Trans-European Network in wider context and specific view on transport

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Summary:

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1. Introduction

1.1. Subject of draft regulation

The TEN-T regulation will create EU principles for the development of Trans-European Transport Networks, which will determine the TEN-T infrastructure in which projects of common interest will be identified.

The principles specify the requirements that should be respected by entities responsible for management of TEN-T infrastructure. They formulate the priorities for TEN-T development. They also define measures for implementation of TEN-T. They are related to TEN-T, which is comprised of:

- existing and planned transport infrastructure;
- measures supporting effective management and the use of such infrastructure.

The TEN-T transport infrastructure consists of:

- railway transport infrastructure;
- domestic water infrastructure;
- highway transport infrastructure;
- marine transport infrastructure;
- air transport infrastructure;
- infrastructure for multi-modal transport;
- equipment, facilities and intelligent transport systems connected with transport infrastructure.

For the purposes of the draft regulation, the following terms are defined as follows:

- project of common interest means any part of the planned transport infrastructure, existing transport infrastructure or any modification of existing transport infrastructure, which conforms with the contents of the Comprehensive Network (see below) and any measures ensuring the effective management and use of such infrastructure;
- project of mutual interest means a project including both EU states and one or more third countries focusing on the connection of TEN-T with those countries' transport infrastructure networks for facilitation of the main traffic flows;
- third countries means any neighbouring countries and all other countries with which the EU may cooperate to achieve the objectives monitored based on the TEN-T regulation;
- In the last issue of the EU Monthly we touched on the topic of trans-European infrastructure networks in a broader context. However, the topic was devoted primarily to examination of the past, specifically the basic characteristics of TEN-T and the principles of its development. The topic of this issue of the Monthly is at the most complementary. We are more closely examining the regulations regarding TEN-T and its basic definition and objectives as well as specific identified projects for the program period of 2014 to 2020.
- neighbouring countries means countries involved in the system of European Neighbouring Policy (ENP), including Strategic Partnership, Expansion Policy, the European Economic Area and the European Free Trade Association (EFTA);
- European added value means in relation to the project the value stemming from EU intervention, which represents a sufficient contribution to the value, which otherwise would be created by the very (isolated) activity of the member state;
- infrastructure manager means any public or business entity that is responsible particularly for the establishment and maintenance of transport infrastructure. It can also include management of infrastructure control and safety systems;
- intelligent transport systems (ITS) means systems using informational, communication, navigation and localization (position determining) technology for management of mobility and operation in TEN-T and ensuring of the added value of services for citizens and operators, including safety, environmentally friendly and capacity effective network use. They can also include on-board equipment that ensures the formation of an inseparable system with related infrastructure components. They also include systems that are further related to the following five points:
    a) management system for air transport means the system specified in Regulation (EC) No. 552/2004 of the European Parliament and the Council of the EU from 10 March 2004 about the interoperability of the European network of aviation transport management (the regulation regarding interoperability) and in the main plan about

European air transport management (ATM) defined by Council Regulation (EC) No. 210/2007 from 27 February 2007, on establishment of a joint enterprise for development of a new generation of the Single European Sky ATM Research program (SESAR);

b) Vessel Traffic Management Information System (VTMIS) means systems put in place for monitoring and management of regular and marine transport, using information from the automatic identification system for ships (AIS), Long-range identification and tracking of ships (LRIT), coastal radar systems and radio communication ensured by directive no. 2002/59/EC of the European Parliament and the Council of the EU from 27 June 2002, establishing a Community monitoring and information system for vessel transport and reference to Council Directive EU No. 93/75 EEC;

c) management information services means information and communication technology for inland water ways as defined in Directive 2005/44/EC of the European Parliament and the Council of the EU from 7 September 2005 related to harmonized management information systems on inland water ways in the Community;

d) marine routes means services using advanced and interoperable information technology in the marine transport sector for facilitation of the transfer of freight at sea in port areas;

e) European Railway Transport Management System (ERTMS) means the system defined in European Commission decision no. 2006/679/EC from 28 March 2006 and European Commission decision no. 2006/860 from 7 November 2006 related to technical specifications for interoperability in relation to management, security and signalization sub-systems of trans-European conventional and high-speed rail systems;

- transport mode (type of transport) means railways, inland water ways and highway, marine and air transport;
- multi-modal transport means the transport of freight or passengers or both using two or more transport modes;
- urban node means a city (urban) area where TEN-T transport infrastructure is linked with other parts of this infrastructure and the infrastructure of regional and local transport;
- logistics platform means an area that is directly linked to TEN-T transport infrastructure, including at least one freight terminal making it possible to secure logistics activities;
- freight terminal means a structure equipped for the transferring of freight between at least two transport modes and for temporary storage of freight in locations such as ports, inland ports, airports and railway and highway terminals;
- NUTS region means a region that is defined in the nomenclature of territorial units for statistics purposes.

