



EUROPEAN COMMISSION

Brussels, 19.10.2011
SEC(2011) 1213 final

COMMISSION STAFF WORKING PAPER
EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT

Accompanying the document

**PROPOSAL FOR A REGULATION OF THE EUROPEAN PARLIAMENT AND OF
THE COUNCIL**

on Union Guidelines for the development of the Trans-European Transport Network_

{COM(2011) 650 final}
{SEC(2011) 1212 final}

This document provides the executive summary of the Impact Assessment Report on the Commission's revised Union Guidelines for the development of the Trans-European Transport Network.

1. PROBLEM DEFINITION: A FRAGMENTED NETWORK NOT FIT FOR PURPOSE

The EU 27, taken as a whole, is well endowed with transport infrastructures. But these infrastructures do not, as yet, provide the Union with a complete trans-European network that can adequately fulfil the objectives set out for it. The TEN-T is fragmented, geographically – particularly between countries, and modally – both between and within transport modes.

Missing cross border links constitute today significant bottlenecks for freight and passengers flows on important European axes. They affect connections both across the Union's Member States and with its neighbours. In addition, the considerable and enduring disparity in the quality and availability of infrastructure between the older and the newer Member States means also that East-West connections are hardly developed compared to North-South ones, which are predominant on the TEN-T map.

Viewed in a modal perspective, the infrastructure network is also fragmented. Intermodal nodes, enabling the exchange of passengers and goods across modes, are underdeveloped in many of Europe's main railway stations, airports and ports. The lack of intermodal capacities, together with important missing or poor quality sections along the rail and inland waterways networks, lead to insufficient exploitation of co-modal options and increase infrastructure capacity bottlenecks in all modes.

In addition, differing sets of operational rules and standards, based on longstanding traditions and legislation of individual Member States, are multiplying the barriers and bottlenecks in the transport system. Rail transport is a prominent example where ("soft") interoperability problems due to varying national operational rules such as train control signalling systems, document handling, language regimes, train crew certifications, tail lights and so forth, and non-aligned physical infrastructure parameters such as rail gauge, train length, axle loads and traction energy supply systems are severely hampering the effectiveness of huge trans-European investments in ("hard") infrastructure.

Four drivers to the problem have been identified, corresponding to two fields of action: the conceptual planning and the means for implementation. The causes leading to fragmentation are: the insufficient EU-level planning of network configuration; the insufficient implementation of common standards and adoption of common rules for the interoperability of networks within the TEN-T; the limited cooperation among Member States in project implementation and the lack of sufficient conditionality of TEN-T funding instruments.

2. IS EU ACTION JUSTIFIED ON GROUNDS OF SUBSIDIARITY?

The need for coordinated development of a trans-European network in the area of transport infrastructure to support transport flows within the single European market and the economic, social and territorial cohesion needs has been recognised by the introduction of specific provisions in the EU Treaty.

Articles 170 to 172 of the Treaty on the Functioning of the Union define the general objectives and scope of EU action in supporting the establishment and development of the TEN-T. In addition, a string of significant new policy strategy documents adopted by the Commission (the EU 2020 Strategy, the Budget Communication, the White Paper for Transport, the Single Market Act) has brought a new political context in which the TEN-T policy is to be developed.

Article 172 sets the Framework for the application of the principle of subsidiarity by requiring the approval of Member States regarding projects on their territory. The need for coordination between the Union establishing the Guidelines and the Member States implementing it has led to the setting up of the TEN-T Guidelines Committee, which has been involved at every stage of the revision of the TEN-T Guidelines.

3. OBJECTIVES OF TEN-T POLICY REVISION

The overall aim of this initiative is to establish by 2030 a complete and integrated TEN-T that would maximise the value added for Europe of the network. This optimal network would cover and link all EU Member States in an intermodal and interoperable manner. This network would also provide links to neighbouring and third countries, as well as all transport modes and systems that would support the move towards a competitive and resource-efficient transport system by 2050.

This general objective can be translated into more specific goals, to be achieved by 2030. Each of these 4 specific objectives intends to address one of the 4 drivers leading to the problem of fragmentation.

The first specific objective shall enhance coordination in EU **planning**:

- Define a *coherent & transparent approach to maximise the EU added value of the TEN-T*, addressing aspects of network fragmentation linked to missing links, multimodality, and adequate connections to neighbouring and third countries, as well as ensure adequate geographical coverage.

The next three specific objectives shall design a sound governance structure to secure the **implementation** of the optimal network configuration thus identified:

- Foster the implementation of European *standards* for management systems and push for the development of harmonised operational *rules* on the TEN-T projects of common interest. This objective does not aim at imposing new specific standards and rules, but rather ensuring the effective adoption and implementation of common European standards already developed.
- *Enhance Member States cooperation* in order to coordinate investments, timing, choice of routes, environmental and cost-benefit assessments for projects of common interest.
- Ensure that *the optimal network configuration is a key element in the allocation of EU funding* allowing a focus on cross-border sections, missing-links and bottlenecks.

