

EN
ANNEX
"ANNEX II

**referring to objectives and priorities of the CEF - Transport sector to be implemented
by calls for proposals under the Multi-Annual Work Programme 2014-2020 in 2016**

1. BUDGET

1.1. Budget heading

- 06020101 - Removing bottlenecks and bridging missing links;
- 06020102 - Ensuring sustainable and efficient transport in the long run;
- 06020103 - Optimising the integration and interconnection of transport modes and enhancing interoperability, safety and security of transport;
- 06020104 - Connecting Europe Facility (CEF) — Cohesion Fund allocation.

1.2. Budget resources

The **additional** amount in the field of the Connecting Europe Facility (CEF) - transport sector to be allocated in 2014 - 2020 to the calls for proposals to be launched in 2016 shall be:

- EUR 70 000 000 under the budget line 06020101 for the calls 2016
- EUR 80 000 000 under the budget line 06020102 for the calls 2016
- EUR 500 000 000 under the budget line 06020103 for the calls 2016
- EUR 849 554 916 under the budget line 06020104 for calls 2016

The indicative breakdown of annual instalments of the Union financial support including the global overview of budgetary implementation is provided for in Annex.

The Work Programme defines the means of implementation of the Union financial support.

2. FUNDING OBJECTIVES

This Work Programme establishes the basis for the allocation of the Union financial assistance to projects of common interest and to the Programme Support Actions in the field of Connecting Europe Facility (CEF) - transport sector.

This Work Programme is organised according to the following funding priorities in line with the CEF Regulation as supplemented by the Delegated Act of 8 July 2016¹ concerning the CEF transport funding priorities:

- 2.1 Funding priorities for the objective of bridging missing links, removing bottlenecks, enhancing rail interoperability, and, in particular, improving cross-border sections
- 2.2 Funding priorities for the objective of ensuring sustainable and efficient transport systems in the long run, with a view to preparing for expected future transport flows, as well as enabling all modes of transport to be decarbonised through transition to innovative low-carbon and energy-efficient transport technologies, while optimising safety

¹ OJ L247/1 of 15 September 2016

2.3 Funding priorities for the objective of optimising the integration and interconnection of transport modes and enhancing the interoperability of transport services, while ensuring the accessibility of transport infrastructures

2.4 Programme support actions.

3. OBJECTIVES AND PRIORITIES:

3.1. Priorities related to bridging missing links, removing bottlenecks, enhancing rail interoperability, and, in particular, improving cross-border sections

3.1.1. Pre-identified projects on the core network corridors, Annex I, part I point 2 of the CEF Regulation for the following transports modes: railways, inland waterways, roads, maritime and inland ports

This funding priority is **open only to the Cohesion Member States for the call concerning the Cohesion envelope** (funded from the appropriations of the budget line 06.020104)

3.1.2. Pre-identified projects on the other sections of the core network, Annex I, part I point 3 of the CEF Regulation for the following transports modes: railways, inland waterways, roads, maritime and inland ports

This funding priority is **open only to the Cohesion Member States for the call concerning the Cohesion envelope** (funded from the appropriations of the budget line 06.020104)

General objectives under 3.1.1 and 3.1.2:

The general objectives are as follows:

- to implement transport infrastructure projects (studies and works) on the core network corridors, and
- to increase the use of private finance in trans-European transport infrastructure financing as an alternative and complement to the traditional grant funding and plug financing gaps for strategic investments.