1.2. Aims of Trans-European transport network

TEN-T enables transport services and operations, which:

a) satisfy its users' mobility and transport needs within the EU and in relation to third countries, which contributes to further economic growth and competitiveness;

b) are economically effective, contribute to objectives related to carbon reduction, clean transport, fuel safety and environmental protection, are safe and have high standards of quality both for passenger and freight transport;

c) support the most advanced and most developed technological and operating concepts;

d) ensure enough availability of all EU regions, which supports social, economic and territorial cohesion and growth based on the process of social inclusion.

In TEN-T infrastructure development, the following objectives will be monitored:

a) mutual interconnection and interoperability of national transport networks;

b) elimination of obstacles and covering of missing connections both within transport infrastructure and at connection points between locations within member states and at border crossings between them;

c) development of all types of transport in a consistent method with ensuring of sustainable and economically effective transport over the long-term;

d) optimum integration and interconnection of all types of transport;

e) effective use of infrastructure;

f) support for widespread use of transport with the greatest possible carbon-neutral effect;

g) connection of transport infrastructure between TEN-T and neighbouring countries' transport infrastructure networks and support for their interoperability;

h) creation of infrastructure requirements, nominally in relation to interoperability and safety, which will create benchmarking for the quality, effectiveness and sustainability of transport services;

i) essential connection between long-distance transport infrastructure and regional and local transport for both passenger and freight transport;

j) transport infrastructure that reflects the specific situations in various parts of the EU and ensures balanced coverage of European regions, including the most distant and other peripheral regions;

k) accessibility for older persons, persons with reduced mobility and disabled passengers.

1.3. Resource effective network

Member states and where beneficial also regional and local authorities, infrastructure managers, transport operators and other public and private entities shall plan, develop and operate TEN-T in a resource effective manner through:

a) optimizing integration and interconnection of infrastructure;

b) widespread placement of new technology and ITS;

c) improving and maintaining existing transport infrastructure;

d) respecting possible synergies with other networks, particularly trans-European energy and telecommunications networks;

e) appreciation of the strategic impact on the environment, with creation of suitable plans and programs for reducing the impact on the climate;

f) measures for planning and expansion of infrastructure capacity where it is needed;

g) adequate consideration of the vulnerability of infrastructure in view of climate change and natural and man-made disasters.

1.4. Double-layer TEN-T structure

The gradual development of TEN-T will be achieved particularly by implementing a double-layer structure for this network, consisting of a Comprehensive Network and Core Network (see below). The Comprehensive Network will be created from all existing and planned TEN-T transport infrastructure and measures supporting the effective use of this infrastructure.

The Core Network will involve the parts of the Comprehensive Network that have the **greatest strategic importance** for TEN-T development achievements.

1.5. Projects of common interest

Projects of common interest will contribute to TEN-T development through the creation of new transport infrastructure, maintenance, restoration and improvement of existing infrastructure and through measures supporting resource effective use.

Projects of common interest will:

a) contribute to TEN-T objectives;

b) conform with the purpose of the Core Network and Comprehensive Network;

c) be a subject of socioeconomic analysis of costs and benefits, culminating in a positive net value;

d) demonstrate clear European added value.

A project of common interest can include an entire cycle, including studies of feasibility, allowance procedures and evaluations.

1.6. Cooperation with third countries

The EU can support projects of common interest in order to establish connections between TEN-T and third countries' infrastructure networks, included in the European Neighbourhood Policy, the Expansion Policy, the European Economic Area (EEA) and the European Free Trade Association and which seek:

a) connection of the Core Network at border crossings;

b) ensuring of connections between the Core Network and third countries' transport networks;

c) completion of transport infrastructure in third countries, which serve as links between parts of the Core Network in the EU;

d) implementation of transport management systems in those countries.

Such projects of common interest will boost the capacity and usefulness of networks, localized in one or more member states.

The EU can cooperate with third countries on supporting projects of common interest. These projects seek:

a) support for interoperability between TEN-T and neighbouring countries' networks;

b) support for expanding the trans-European network policy to third countries;

c) facilitation of air transport with third countries, particularly expansion of the Single European Skies and cooperation in air traffic management;

d) facilitation of marine transport and support for marine routes with third countries.

The annex to the regulation contains TEN-T indicative maps, expanded for specific neighbouring countries. The EU can use existing or create and use new coordination and financial tools with neighbouring countries such as a Neighbourhood Investment Facility (NIF) or an Instrument for Pre-accession Assistance (IPA) to support projects of common interest.

The EU may cooperate with international and regional organizations and institutions to achieve any goals monitored in connection with fulfilment of the purpose of cooperation with third countries.

