014) and by the shift of Mediterranean transshipment hubs outside the EU. Forecasts for aviation markets are expected to grow vibrantly both on the passenger (doubled by 2025) and on the freight transport (tripled by 2040) with possible shift of main world airport outside the EU. Thus internal core nodes, in particular airport and ports will be seriously affected by the above mentioned changes. TEN-t guide lines revision should consider as far as the network extension outside the EU is concerned:

- 1) **Land cross border points**, which will be identified by TEN-t revision according to the criteria laid down by Expert Group 1 and proposed by the Commission. some cross border points have been tentatively identified (see Annex 3) according to available information
- 2) **Core airports** “naturally” individuated by the criteria pointed out by Expert Group 1 as located near main EU cities, provided that attention is paid to possible constraints coming from the evolution of the Air Traffic Management system to be redesigned according to SESAR.

3) **Multiport gateway systems**<sup>1</sup> to be considered as nodes of the EU core network. The growth of trade with Asia and with North Africa calls for a better exploitation of Mediterranean ports that now enjoy a geographical and an environmental advantage. The decarbonization strategy of the EU policy reinforces this perspective. **TEN-T policy should find a smart balance between two strategies for port development:** improving hinterland connections of northern range ports and enhancing capacity and competitiveness of Mediterranean ports. The eastward tilting of the EU economic growth call for a better exploitation of Baltic Sea and Adriatic port gateways.

EU-relations with third countries should be based on a peer - peer approach to create a fruitful partnership in infrastructure.

To ensure the connections of the core internal market to network of neighbouring countries it is fundamental to check whether the methodology to select and prioritize projects and network is consistent between EU and not EU countries. In this regard a distinction should be done :

- For **candidate countries**, both actual and potential, the same methodology in the TEN-T guidelines should be applied. Full consideration should be given to the comprehensive network already identified in some neighbouring areas (Balkans<sup>2</sup> – Mediterranean) and based on the current TEN-T methodology. The content of the **conceptual pillar** must be applied, as part of the *aquis communautaire*.
- **For the other areas the methodology to identify core nodes** might be different, but in the framework of a relation between equal partner, the maximum harmonization should be envisaged, including as far as possible the content of the “conceptual pillar”, such as for connections with Mediterranean Countries, TRACECA and towards the eastern part of Europe (Ukraine – Belarus – Moldova – Russia). A further distinction should be proposed in the identification of nodes (and links) routes to “neighboring countries“ and the nodes (and links) for other countries (such as Euro Asian and Euro African Links)
  - Despite the fact that the methodology to identify CORE networks for TEN-T and outside TEN-T should be the same, the constraints related to the implementation of such CORE network, cannot be the same outside the TEN-T, given the fact that we do not have a legal basis to force their timely implementation and we do not have the financial lever to support them.

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<sup>1</sup> The expression “Multiport Gateways System” is based on the definition given by the European Sea Ports Organization (2009), contained in the “Economic Analysis of European seaport system”.

<sup>2</sup> The network of the Balkan area identified by SEETO is called "CORE" network, the appellation however differs from the one used by the Commission in the context of the TEN-T revision. This CORE network should be considered as the comprehensive network.

**A full proposal for the identification of the core network** on Neighbors countries will be carried out when the methodology will be fully established. In the mean time the following should be accepted:

1) The *conceptual pillar*, as intended by EG 1 is important to ensure a full interconnection (not only physical) with third countries. In this respect it has been proposed that instead of talking about connections between networks, this exercise should be defined as an attempt of connecting transport system together.

2) Other important links to be considered are the Motorways of the Seas which will play a key role in the Euro Mediterranean Region, in the Baltic, in the Black Sea, in the Barents Sea and in the Danube river, implying route and port selection (to be decided at a later stage).

3) Land traffic on the **Euro Asian links** increased considerably call for **cross border points and connections (mainly with Eastern partners) to be included in the TEN-t Core Network**. The impact on the TEN-T – in particular on the future "core" network of these new connections should be assessed at one stage.

4) The recently launched Partnership for Infrastructure Development Assistance in cooperation with Euro African Union will imply the need for ensuring proper links between Sub Saharan corridor and Trans Mediterranean Networks, assessing and selecting main African Ports and evaluating which airports might be indicated as the most suitable for intercontinental traffic.

**A tentative application of these principles and facts has been carried out in Annex3** in order to explore the issues to be considered when the approved methodology will allow it.

The selection of potential external core nodes and links has been made distinguishing between candidate and not candidate countries.