These objectives shall be pursued by means of:

- Cross-border projects for railways, inland waterways and roads;
Actions involving a cross-border section or a part of such a section shall be eligible to receive Union financial assistance only if there is a written agreement between the Member States concerned or between the Member States and third countries concerned relating to the completion of the cross-border section.
- Projects aiming at the removal of bottlenecks for railways, inland waterways, maritime and inland ports, as well as for roads in the case of Member States with no railway network established in their territory or in the case of a Member States, or part thereof, with an isolated network without long-distance rail freight transport;
- Other infrastructure projects for railways, inland waterways, maritime and inland ports, as well as for roads in the case of Member States with no railway network established in their territory or in the case of a Member States, or part thereof, with an isolated network without long-distance rail freight transport;

- Technical, legal, financial or feasibility studies to assess the potential for Public Private Partnerships (PPP) or other project finance schemes as well as the preparation of tender documentation and permission procedures insofar as these projects are located on the Core Network in points 2 or 3 of part I of Annex I of the CEF Regulation.

a) Railways (under funding priorities 3.1.1 and 3.1.2)

Priority open only to the Cohesion Member States.

Under this priority, only Actions (works or studies) related to the following sections may be funded:

- Pre-identified Core Network Corridor sections, as stipulated in Annex I, part I point 2 of the CEF Regulation; and
- Other sections of the Core Network, as defined in Annex I, part I point 3 of the CEF Regulation.
- Actions shall be in line with Chapter III (Core Network) of the TEN-T Guidelines.

Priority shall be given to eligible Actions addressing:

- Cross-border pre-identified projects of the Core Network Corridors or other sections of Core Network Corridors;
- Cross-border pre-identified projects of the Core Network Corridors or other sections of the Core Network that ensure connection between two Member States via a third country;
- Projects aiming at accelerating the removal of bottlenecks (in terms of capacity and service quality) which hinder the traffic flows on the pre-identified sections or other sections as defined above, of the Core Network;
- Projects improving railway safety, including the deployment of the railway radio communication system (GSM-R) for safety-related voice communication, notably for emergency calls, compliant with the technical specifications laid out in Commission Regulation (EU) 2016/919²;
- Where relevant, interconnections between rail and other modes of transport, in particular inland waterway and maritime transport;
- Studies that shall contribute to the start-up of the implementation of works on sections or parts which are most critical to the success of the respective Core Network Corridor as a whole, i.e. which are of vital importance for smooth traffic flows along the entire axis and would, if not completed within the agreed period of time, reduce the benefits drawn from investments made on other sections of the axis. First priority shall be given to those studies where the Member States directly involved have given due priority to the respective sections in their political decision making process and in their investment planning. Priority shall also be given to studies where activities have been

² Commission Regulation 2016/99 of 27 May 2016 on the technical specification for interoperability relating to the ‘control-command and signalling’ subsystems of the rail system in the European Union (OJ L 158, 15.6.2016, p. 1–79).

coordinated across national borders, Public Private Partnerships or other financing schemes optimised and which shall result in launching procurement for execution of construction works.

The "project pipeline" resulting from the corridor analysis shall be given due consideration.

Applicants are reminded to take due account of the provisions of Directive 2008/57/EC of the European Parliament and of the Council³.

Proposed Actions covering stations, and in particular the station buildings, are of lower priority unless they concern the railway infrastructure component. If included in the application, they shall be clearly described, quantified and priced separately.

Support is not given for maintenance.

b) Specific conditions for combined projects referring to the pre-identified railway sections on the Core Network Corridors and track-side ERTMS works projects

Under this priority projects addressing both following elements may be funded:

- pre-identified railway sections on the Core Network Corridors for railway implementation including interoperability elements (**works only**); and
- ERTMS implementation (track-side **works only along the same sections of the railway implementation**)

These project proposals shall be submitted as '**combined pre-identified railway and track-side ERTMS works projects**' and present:

- railway works, and
- track-side ERTMS deployment activities

and specify, for each component, a cost estimation.

These projects shall contribute to the objectives for Railway as stipulated in 3.1.1 a) and to the ERTMS track-side deployment as stipulated in point 3.1.4.1.