1.7. Examples of preliminarily identified Core Network projects related to transport

a) Baltic-Adriatic corridor

Preliminarily identified sections	Transport type	Description / data / information
Helsinki – Tallinn	Ports, marine routes (Motorways of the Sea; MoS)	Interconnection of ports, (further) development of multi-modal platforms and their interconnection, MoS, including icebreaker capacity
Tallinn – Riga – Kaunas - Warsaw	railways	(detailed) study of new UIC (International Union of Railways) regarding fully interoperable tracks; work on a new route beginning before 2020; interconnection of railways, airports and marine ports
Gdynia - Katowice	railways	Modernization
Gdynia, Gdansk	ports	Interconnection of ports; (further) development of multi-modal platforms
Warsaw - Katowice	railways	modernization
Katowice – Ostrava – Brno – Vienna & Katowice – Žilina – Bratislava – Vienna	railways	modernization; particularly the Polish-Czech, Polish-Slovak and Slovak-Austrian border areas; (further) development of multi-modal platforms
Vienna – Graz – Klagenfurt – Udine – Venice – Ravenna	railways	Modernization and continuing work; (further) development of multi-modal platforms
Terst, Venice, Ravenna	ports	Interconnection of ports; (further) development of multi-modal platforms

b) *Warsaw – Berlin – Amsterdam/Rotterdam – Felixstowe – Midlands*

Preliminarily identified sections	Transport type	Description / data / information
Border crossing with Belarus – Warsaw – Poznan – border with Poland – Germany	Railways	Modernization of existing routes; studies for high-speed railways
Border Poland - Germany – Berlin – Hannover – Amsterdam/Rotterdam	Railways	Modernization of several sections (Amsterdam – Utrecht – Arnhem; Hannover – Berlin)
West German channels, Mediterranean Channel, Hannover – Magdeburg - Berlin	Inland water ways (IWW)	Modernization
Amsterdam locks	Inland water ways (IWW)	Ongoing study
Felixstowe - Midlands	Railways, port, multi-modal platforms	Interconnection of ports and multi-modal platforms

c) *Third Mediterranean Corridor*

Preliminarily identified sections	Transport type	Description/data
Algeciras - Madrid	Railways	Ongoing studies, work should be commenced before 2015 and completed in 2020
Seville – Antequera – Granada – Almería – Cartagena – Murcia – Alicante - Valencia	Railways	Study and processing
Valencia – Tarragona - Barcelona	Railways	Development between 2014 and 2020
Barcelona	Port	Interconnection of railways with port and airport
Barcelona – Perpignan	Railways	Cross-border section, ongoing work, new route completed by 2015, modernization of existing route
Perpignan - Montpellier	Railways	The Nimes-Montpellier route should be functional in 2017, Montpellier-Perpignan in 2020
Lyon - Turin	Railways	Cross-border section; work on tunnel foundation should be commenced by 2020; study regarding access to
Milan - Brescia	Railways	Partial modernization, partially new high-speed route
Brescia – Venice - Terst	Railways	In several sections, work should start by 2014
Milan – Mantova – Venice - Terst	Inland water ways (IWW)	Studies, modernization, processing
Terst - Divača	Railways	Study and partial ongoing modernization; cross-border section will be developed after 2020
Koper – Divača – Ljubljana – Maribor	Railways	Study and modernization / partially new route
Node Ljubljana	Railways	Railway mode Ljubljana, including multi-modal platform; interconnection of railways - airports
Maribor - Zalalövö	Railways	Cross-border section: study, work should be commenced before 2020
Boba - Szekesfehervar	Railways	Modernization
Budapest – Miskolc – border crossing with Ukraine	Railways	Modernization

d) Hamburg – Rostock – Burgas / border crossing with Turkey – Pireus – Nicosia

Preliminarily identified sections	Type of transport	Description/data
Dresden – Prague	Railways	Study for high-speed railways
Prague	Railways	Modernization, passage for freight, rail link to airport
Hamburg - Dresden	Inland water ways (IWW)	Modernization of Elbe
Děčín locks	Inland water ways (IWW)	study
Břeclav - Bratislava	Railways	Cross-border, modernization
Bratislava – Hegyeshalom	Railways	Cross-border, modernization
Budapest – Arad – Timisoara - Calafat	Railways	Modernization in Hungary almost completed, work continuing in Romania
Vidin – Sofia – Burgas/ border crossing with Turkey Sofia – Thessaloniki – Athens/Pireus	Railways	Study and processing of Vidin – Sofia – Thessaloniki; modernization of Sofia – Burgas/border crossing with Turkey
Athens/ Pireus - Limassol	MoS	Port capacity and interconnection with infrastructure for water ways
Limassol - Nicosia	Ports, multi-modal platforms	Modernization of interconnections

2. Comprehensive Network

Basic definition: The Comprehensive Network will be set up based on identification of projects of common interest. It will be specified via the maps in the annex to the regulation. It will be specified via a description of the parts of infrastructure. It will conform with the requirements for transport infrastructure. It will create a framework for the development of priority infrastructure.

Member states will ensure that the Comprehensive Network is completed and implemented and that it fully conforms to relevant rules by the end of 2050 at the latest.