This attempt is not intended to go beyond the competence and the sovereignty of neighbours countries and their regional organization which are responsible for identification, prioritization and financing of their network. Finally, through this exercise main EU cross border points has been also individuated. **An attempt as been made for the SEETO and the Turkey Core Network, analyzing land cross border point, both for rail and railways, and their alignment with the current Priority Projects, as probably they will be part of the EU Core network.**

Due to the time constraints, **some “horizontal” issues have been not properly analyzed** but should be considered for the potential impact they might have on the Trans European Networks and on the connections outside the EU:

- 1) Air traffic management harmonization
- 2) Harmonization of licenses with Neighboring countries
- 3) Further analysis on future transport flows considering the ageing of EU population
- 4) Evaluation of the extension of the GALILEO program with third countries: at the moment Ukraine, Israel, Norway, Morocco, China and South Korea joined the Galileo

system

- 5) further development for TRACECA projects
- 6) Future development in the Euromediterranean area , considering that Infrastructure and Transport area priorities for the Union for the Mediterranean

**The Chair thanks all members of the group for their contributions.**

**Attachment to this final report:**

- **annex 1: members of the EG 4**
- **annex 2 concerning the minutes of meetings**
- **annex 3 which includes observations on the likely development of connections outside the EU and the individuation of main cross border points and links**

## **Annex 1:**

### **Expert Group 4 Chair, members, meetings and attachments:**

**Chairman:** Paolo COSTA

**Secretariat:**

**Members:**

Saki AKIMAN

Katarina COP BADJE

Maarti MIETTINEN

Nenad NIKOLIC

Otto SCHWETZ

Barrie STEVENS

John WHITE

Boris ZIVEC

Helmut ADELSBERGER

Alain BARON

Gudrun SCHULZE

Madalina SIMION

**Meetings:**

18 December 2009

28 January 2010

26 March 2010

**Commission:**

Helmut ADELSBERGER

Alain BARON

François BÉGEOT

Richard FERRER

Patricia FONTAINE

Giuseppe RIZZO

Gudrun SHULZE

**Chairman Staff**

Stefano CAMPAGNOLO

Claudia MARCOLIN

## ANNEX 2

### Brief summary of the Expert Group 4 meetings

The expert group met three times:

- 18 December 2009;
- 28 January 2010;
- 26 March 2010.

#### **First meeting** (18 December 2009)

##### ***Presentations:***

Helmut ADELSBERGER, *Core Network Planning*

Saki ACIMAN *Definition of a Trans-Mediterranean, Network of Transport (TMN-T)*

Paolo COSTA *Ten-t and connections outside EU: towards a new approach*

Martti MIETTINEN *The Northern Dimension Partnership on transport and logistics*

Nenad NIKOLIC, *The SEE Core Regional Transport Network*

John WHITE, *Reference Case projections to 2030 and Short Term Transport Outlook to 2015*

The first meeting was mainly dedicated to a survey of the current situation and development of transport infrastructure in the different regions outside the EU: accession countries, neighbouring countries, other world countries and regions were considered separately.

According to Mr. ACIMAN, in the Mediterranean basin, planning of a transport network is currently ongoing. The selection of relevant network elements of all modes, however rather corresponding to the "comprehensive network", is derived from a set of criteria. Better perspectives are in the Western than in the Eastern part. Since the existing rail network is relatively small, it has been chosen as a priority almost entirely. For the selection of roads, ports and airports, quantitative criteria are being applied. For the time being, identification of a "comprehensive network" is partly completed.

As Mr. MIETTINEN explained, in the "Northern Dimension" such identification has not been done yet. The corresponding selection process is starting from the TEN-T in member states and the recommendations of the de Palacio Group for Norway and Russia. Beside the priority assigned to individual projects, their maturity is decisive. Environmental impacts play an important role too.

In his presentation, Mr. NIKOLIC informed that in the Western Balkans (former Yugoslavia minus Slovenia, plus Albania), SEETO has established a so called "core network", which is based on studies and a process similar to TINA. However, this "SEE core network" corresponds to EU "comprehensive network". For acceding countries in that region, this would be the basis for their future TEN-T comprehensive networks. The real "core network" (in the sense of the current TEN-T policy review), will still have to be identified.

According to an analysis by OECD presented by Mr. WHITE, significant changes might continue in world trade. 2025 China might outstrip USA in terms of GDP. Air transport is expected to further grow, in particular the low cost sector and in relation with Far East destinations. In India and China, rail transport is developing fast. However growth rates will be low in Europe, except in the new member states and Eastern Europe.