The applicants of the 'combined pre-identified railway implementation – track side ERTMS works projects' proposals are requested to include in the application forms the information required for ERTMS track-side deployment relating to works specified in section 3.1.4.1.c, addressing at least:

- Identification of the specific line and its main characteristics, including location, length, single/double track, type of traffic i.e. freight, passenger, mixed, etc.;
- Characteristics and description of the ERTMS track-side subsystem to be installed including details of the CCS TSI, baseline, level, interoperability constituents and optional functions as for example the use of Euroloop;
- Expected date when the ERTMS track-side subsystem equipped section will be authorised to be placed in service.

c) Inland Waterways and inland ports (under priorities 3.1.1 and 3.1.2)

Priority open only to the Cohesion Member States.

³ Directive 2008/57/EC of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community (OJ L 191, 18.7.2008, p. 1).

The specific objective is to reinforce the contribution of inland waterways and ports to a sustainable European freight transport network, in particular to core network corridors, in line with the Naiades II policy framework adopted by the Commission on 10 September 2013⁴.

Under this priority, only Actions (works or studies) related to the following sections may be funded:

- pre-identified Core Network Corridors sections, as stipulated in Annex I, part I point 2 of the CEF Regulation; or
- other sections of the Core Network defined in Annex I, part I point 3 of the CEF Regulation;
- **core** inland ports as identified in Annex II point 2 of the TEN-T Guidelines; or
- water-side infrastructure development of inland ports located on Core Network Corridors sections, as stipulated in Annex I, part I point 2 of the CEF Regulation.

Only Actions in line with Chapter III (Core Network) of the TEN-T Guidelines and the specific requirements of Chapter II, section 2 (Articles 14, 15 and 16) of the TEN-T Guidelines on transport infrastructure requirements for inland waterways may be funded.

Inland waterways and inland ports facilities supported under the CEF must be accessible for use by all operators on a non-discriminatory basis.

For Inland Waterways, priority shall be given to the following:

- Upgrade of waterways in order to achieve stable or improved navigation conditions and/or more capacity for the passage of vessels in the meaning of Articles 15 and 16 of the TEN-T Union Guidelines;
- Creation of new waterways;
- Construction/upgrading/modernisation of locks (including the deployment of remote control systems), to improve the passage of vessels and pushed convoys;
- Increasing of under-bridge clearance;
- Facilities for ice-breaking, hydrological services and dredging to ensure year-round navigability;
- Creation and/or upgrade of infrastructure for mooring and waterborne operations along a waterway for use and access to all on a non-discriminatory basis;
- Where relevant, proposed Actions shall provide for interconnection between inland waterways and other modes of transport, in particular rail and maritime transport.

For Inland ports, priority shall be given to providing or improving the following:

- Access to inland ports and connections between inland ports and rail and road sections of the Core Network;
- Access, including safe access through navigational aids, of inland ports to inland waterways;

⁴ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions, Towards quality inland waterway transport NAIADES II (COM/2013/0623 final).

- Basic infrastructure in inland ports in accordance with point (g) of Article 16 of the TEN-T Guidelines;
- Water-side terminals/platforms infrastructure such as storage and stacking areas in accordance with point (g) of Article 16 of the TEN-T Guidelines;
- Reception facilities for oil and other waste, to support the sustainability of waterborne transport services;
- ICT applications, in particular pilot Single Window applications, as well as applications to streamline administrative formalities through a better use of information, communication and positioning technologies;
- Providing or improving road/rail access and connections within inland ports;
- Facilities for loading/transshipment as well as for ice-breaking, hydrological services and dredging of the port and port approaches to ensure year-round navigability (facilities must be accessible for use by all operators on a non-discriminatory basis);
- Introduction or implementation of fixed infrastructure regarding alternative energy, e.g. LNG bunkering and shore-side electricity.

Water-side terminals and platforms infrastructure must be open for use by all operators on a non-discriminatory basis. Proposed Actions for such infrastructure shall be accompanied by an analysis of all terminals and platforms serving the targeted hinterland and demonstrating broader capacity constraints for the targeted hinterland. Support for water-side terminals/platforms superstructure, such as warehouses, shall not be granted.