2.1. Priority

The EU, member states, infrastructure managers and other supporters of projects in the process of development of the Comprehensive Network will especially consider measures that are necessary for:

- the implementation and deployment of intelligent transport systems, including measures that enable management of transport, multi-modal services related to transport schedules and information, multi-modal tracking and tracing, capacity planning, online reservation systems and integrated services related to tickets;
- overcoming of missing connections and elimination of narrow locations, mainly in cross-border sections;
- elimination of administrative and technical obstacles, mainly in relation to network interoperability and economic competition;
- ensuring of optimum integration of transport modes;
- ensuring of suitable passability for all regions of the EU;
- improvement or maintenance of the quality of infrastructure from the point of view of effectiveness, climate safety, overcoming unfortunate events, performance in relation to the environment, social conditions, availability for all users, quality of services and continuity of traffic flows;
- support for the current system of technological development;
- ensuring of safety related to fuels by enabling the use of alternative and especially low-carbon or carbon-free sources of energy and propulsion systems;
- bypasses of urban areas for freight transport by rail.

2.2. Rail transport infrastructure

Maps

The rail connections that form part of the Comprehensive Network are indicated on maps, which are part of the annexes to the regulation.

Infrastructure components

Rail transport infrastructure particularly includes:

a) high-speed and conventional rail connections, including siding, tunnels and bridges;

b) freight terminals and logistics platforms for loading of goods within railway mode and between railway and other modes of transport;

c) stations along connections, indicated in the annex for the transport of passengers within railway mode and between railway and other modes of transport;

d) related equipment;

e) ITS.

Rail connections will take one of the following forms:

- rail connections for high-speed transport, which are:
- specially constructed high-speed routes selected for speeds of 250 km/h or higher;
- specially adapted and reconstructed conventional routes equipped for speeds of 200 km/h;

- rail routes for conventional transport.

The technical equipment related to rail routes will include electrification systems, equipment for boarding and exiting of passengers and loading and unloading of freight in stations, logistical platforms and freight terminals. It will include any facility necessary for ensuring safe and effective operation of the vehicles.

Requirements for transport infrastructure

The operators of freight terminals will ensure that any freight terminals are opened for all operators.

The operators of logistical platforms will offer at least one terminal opened to all operators.

The operators of freight terminals and logistical platforms will ensure this access in a non-discriminatory manner and shall apply a transparent system of fees.

The operators of stations for passengers will ensure that the stations for passengers offer access to information, ticket and commercial activities for rail transport within the Comprehensive Network and where it is appropriate also information about connections with local and regional transport routes, in accordance with Commission Regulation (EU) No. 454/2011 of 5 May 2011, on the technical specification for interoperability relating to the sub-system of 'telematics applications for passenger services' of the trans-European rail system.

Within the extent of their responsibility, member states and infrastructure managers shall ensure that:

- rail routes are equipped with ERTMS;
- rail infrastructure is in accordance with Directive 2008/57/EC of the European Parliament and Council of the EU of 17 June 2008 on the interoperability of the rail system within the Community and its implementation measures for achieving interoperability of the Comprehensive Network;
- the rail infrastructure is in accordance with the requirements of the technical specification for interoperability (TSI), adopted pursuant to Article 6 of Directive 2008/57/EC for new and renovated routes, with the exception of properly justified cases. In any case, the rail infrastructure should be in accordance with the following requirements:
  a) nominal span of tracks for new rail routes – 1,435 mm;
  b) electrification;
  c) connections used by conventional freight trains: 22.5 t of weight and train length 750 m;
  d) maximum gradients for new tracks used by conventional trains: 12.5 mm/m.

Framework for priority development of infrastructure

Member states and other submitters of projects in the case of support for projects of common interest shall particularly take into consideration:

- the use of ERTMS;
- reduction of the impact of noise caused by rail transport;
- achievement of standards higher than those set as the minimum requirements in the technical specifications.

2.3. Domestic water infrastructure

Maps

Domestic water routes and domestic ports that form part of the Comprehensive Network are indicated on maps in an annex to the proposed regulation.

Parts of infrastructure

The infrastructure of domestic water routes consists mainly of:

- rivers;
- canals;
- lakes;
- locations related to infrastructure, such as sluices, locks, bridges and reservoirs;
- domestic ports, including infrastructure essential for transport operations within the port area;

- related equipment;
- ITS.

Domestic ports will have a yearly volume of transported freight greater than 500,000 t. The total yearly volume of transported freight is based on the most current available three-year average published by Eurostat.

Equipment connected with the port will particularly enable propulsion and operating systems to reduce pollution, energy consumption and carbon intensity. This also includes equipment receiving waste.

Within the extent of their responsibility, member states, port operators and infrastructure managers shall ensure that domestic ports are connected with roadway or rail infrastructure within the Comprehensive Network.

Port operators shall ensure that any domestic port can offer at least one freight terminal opened to all operators in a non-discriminatory manner and that transparent fees are applied.

As part of their responsibility, member states and infrastructure managers shall ensure that:

- rivers, canals and lakes conform to the minimum requirements for class IV water routes, as specified in the European agreement on main water routes of international importance (AGN) regarding new classification of internal water routes and that related illumination of bridges is ensured;
- rivers, canals and lakes are equipped with RIS.