These specific objectives have been further detailed into operational objectives, as follows.

The methodology to define the network configuration should enable the:

- Connection of all main airports and seaports to other modes, especially (High-Speed) railways and inland waterway systems by 2050;
- shift of 30% of road freight over 300 km to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050.

The implementation of European standards and adoption of common rules should be realised by:

- ensuring by 2030 the deployment of European transport management systems (ERTMS, SESAR, ITS, RIS, SSN and LRIT) on the projects of common interest;
- ensuring the commitments of Member States to agree on common operational rules in order to have fully functional projects of common interest by 2030.

The enhancement of Member States cooperation will be realised by:

- obtaining binding commitments by Member States for the implementation of essential cross-border projects with a binding timetable;
- obtaining binding commitments by Member States to take measures eliminating bottlenecks and missing-links on their territory that have cross-border effects.

The optimal network configuration shall ensure:

- priority for cross-border projects, bottlenecks and missing-links, interoperability and intermodality;
- conditionality of EU funding upon compliance with EU environmental legislation (SEA, EIA & Natura 2000)

4. POLICY OPTIONS

A two-pronged process was applied for generating a range of possible policy options that could address the drivers leading to TEN-T's fragmentation and help thus achieve the objectives set out above. First, a range of possible generic policy scenarios in each field for action has been identified. Five (A) "planning" scenarios have been envisaged – business-as-usual, guidelines discarded, selection of new PPs (or "Essen 2"), Core Network and dense comprehensive network; and five (B) "implementation" scenarios have been developed – business-as-usual, guidelines discarded, regulatory approach only, reinforced coordination, EU full operational management.

Second, policy options alternatives have been generated through combinations of policy scenarios at each level of action. The result has been a matrix of 25 combinations of planning and implementation (AB) scenarios, i.e. 25 (theoretically) possible policy options. As the "Guidelines discarded" planning scenario was not compatible with any implementation scenario, five options involving it were discarded from the start. This planning scenario was subsequently considered as a policy option in its own, without an implementation dimension.

The remaining 21 options were submitted to a preliminary assessment with regard to their effectiveness in addressing the drivers of TEN-T fragmentation. Three scenario combinations were subsequently retained as clearly viable policy options – A3B4, A4B4, A5B4, with a fourth at the limit – A1B4. While scoring high in terms of positive impacts on all but one of the drivers, the latter combination was however discarded. Due to continued limited coordination in planning, it would not solve the central issue of network fragmentation and, as such, would not make a viable policy alternative.

Impacts on Options	Planning coordination	Interoperability standards & rules	Member States cooperation	Conditionality of EU funding
A1B1 Business as usual / Continuation with current 30 PPs and current implementation approach	[0]	[0]	[+]	[0]
A1B2 Continuation of current 30 PPs but with no further EU implementation support	[0]	[0/-]	[-]	[-]
A1B3 Continuation of current 30 PPs with a purely regulatory approach to implementation	[0]	[0/+]	[+]	[0/+]
A1B4 Continuation of current 30 PPs with reinforced coordination	[0]	[++]	[+++]	[+++]
A1B5 Continuation of current 30 PPs with full EU operational management	[0]	[++]	[-]	[+]
A2 Guidelines discarded	[-]	n/a	n/a	n/a
A3B1 MS selection of new PPs (Essen 2) with current implementation approach	[+]	[0]	[+]	[0]
A3B2 MS selection of new PPs (Essen 2) with no further EU implementation support	[+]	[0/-]	[-]	[-]
A3B3 MS selection of new PPs (Essen 2) with purely regulatory approach to implementation	[+]	[0/+]	[+]	[0/+]

A3B4 MS selection of new PPs (Essen 2) with reinforced coordination	[+]	[++]	[+++]	[++]
A3B5 MS selection of new PPs (Essen 2) with full EU operational management	[+]	[++]	[-]	[+]
A4B1 Dual layer (core and comprehensive) network with current implementation approach	[++]	[0]	[+]	[0]
A4B2 Dual layer (core and comprehensive) network with no EU implementation support	[++]	[0/-]	[-]	[-]
A4B3 With purely regulatory approach to implementation	[++]	[0/+]	[+]	[0/+]
A4B4 TEN-T Dual layer (core and comprehensive) Reinforced coordination	[++]	[++]	[+++]	[+++]
A4B5 Dual layer (core and comprehensive) network with full EU operational management	[++]	[++]	[-]	[+]
A5B1 Dense TEN-T with current implementation approach	[+++]	[0]	[+]	[0]
A5B2 Dense TEN-T with no further EU implementation support	[+++]	[0/-]	[-]	[-]
A5B3 Dense TEN-T Purely regulatory approach to implementation	[+++]	[0/+]	[+]	[0/+]
A5B4 Dense TEN-T with reinforced coordination	[+++]	[++]	[+++]	[+++]

A5B5 Dense TEN-T with full EU operational management	[+++]	[++]	[-]	[+]
---	-------	------	-----	-----

Legend: [-] negative; [0] none; [+] low; [++] medium; [+++] high.