## **Second meeting (28 January 2010)**

### ***Presentations:***

Helmut ADELSBERGER, *Core Network Planning*

Paolo COSTA, *ports as strategic border points of the affordable core network*

Martti MIETTINEN *north of Europe*

Otto SCHWETZ, *Corridor VII, the Danube as a border crossing inland waterway to the Black Sea region*

Barrie STEVENS, *European aviation and airports outlook to 2027*

Mr. ADELSBERGER presented the current stage of the core network planning methodology, which is being developed by Expert Group 1. The coherent multimodal "core network" should consist of the strategically most important nodes and links of the Community and reflect the main long distance traffic flows. Applying a geographical approach, in the first step, the main nodes, eg. the capitals of all member states and neighbouring countries, other big and important cities, gateway ports and hub airports etc. would be identified. These would be connected by links in an appropriate way to optimize spatial integration, traffic effectiveness and protection of the environment. The core network should secure continuity with the existing priority projects and remain stable over a reasonably long period, while enabling a top-down selection of projects.

Mr. COSTA had prepared a paper on likely future changes in global trade. While in past decades trade between Europe and Northern America was the most important relation, favouring the development of the North Sea ports, now trade with Eastern and South-Eastern Asia has become dominant and will continue to grow. Cargo flows through Suez Canal would save 2000 km or 5 days of transport time in reaching central Europe, if not passing through the Strait of Gibraltar. If in coming years fuels become more expensive, an economic pressure would emerge to use increasingly Mediterranean instead of North Sea ports. Such development would contribute to reduced CO<sub>2</sub> emissions, as well, also by shortening some land transport. To meet this challenge, Mediterranean ports would have to enhance their capacity and operation quality, and hinterland connections be improved.

Mr. SCHWETZ reported of the Danube as an international inland waterway, passing through EU member states, candidate countries, possible later candidate countries and third countries. He pointed also to the actual EU initiative for a Danube region strategy. There are still bottlenecks along the Danube, but efforts to remove them are ongoing. A partial shift of global cargo flows as described by Mr. Costa, would likely move to the Black Sea. Constanta

as the most important EU port at the Black Sea, interconnected with the Danube, would be favoured by such a development and inland navigation as well.

As regards to air transport, Mr. STEVENS pointed to a further growth of low cost and Far East traffic. A problem would be the restricted possibility of many airports to expand. A better integration with land transport, in particular with rail, should be achieved, in all major cities.

Mr. NIKOLIC spoke about current developments in the Western Balkans region. In tight relation with the TEN-T, traffic management systems would be installed, and the ongoing approach to EU legal standards is leading to harmonized solutions in the fields of competition, safety and security, technical standards and interoperability.

For methodological reasons, the countries with an accession perspective, i.e. Western Balkans countries and Turkey, should be treated as if they were member states already and therefore included in the scope of Expert Group 1.

### **Third meeting (26 March 2010)**

This meeting was scheduled to be the last one of this group; therefore the Chairman summarized the issues tackled and line taken in the previous meetings. According to his opinion, the core network should be indivisible – that is a single “object” and not a collection of independent projects – and affordable – considering for its full implementation two time horizons: 2020 and maybe 2030.

He repeated the mandate of the group to supplement the strategic network planning methodology with respect to the connections of the Community with the outside world. While network planning for acceding countries and Western Balkans had been integrated into the scope of Expert Group 1, it has been the task for this group to consider land-based connections to third countries and to Asia, as well as gateway ports and airports as the main entry and exit points of the Community for passengers and freight. He also pointed to the coming tendency of maritime cargo flows from and to South Eastern Asia, to use Mediterranean ports, due to cost pressure from increasing fuel prices and to reduce greenhouse gas emissions, provided that capacity and service quality of ports and hinterland connections would allow this.

The question as how far the methodology for selection of core nodes, in particular of ports in third countries, was discussed controversially. Although methodologically adequate, there is no legal base for applying for instance TINA procedure to third countries without involving them directly. Border-crossing sections too have to be agreed within neighbouring countries. The EG 4 can only make proposals elaborated in a EU top-down approach to be discussed at the right time with the neighbouring partners.

Wherever there are no recent agreements with third countries, the proposals of the De Palacio Group issued in 2007, which are based on the agreements of 53 countries, might be applied, at least as a first approach for defining border-crossing points to non-member states.

In the Western Balkans, a “core network” has been identified within SEETO, which could serve as the basis of the future comprehensive network and of the determination of a core network in accordance with TEN-T, after a review according to TEN-T network planning methodology. A similar situation applies to Turkey, where a network identified in the TINA Turkey exercise has been entered into the accession negotiations.

Soft measures are important for smart operation, but they are purely supplementary to hard infrastructure investments and can not replace them.

Affordability does not only depend on EU TEN-T funding but includes a wide range of other funding options, from cohesion and structural funds, EIB or other loans, national funding and private involvement. This issue is tackled in Expert Group 5. However, lines put into the map should have a realistic chance for implementation.

The Chair would finish the report by 7 April, adding, as attachments, the minutes of meeting and a paper (Annex 3) that outlines an exercise, based on available data of possible extensions of the “core” TEN-T Network outside the EU.