Framework for development of priority infrastructure:

Member states and other project implementers when supporting projects of common interest shall especially devote attention to:

- existing domestic water routes, implementation of measures necessary to achieve the standards of class IV domestic water routes;
- where appropriate, achieving higher standards than class IV domestic water routes, for ensuring market demand;
- implementation of ITS, including RIS;
- connection of the domestic port infrastructure to the rail transport infrastructure.

2.4. Roadway transport infrastructure

Maps

The roadways that comprise part of the Comprehensive Network are indicated on maps in an annex to the proposed regulation.

Infrastructure components

Roadway transport infrastructure consists particularly of:

- higher quality roadways, including bridges, tunnels, intersections, crosswalks and crossing points outside of level;
- parking zones;
- accompanying equipment;
- ITS;
- freight terminals and logistical platforms;
- bus stations and terminals.

Higher quality roadways are those that play an important role in long-distance transport for freight and people, integrate main urban and economic centers, connect other transport modes and enable connection of remote and peripheral NUTS 2 regions with central regions of the EU.

Higher quality roadways will be especially proposed and built for motor traffic and will have the form of highways or high-speed roadways.

A highway is a roadway specially proposed and built for motor traffic, which primarily does not serve entities located in their vicinity and which:

- consists, with the exception of special locations and sections or for a temporary period, of separated traffic lanes for two directions of traffic, separated from each other by a dividing line, which is not intended for traffic, or only in exceptional cases;
- does not cross another roadway, railway or tram lines or pedestrian paths at the same level, and
- is specially labelled as a highway.

A high-speed roadway is a roadway intended for motor traffic, which is available only from managed intersections and crossings and which:

- prohibits stopping and parking in travel lanes;
- does not cross at one level with any rail lines, tram routes or pedestrian paths.

Equipment related to roadways particularly includes equipment for managing traffic, informational and management equipment, equipment for collecting tolls for the use of roadways, safety measures, equipment for reducing negative environmental impacts, for tanking or charging vehicles with alternative propulsion and for ensuring parking zones for commercial vehicles.

Traffic infrastructure requirements

Within their extent of responsibility, member states and infrastructure managers shall ensure that:

- roadways are in accordance with the specified definitions;
- the safety of rail infrastructure is ensured and monitored and where necessary improved based on the procedure outlined in Directive 2008/96/EC of the European Parliament and Council of the EU of 19 November 2008 on road infrastructure safety;
- roadway tunnels longer than 500 m are in accordance with Directive 2004/54/EC of the European Parliament and the Council of the EU of 29 April 2004, on minimum safety requirements for tunnels in the Trans-European Road Network;
- the interoperability of fee collection systems is ensured in accordance with Directive 2004/52/EC of the European Parliament and the Council of the EU from 29 April 2004, on interoperability of electronic road toll systems in the Community and European Commission Decision 2009/750/EC of 6 October 2009 on the definition of European electronic toll service and its technical elements.
- interoperability of toll collection systems is ensured in accordance with Directive 2004/52/EC of the European Parliament and the Council of the EU of 29 April 2004, on interoperability of electronic road toll system in the Community, and Decision of the European Commission No. 2009/750/EC of 6 October 2009, on definition of the European electronic toll system and its technical elements.

The intelligent transport systems for road infrastructure, which are in accordance with Directive 2010/40/EU of the European Parliament and the Council of the EU of 7 July 2010, on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport, will be used.

Framework for development of priority infrastructure

Member states and other participants in the projects in the event of support for projects of common interest will devote primary attention to:

- use of ITS, particularly multi-modal information management and management of transport operation and will enable integrated communication and payment systems;
- implementation of new technologies and innovations for supporting low-carbon transport;
- ensuring of safe parking zones;
- support for road safety.

2.5. Marine transport infrastructure

Maps

Seaports that form part of the Comprehensive Network are indicated on maps in an annex to the proposed regulation.

Parts of infrastructure

The marine transport infrastructure consists particularly of:

- marine space;
- marine canals;
- seaports, including the infrastructure necessary for transport operations within the port areas;
- navigation aids;
- access to ports;
- maritime routes;
- related equipment;
- ITS.

Seaports will be entry and exit points for ground infrastructure of the Comprehensive Network. They will satisfy at least one of the following criteria:

- the total yearly volume of transport of persons will exceed 0.1% of the total yearly volume of transport of persons at all seaports in the EU; the reference value for this total volume is the last available three-year average, based on statistics published by Eurostat;
- the total volume of freight – either for mass or non-mass processing of freight – exceeds 0.1% of the corresponding total yearly volume of freight processed at all seaports in the EU; the reference amount for this total volume is the last available three-year average based on statistics published by Eurostat;
- the seaport is localized on an island and ensures an exclusive point for access to the NUTS 3 region within the Comprehensive Network;
- the seaport is localized in a remote region or peripheral area, beyond a radius of 200 km from the nearest other port within the Comprehensive Network.

The connected equipment with the marine transport infrastructure particularly includes equipment for breaking ice, hydrological overviews, excavation and maintenance of the port and access to it.