Water-side infrastructure development projects shall mean infrastructure that enhance the navigability capacity in the meaning of Articles 15 and 16 of the TEN-T Guidelines or improves the multimodal connection of waterborne transport operations. This excludes infrastructure that does not directly benefit waterborne transport operations.

As regards support to dredging activities for both inland waterways and inland ports, routine maintenance dredging shall not be funded; only capital dredging and rehabilitation dredging activities may be funded under this priority. Rehabilitation dredging may only be funded in connection with global actions that provide for year-round good navigation status for a given section of the waterway.

Such dredging activities and facilities may only be proposed as part of a wider project having the main focus on the upgrading of basic infrastructure or the provision of waterside terminals/platforms. Likewise, proposed Actions related to the introduction or implementation of fixed infrastructure for alternative energy as the main content of a proposal or related to mobile infrastructure (with the exception of facilities for ice-breaking, hydrological services and dredging), shall be submitted to Priority "Deployment of new technologies and innovation in all transport modes, with a focus on decarbonisation, safety and innovative technologies for the promotion of sustainability, operation, management, accessibility, multimodality and efficiency of the network" of the 2016 multi-annual transport call for proposals, Funding Objective 2.

Finally, measures for the deployment of River Information Services shall not be supported.

d) Roads (under priorities 3.1.1 and 3.1.2)

Priority open only to the Cohesion Member States.

Under this priority, only Actions (works for cross-border sections or studies) related to the following sections may be funded:

- pre-identified Core Network sections, as stipulated in Annex I, part I point 2 of the CEF Regulation; and
- other sections of the Core Network, as defined in Annex I, part I point 3 of the CEF Regulation.

Actions shall be in line with Chapter III (Core Network) of the TEN-T Guidelines and the specific requirements of Chapter II, section 3 (roads) of the TEN-T Guidelines.

Priority shall be given to actions addressing cross-border projects on the sections of the Core Network.

In addition, in the case of Member States with no railway network established in their territory or in the case of a Member State, or part thereof, with an isolated network without long-distance rail freight transport and maritime infrastructure on the Core Network Corridors, priority shall be given to actions addressing:

- Removal of bottlenecks;
- Other infrastructure projects.

Applicants are also reminded of the fact that funds shall only be granted to Actions compliant with the road safety⁵ and tunnel safety⁶ Directives.

Support is not given for maintenance.

Studies shall concern Actions where the initial investment decision has already been taken before the application for CEF funding and in particular studies related to design, permits, including EIA, etc. that are close to the actual implementation of these Actions.

e) Maritime Ports (under 3.1.1 and 3.1.2)

Priority open only to the Cohesion Member States.

Under this priority, only Actions (works or studies) related to the following sections may be funded:

- pre-identified Core Network Corridors sections, as stipulated in Annex I, part I point 2 of the CEF Regulation; and
- other sections of the Core Network, as defined in Annex I, part I point 3 of the CEF Regulation;

Actions shall be in line with Chapter III (Core Network) of the TEN-T Guidelines and the specific requirements of Chapter II, section 4 (maritime transport and motorways of the sea) of the TEN-T Guidelines.

All core network maritime ports in Cohesion Member States are covered by Annex I, Part I of the CEF Regulation.

Specific objectives are to support the development of ports as efficient and sustainable entry and exit points fully integrated with the land infrastructure in line with the Communication "Ports: an engine for growth".⁷

⁵ Directive 2008/96/EC of the European Parliament and of the Council of 19 November 2008 on road infrastructure safety management (OJ L 319, 29.11.2008, p. 59).

⁶ Directive 2004/54/EC of the European Parliament and of the Council of 29 April 2004 on minimum safety requirements for tunnels in the trans-European road network (OJ L 167, 30.4.2004, p. 39).