In parallel, the coherence of each policy scenario with the principles of subsidiarity and proportionality was assessed. Two planning scenarios - "A2/Guidelines discarded" or "A5/Dense network approach" – and two implementation scenarios - "B3/Regulatory approach only" and "B5/EU full operational management" – were found not to comply with these principles. Hence, any combination that included either of these scenarios was deemed unviable as a policy option. Option A5B4 was consequently discarded for further consideration, in spite of the fact that, according to the effectiveness criteria, would have been most promising in terms of addressing current drivers and thus achieving the TEN-T policy objectives.¹

This process of pre-screening of the possible policy options has narrowed down the choice between two policy alternatives capable on a stand alone basis to address all the root causes of the problem identified above:

- Option 1 (A3B4), combining an approach to planning that largely continues with the current policy, though with certain amendments in the light of the experience accumulated, with a reinforced coordination approach to implementation; and
- Option 2 (A4B4), combining a stronger approach to planning coordination, by means of identification of an optimised configuration of the strategic "core" of the TEN-T, with the same reinforced coordination approach to implementation.

The impacts of both options have been assessed against the baseline scenario, i.e. where the current policy approach would be maintained.

5. ASSESSMENT OF IMPACTS

The table below presents an synoptic presentation of the different impacts of the policy options considered in what concerns other economic, social and environmental impacts:

	Option 1	Option 2
Economic Impacts		
Impact on transport sector		
- Modality and efficiency of the Transport system	+	++
- Congestion & travel times	+	++

¹ Other arguments that played against its retention were its very high costs, resulting in limited cost-efficiency, and extensive infrastructure developments required that could not be delivered within the 2030 timeline.

- Administrative burden	+	++
General economic impacts		
- Trade with Neighbouring and 3rd countries	+	++
- Economic growth	+	++
- Innovation	+	++
- EU competitiveness	+	++
Social impacts		
Employment and Jobs		
- Jobs related to infrastructure investments	++	++
-Effects on employment in the transport sector	+	++
Public Health and Safety		
- Road Safety	+	++
Accessibility & territorial cohesion	+	++
Environmental impacts		
Emissions		
- Climate change	=	+
- Air pollution	++	++
- Noise	=	+
Energy use	+	+
Land-use	-	-

The analysis has shown that:

- Both Options 1 and 2 would have an overall higher positive *economic* impact, both at macroeconomic level and for the European transport system, as compared to a baseline scenario. Option 2 appears to be preferable, having higher positive impacts on all aspects assessed.
- With regard to *social* impacts, both Option 1 and Option 2 would have higher positive impacts as concerns job creation than if continuing with the current policy approach. The impact on safety is also likely to be positive in both options, though to a lesser extent, due to the rebound effect of increased transport volumes on an improved network configuration in both options. Option 2 would be preferable due to overall higher positive effects.
- With regard to *environmental* aspects, the rebound effect of improved transport efficiency in Options 1 and 2 will limit the positive impact of the reduction of emissions and energy use thanks to congestion reduction and induced modal shift. In Option 1, the impact on land-use and biodiversity is likely to be

particularly negative, since the selection of new Priority Projects would lead to the building of new infrastructure, while it will remain limited in Option 2, thanks to efforts to optimally interconnect existing infrastructure. Option 2 appears to be preferable from this point of view too, due to higher overall positive impacts.

The assessment of the impact of the policy options is surrounded by a certain degree of uncertainty, owing to the influence of factors that are difficult to predict or quantify. These are either factors inherent to the policy options, such as possible changes in the network configuration or the impact of budgetary decisions at Union, Member States or regional level; or factors external to transport infrastructure policy choices, such as the many synergies and trade-offs with other transport policy measures, long-term technological developments or environmental amenities.

6. COMPARISON OF OPTIONS

Each alternative option retained would bring significant improvements, when compared to the baseline policy approach, both in terms of effectiveness in the implementation of the specific policy objectives and in terms of economic, social and environmental impacts. Option 2, due to stronger coordination ensured at both planning and implementation levels, would have overall higher positive impacts.

In terms of efficiency, the economic, social and environmental benefits of Option 2 are higher than those of Option 1, while the costs of implementing these options are similar, rendering a better cost-benefit ratio in Option 2 than in Option 1.

Finally, Option 2 is likely to be more effective in limiting trade-offs across the economic, social and environmental domain than both two other policy approaches.

7. MONITORING AND EVALUATION

The Commission evaluates and reviews the Progress of the implementation of the TEN-T policy through annual Progress Reports, a practice that will accompany TEN-T policy implementation regardless of the choice of policy approach in the future.

In addition, the Commission, its agencies, notably the TEN-T Executive Agency and the European Coordinators, whose mandate and role would be maintained all options, would continue to constantly monitor a set of indicators that measure the extent to which the policy operational objectives, as set out in this report, are achieved.