Maritime routes

Maritime routes represent a marine dimension of the Trans-European Transport Network. They consist of coastal routes, ports, related marine infrastructure and equipment, equipment enabling coastal transport and/or services on seas and rivers between at least two ports, including connections with the mainland, in at least two different member states.

Maritime routes include:

- marine connections between marine ports within the Comprehensive Network;
- port facilities, information and communication technology, such as electronic logistical guidance systems, safety, administrative and customs procedures in at least one member state;
- infrastructure for direct access to land and to the sea.

Projects of common interest for maritime routes in the Trans-European Transport Network will be proposed by at least two member states. They will take one of the following forms:

- they will be a marine part of the Core Network corridor (see below), or they will create the marine part between two corridors of the Core Network;
- they will create the marine connection and its mainland connection within the Core Network between two or more ports in the Core Network;

They will create the marine connection and its mainland connection between the Core Network port and the Comprehensive Network port, with a special focus on mainland connection of Core and Comprehensive Network ports.

Projects of common interest for maritime routes in the Trans-European Transport Network may also include activities that have broader benefits and are not connected to specific ports, such as activities for improving performance related to the environment, making ice breaking equipment available, activities ensuring year-round passability of waterways, excavation work, equipment for alternative vessels as well as optimization of processes, procedures and human elements, ICT platforms and information systems, including management of operations and electronic and information systems.

Requirements for transport infrastructure

Within the extent of their responsibility, the member states, port operators and infrastructure managers shall ensure that:

- marine ports are connected with rail routes, roadways and where appropriate also with inland water ways in the Comprehensive Network, with the exception of those in Malta and Cyprus, for as long as no rail system exists on their territory;
- any marine port offers at least one terminal opened for all operators in a non-discriminatory manner with application of transparent fees;
- marine canals, port throughways and the moths of rivers can connect two seas or ensure access from the sea to marine ports and be connected at least to class VI internal waterways.

Port operators shall ensure that ports contain the equipment necessary for ensuring corresponding performance related to the environment in the case of boats in ports, particularly within the receiving equipment for boats that generate waste and cargo residues in accordance with Directive 2000/59/EC of the European Parliament and the Council of the EU of 27 November 2000, on port reception facilities for ship-generated waste and cargo residues.

Member states shall implement VTMIS in accordance with Directive 2002/5/EC.

Framework for development of priority infrastructure

Member states and other project participants when supporting projects of common interest shall pay specific attention to:

- support for maritime routes, including coastal transport;
- interconnection of marine ports with inland waterways;
- implementation of VTMIS and eMaritime services.

2.6. Air transport infrastructure

Maps

Airports, which form part of the Comprehensive Network are specified on the maps in the annex to the proposed regulation.

Parts of infrastructure

Air transport infrastructure consists mainly of:

- airspace, flight routes and airways;
- airports;
- related equipment;
- ITS.

The airports shall fulfill one of the following criteria:

a) for passenger airports
   - the total number of passengers is at least 0.1% of the total yearly number of passengers at all EU airports, the total yearly number of passengers is based on the last available three-year average, published by Eurostat;
   - the volume ceiling of 0.1% is not applied if the airport is located beyond the radius of 100 km from the nearest airport in the Comprehensive Network or beyond the radius of 200 km, if the region in which the airport is located is equipped with a high-speed rail route.

b) For a freight airport the total yearly volume of freight is at least 0.2% of the total yearly volume of freight at all EU airports. The total yearly volume of freight is based on the last available three-year average, published by Eurostat.

Requirements for transport infrastructure

Within the extent of their responsibility, member states and airport operators shall ensure that any airport offers at least one terminal opened for all operators in a non-discriminatory manner and applies transparent fees.

Within the extent of their responsibility, member states, airport operators and air carriers shall ensure that the basic standards for ensuring civil aviation against acts of unlawful interference are adopted in the EU in accordance with Regulation (EC) No. 300/2008 of the European Parliament and the Council of the EU from 11 March 2008, on common rules in the field of civil aviation safety, which shall also apply to the air transport infrastructure in the Comprehensive Network.

Within the extent of their responsibility, member states, airport operators and air carriers shall ensure that the infrastructure for management of air transport enables the implementation of a single European sky in accordance with:

- Regulation (EC) No. 549/2004 of the European Parliament and the Council of the EU of 10 March 2004, laying down the framework for the creation of the single European sky (the framework regulation),
- Regulation (EC) No. 550/2004 of the European Parliament and the Council of the EU of 10 March 2004, on the provision of air navigation services in the single European sky (the service provision regulation),
- Regulation (EC) No. 551/2004 of the European Parliament and the Council of the EU of 10 March 2004, on the organization and use of the airspace in the single European sky (the airspace regulation)
- Regulation (EC) No. 552/2004 of the European Parliament and the Council of the EU of 10 March 2004, on the interoperability of the European Air Traffic Management network (the interoperability Regulation)

for improvement of the performance and sustainability of the European air traffic system and implementation of rules and EU specifics.