Priority shall be given to eligible actions addressing the:

- Hinterland connections to the Core Network (rail, inland waterway or road if other hinterland connections are not an option) with adequate capacity and efficiency;
- Port access aiming at providing safe maritime access in the form of breakwaters, access channels, locks and navigational aids;
- Basic infrastructure in the form of internal basins, quay walls, jetties, backfills and land reclamation;
- Reception facilities for oil and other waste, including residues from exhaust gas cleaning systems, to meet environmental requirements;
- Implementation of new facilities and technologies regarding provision and use of alternative fuels or energy, e.g. LNG bunkering, shoreside electricity, etc., in line with the Directive 2014/94/EU⁸, excluding any pilot actions.

Union financial support shall not be given to:

- Superstructure in the meaning of moveable commercially operated infrastructure, warehouses and others;
- Any maintenance;
- Dedicated infrastructure and facilities for cruise ships;
- The expansion or construction of new cargo or passenger terminals in ports.

Applicants are reminded about the possibilities offered by other financial instruments such as the European Fund for Strategic Investments (EFSI) and Horizon 2020.

Projects shall be planned and built based on a proper needs assessment.

For projects related to port access or basic infrastructure a market analysis must have been performed and the results clearly presented in the proposal.

The market analysis shall include an analysis of the market impact at regional and/or national level vis-a-vis possible competing neighbouring ports. Projects which are part of a formal long-term port development strategy, encompassing all ports of a region in line with the work plan of the Corridor where the port is located, shall also demonstrate their needs assessment and conduct market analysis. In such cases, the analysis shall however be less detailed and does not need to document the impact on competing ports. Where relevant an assessment of the required intermodal exchanges with rail and inland waterways must also be performed and presented in the proposal. In this regard, the Commission shall take into account the quality of the analysis demonstrating that the port handling capacity and the capacity of rail and/or inland navigation services on the corridor are comprehensively addressed.

Studies shall concern projects where the initial investment decision has been taken and in particular studies related to design, permits, including EIA, etc. that are close to the actual implementation of these projects.

Priority shall be given to projects in ports having accounts in line with Commission Directive 2006/111/EC⁹.

⁷ COM(2013)295

⁸ [Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure](#) (OJ L 307, 28.10.2014)

3.1.3. Rail interoperability

Priority open only to the Cohesion Member States

General objectives

The general objective is to achieve interoperability within the European Union's rail system by meeting the provisions set out in Directive 2008/57/EC and, based on that Directive, notably those of the Technical Specifications for Interoperability (TSI) concerning Telematics Applications for Passengers (TAP) and Telematics Applications for Freight (TAF). Thereby, for the railway lines forming part of the TEN-T, compliance with the infrastructure requirements set out in the TEN-T Guidelines shall be ensured.

Specific objectives

Interoperability shall be promoted via the following specific objectives:

- Ensuring easy access for users to information about itinerary, time and availability, including consultation and dissemination activities for the promotion of TAP and TAF;
- Ensuring compliance of the rail system and its subsystems with the TSI, notably on infrastructure, energy, rolling stock for passengers and freight transport, operation, telematics applications, control command and signalling, safety in railway tunnels;
- Simplifying procedures for the authorisation, placing in service and use of rolling stock on the Union's railway network;
- Ensuring compliance with other relevant requirements of the TEN-T Guidelines.

Proposals under this priority:

- may address elements of more than one of the fields below;
- may be implemented in one or more Member States;
- may not address ERTMS-related activities.

a. Interoperability of the rail system as set out in Directive 2008/57/EC:

Technical Specifications for Interoperability (TSI) concerning Telematics Applications for Passengers (TAP) and Telematics Applications for Freight (TAF).

Proposals shall aim at ensuring easy access for users to information about itinerary, time and availability, including consultation and dissemination activities for the promotion of TAP and TAF. In particular, an application shall demonstrate its contribution to:

- Ensuring quality management of data for TAP TSI (timetable data availability in B4 format, tariff data availability in B1 – B3 format);
- Support small and medium size Railway Undertakings in TAP implementation (timetable data exchange according to B4, tariff data exchange according to B1-B3, reservations in B5 format, home print tickets in B7 format, PRM assistance in B10 format);

⁹ Commission Directive 2006/111/EC of 16 November 2006 on the transparency of financial relations between Member States and public undertakings as well as on financial transparency within certain undertakings (OJ L 318, 17.11.2006, p. 17).