Framework for development of priority infrastructure

Member states and other project resolvers when supporting projects of common interest shall give priority to monitoring:

- optimization of existing infrastructure;
- increasing the capacity of airports;
- supporting the implementation of the single European sky and air traffic management systems, particularly those used by SESAR.

2.7. Infrastructure for multi-modal transport

Maps

Freight terminals and logistical platforms that form part of the Comprehensive Network are indicated on maps in an annex to the regulation.

Parts of infrastructure

Freight terminals and logistical platforms will show conformity with at least one of the following criteria:

- their total movement of freight will exceed the quantitative threshold for marine ports (see above);
- where there is no freight terminal or logistical platform in accordance with the previous point in the territory of the NUTS 2 region, the main freight terminal or logistical platforms proposed by the particular member state shall be involved, combined with at least roadways and rail routes for this NUTS 2 region.

Transport infrastructure requirements. Within the extent of their responsibility, member states, operators of freight terminals, ports and airports and infrastructure managers shall ensure that:

- individual transport modes are connected in any of the following areas: freight terminals, passenger stations, inland ports, airports, and seaports in order to enable multi-modal transport of freight and passengers;
- (without affecting the applicable provisions of EU and national legislation) freight terminals and logistical platforms, inland and seaports and airport handling of freight have been equipped for ensuring information flows within this infrastructure and between types of transport within the logistics chain. These systems will particularly be capable of providing information in real time about available infrastructure capacity, traffic flows and localization, routing and ensuring of safety through multi-modal routes;
- (without affecting the applicable provisions of EU and national legislation) continuing passenger transport after throughout the Comprehensive Network will be simplified through suitable equipment and availability of ITS in railway stations, bus stations, airports and where relevant also in marine and inland water ports.

Freight terminal operators will ensure that freight terminals are equipped with cranes, transporters and other equipment for moving freight between various modes of transport and for positioning and storing freight.

Framework for development of priority infrastructure

Member states and other project implementers when supporting projects of common interest shall pay special attention to:

- ensuring effective connection and integration of the infrastructure of the Comprehensive Network, including access infrastructure wherever it is necessary and via freight terminals and logistical platforms;
- elimination of the main technical and administrative barriers for multi-modal transport;
- development of smooth flows of information between transport modes and enabling ensuring of multi-modal and "single-type" services across the Trans-European Transport System, including related communication, payment, ticket and commercialization services.

2.8. Joint provisions

Urban nodes

During the development of the Comprehensive Network, member states and other project resolvers should focus on ensuring:

- passenger transport: connections between rail and air routes and whenever appropriate also inland waterways and roadway and marine infrastructure of the Comprehensive Network;
- freight transport: connections between rail routes and where appropriate also air, marine and roadway transport infrastructure in the Comprehensive Network;
- adequate connections between various railway stations or airports within the Comprehensive Network in the urban node;
- problem-free connections between the infrastructure of the Comprehensive Network and the infrastructure for regional and local transport, including logistics consolidation and distribution centers;
- bypasses of urban areas for road traffic for improving long-distance traffic flows leading to the Comprehensive Network;
- bypasses of urban areas for rail transport of freight;
- support for effective low-carbon deliveries of freight in urban areas with low noise.

The joint provisions also address the topics of ITS, freight transport services, new technologies and innovations, infrastructure safety, infrastructure resistant to climate changes and disasters, environmental protection and availability for all users.

3. Core Network

3.1. Identification of the Core Network

The Core Network will consist of three parts of the Comprehensive Network, which have the most strategic importance for achieving the goals of the Trans-European Transport Network policy. The Core Network will contribute in particular to coping with increasing mobility and the development of a low-carbon transport system.

The Core Network will be connected in nodes and will ensure connections with the transport infrastructure networks of neighbouring countries.

The transport infrastructure comprising the Core Network is illustrated in maps related the Comprehensive Network in an annex to the proposed regulation.

3.2. Requirements

The Core Network will reflect the developing demand for transport and the need for a multi-modal transport system. The condition of technology and regulatory and management measures for managing the use of infrastructure will importantly be taken into account for ensuring efficient use of the transport infrastructure and ensuring sufficient capacity. The Core Network infrastructure will satisfy the requirements defined above for the Comprehensive Network, to which others will also be assigned:

- for rail transport infrastructure: full electrification of rail routes; routes with regular freight traffic (at least 22.5 t, tracks for speeds of up to 100 km/h and train lengths of 750 m);
- for infrastructure of inland navigation and marine transport: availability of alternative clean fuels;
- for road traffic infrastructure: development of rest areas approximately every 50 km on motorways and ensuring sufficient parking spaces for commercial users of roadways with a corresponding level of safety; availability of alternative clean fuels;
- for air transport infrastructure: capacity for available alternative clean fuels.

3.3. Core Network Development

The transport infrastructure included in the Core Network will be developed in accordance with the provisions regarding the Comprehensive Network (see above). The implementation of projects of common interest contributing to the completion of the Core Network will be given priority.

Member states shall ensure the completion of the Core Network no later than by the end of 2030.

3.4. Core Network nodes

The Core Network nodes are specified in an annex to the proposed regulation and include:

- urban nodes, including their ports and airports;
- seaports;
- border crossings with neighbouring countries.

Seaports will be connected with the rail and road infrastructure of the Trans-European Transport Network by the end of 2030 at the latest.

The main airports will be connected with the rail and road infrastructure of the Trans-European Transport Network by 2050 at the latest. Potential demand for transport will be taken into consideration; these airports will be integrated into the high-speed rail network whenever possible and rational.

3.5. Implementation of the Core Network through Core Network corridors

General significance of Core Network corridors

The Core Network corridors are a tool for facilitating the coordinated implementation of the Core Network. The Core Network corridors will be based on modal integration, interoperability and coordinated development and management of infrastructure leading to resource efficient multi-modal transport.

The Core Network corridors will ensure a coordinated approach from the point of view of use of infrastructure and investments, and so the management of capacity should be done in the most effective way. Multi-modal infrastructure within the Core Network corridors will be built and coordinated where it is necessary in a manner that optimizes the use of each transport mode and cooperation. The Core Network corridors will support targeted use of interoperable transport and traffic management systems.

Definition of Core Network corridors

The Core Network corridors are part of the Core Network. They will include at least three transport modes and pass through at least three member states. They will cover the most important cross-border flows over long distances within the Core Network. Under reasonable circumstances, the Core Network corridor may include only two transport modes.

The Core Network corridors will include marine ports and access routes to them.

List of Core Network corridors

Each member state will participate in at least one Core Network corridor.

The list is contained in an annex to the regulation about the CEF (Connecting Europe Facility; see the previous situation report).

Core Network corridor coordination In order to facilitate the coordinated implementation of Core Network corridors, the European Commission shall specify, after consultations with affected member states and consultations with the European Parliament, persons given the title “European Coordinator”.

The European Coordinator will be selected mainly based on his/her experience with European institutions and knowledge of subjects related to financing and socioeconomic and environmental evaluation of main projects.

The decision by the European Commission that will select the European Coordinator will also specify how his/her objectives will be fulfilled.

The European Coordinator will act on the European Commission's behalf. In cooperation with the affected member states, he/she will create a workplace for the activities that will be fulfilled.

The European Coordinator:

- will perform coordinated implementation of the Core Network corridor in a manner that ensures fulfillment of the time plan set in the decision regarding implementation for the individual Core Network corridor;
- will inform the member states, the European Commission and when appropriate also all other entities directly involved in the development of the Core Network corridor about any problems and complications that arise and will contribute to finding appropriate solutions;
- will compile a report each year for the European Parliament, the European Commission and affected member states about the achieved progress during the implementation of the Core Network corridor;
- will consult in cooperation with affected member states and particularly with regional and local authorities, infrastructure managers, transport operators, transport users and when appropriate also other public and private entities in order to obtain greater knowledge about the demand for transport services, options for financing investments and the steps that need to be taken for optimization of the conditions for financing.

Core Network corridor management

For each Core Network corridor, the participating member states will establish a corridor platform responsible for defining the general objectives of the Core Network corridor and for the preparation and supervision of measures related to the corridor development plan (see below).

The corridor platform will be comprised of representatives of the participating member states, and when appropriate also representatives of other public and private entities.

The European Coordinator will sit at the helm of the corridor platform.

The corridor platform may be established as a permanent legal entity, such as a European economic interest group.

The establishment of the corridor platform shall not change the fact that the recipient of EU financial aid will have the final responsibility for implementing the projects.

Corridor development plan

For each Core Network corridor, the participating member states in cooperation with the corridor platform will jointly process (and notify the European Commission of) a corridor development plan within six months after this regulation becomes valid. The plan shall particularly include:

- a description of the characteristics of the Core Network corridor, including narrow locations;
- the aims of the Core Network corridor, particularly from the point of view of performance expressed based on the quality of services and capacity and in accordance with the definition requirements imposed for the Core Network;
- a program of measures necessary for the development of the Core Network corridor;
- a market study about the multi-modal transport;
- an implementation plan, including an accompanying plan, related to the interoperability of the management systems for multi-modal freight corridors; a plan for eliminating physical, technical, operational and administrative barriers between and within transport modes and for boosting the effectiveness of multi-modal transport and services; measures to improve the administrative and technical capacity for concept formulation, planning, design, securing, implementation and monitoring projects of common interest; evaluation of risks, including the potential impacts of climate changes on infrastructure, and when appropriate proposed measures for boosting resistance against climate effects; measures shall be adopted to curb greenhouse gas emissions;
- an investment plan, which will be regularly updated, including a list of projects for the expansion, restoration or proposal of transport infrastructure for each mode of transport, included in the Core Network corridor; a related financial plan with various sources considered for financing at the international, national, regional, local and EU level, including, when possible, predetermined systems of cross financing and private capital, together with amounts of obligations already earmarked and a reference to the EU's contribution expected as part of EU financing programs.