- Support rail stakeholders to develop a common Telematics Reference Files merging the existing TAF and TAP Reference Files sets to be used in the Telematics framework and by other registers managed by ERA or the rail sector;
- Support Infrastructure Managers and Railway Undertakings to implement and ensure the compliance of the rail system and its subsystems with the TAP and TAF TSI developing and implementing the unique Train ID in line with the commitment expressed in the TSI TAP and TAF master plans to replace Operation Train Number already in use;
- Support rail actors (Infrastructure Managers, Wagon keepers, Railway Undertakings or other rail related organizations/companies) to implement TAP and TAF TSI compliant databases and/or tools (such as for assessment of the compatibility of the rolling stock with the infrastructure, infrastructure restriction notices, rolling stock data, freight operational data for tracking wagon/ intermodal unit movements tariff data, timetable data, TAP registry and other TAP related registers);
- Support Infrastructure Managers and Railway Undertakings to implement and ensure the compliance of the rail system and its subsystem with the TAP and TAF TSI. For example, a subset of function like Train Running Information, Path Request, Service Disruption, Train Preparation and Reference Files for European Infrastructure Managers and Railway Undertakings or pre-arranged train paths and reserve capacity, traffic Management by Rail Freight Corridors;
- Support Railway Undertakings to implement and ensure the compliance of the rail system and its subsystem with the TAF TSI through the implementation of the Electronic Consignment Note in line with TAF requirements and including intermodal information, in order to remove missing links between different modes of transport.

b. Railway system compliance with Interoperability¹⁰ and Safety Directives¹¹ (including TSIs other than TAF/TAP) and TEN-T Guidelines

Under this specific objective, proposals shall aim at reducing network diversity if possible by ensuring compliance of railway subsystems with Safety and Interoperability Directives (including TSIs other than TAF/TAP, and notably Infrastructure, Energy, Rolling Stock (including Noise), Operation, Safety in railway tunnels), and/or with infrastructure requirements, covering either comprehensive or core network, set-up in the TEN-T Guidelines.

In particular, proposals shall aim at one or more of the following goals:

- Contributing, by means of works actions, to the reduction in diversity of railway fixed equipment and therefore opening of supply markets including, wherever possible, ensuring TSI compliance of fixed railway installation, primarily in the area of infrastructure and energy subsystems;
- Contributing to the development of a location-specific risk model for the European Railway System to draw a clear link between risk levels measured at a European level

¹⁰ Directive 2008/57/EC.

¹¹ Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (OJ L 164, 30.4.2004, p. 44).

and changes to railway infrastructure. As a result, it shall be possible to quantify the safety benefit from investments made in upgrading railway infrastructure or target investment where it will deliver the greatest benefits. This could support the convergence of risk levels across Europe and support the development of the Single European Railway Area;

- Supporting Railway Undertakings to implement and ensure compliance of the rail system and its subsystems with the Interoperability and Safety Directives including technical specifications for interoperability concerning the subsystems operation and traffic management, rolling stock and wagons;
- Supporting the development and establishment of interoperability registers, in particular the register of infrastructure for all existing infrastructure. This shall ensure consistency between interoperability registers and other existing registers. For more details, please refer to the European Railway Agency study on Coherence and Consistency of Registers¹².

3.1.4. European Rail Traffic Management Systems (ERTMS)

Priority open to all Member States

General objectives:

The general objective is to deploy ERTMS on the trans-European transport core network, including track-side and on-board components.

All actions supported by CEF shall contribute to the objectives of bridging missing links, removing bottlenecks, enhancing rail interoperability, and, in particular, improving cross-border sections. They shall be compliant with Commission Regulation (EU) 2016/919 or subsequent versions, and with Directive 2008/57/EC and Directive 2004/49/EC, or Directive (EU) 2016/797 and Directive (EU) 2016/798.

ERTMS Baseline 2 (B2) means the set of specifications #1 in table A2.1 of the Annex A of the Commission Regulation (EU) 2016/919.

ETCS Baseline 3 (B3) means the set of specifications #2 or #3 in table A2.2 or A2.3 of the Annex A of the Commission Regulation (EU) 2016/919.

B2 may be eligible if packet 203 described in Annex A of Commission Regulation (EU) 2016/919 and relevant mitigation measures defined in the Baseline Compatibility Assessment reports (<http://www.era.europa.eu/Core-Activities/ERTMS/Pages/Current-Legal-Reference.aspx>) are implemented.

On-board and track-side ERTMS deployment may not be submitted together in one application.

Specific objectives:

Under the call to be published General envelope the following eligibility conditions shall apply:

- Trackside projects including relevant preparatory actions, should be B3 or B2 compliant, with priority given to B3 and located on the Core Network, with priority on cross-border sections in the Core Network Corridors (CNC).

¹²

<http://www.era.europa.eu/Document-Register/Documents/ERA-REP-15-2012%20on%20Study%20on%20Coherence%20and%20Consistency%20of%20Registers.pdf>.

On-board projects:

- ERTMS retrofitting and/or upgrading (works) of B3-complaint on-board components with priority for international traffic.

Under the call to be published under the Cohesion envelope the following eligibility conditions shall apply:

- Trackside projects including relevant preparatory actions, should be B3 or B2 compliant, with priority given to B3 and located on the Core Network, with priority on the Core Network Corridors (CNC).

On-board projects:

- ERTMS retrofitting and/or upgrading (works) of B3-complaint on-board components with priority for international traffic.

3.1.4.1. ERTMS track-side deployment

a) Description

Proposals addressing ERTMS track-side deployment compliant with B2 or B3, with priority given to B3 or upgrade of lines to B3 compliant version, or preparatory actions

Deployment means:

- equipment with ERTMS of a railway line section (already in operation or in construction) and not equipped with this system before.

Upgrade means:

- equipment with B3 of a line section already in operation and equipped with a version of ERTMS/ETCS not compatible with the sets of specifications laid down in the Commission Regulation (EU) 2016/919
- equipment with B3 of a line section already in operation and equipped with B2.

Preparatory actions mean

- activities needed to prepare project implementation in accordance with Article 2(6) of the CEF Regulation to speed up the ERTMS deployment. The preparatory actions should be a basis for launching a procurement procedure for the ERTMS deployment.

b) Essential conditions

Are excluded from the scope of this specific objective:

- Applications covering solely GSM-R component of ERTMS;
- Works related to Class B system(s) and/or Specific Transmission Module (STM).

ERTMS deployment and preparatory actions cannot be submitted together in one application.

Feasibility studies can only be presented as a part of a Preparatory action package and are not eligible as stand-alone documents.

c) Information to be included in a proposal:

For proposals related to a **deployment** of ERTMS (works):

- Identification of a specific line and its main characteristics, incl. location, length, single/double track, type of traffic i.e. freight, passenger, mixed, etc.;
- Characteristics and description of the ERTMS track-side subsystem to be installed including details of the CCS TSI, baseline, level, interoperability constituents and optional functions as for example the use of Euroloop;
- A description of tests strategy in line with applicable technical specification for interoperability, to be performed with on-board units provided by at least one different supplier to the one in charge of the equipment of the line. The on-board units used for tests shall be compliant with applicable technical specification for interoperability;
- Expected date when the ETCS track-side subsystem equipped section will be authorised to be placed in service;
- Evidence of the activities completed/ planned in order to obtain the authorisation to place the line in service;
- Identification and justification for infrastructure eligible works for track-side equipment (falling under the definition in Article 2(5) of the CEF Regulation) which are necessary for the implementation of ETCS level 2 (e. g. upgrade or renewal of interlockings);
- Description of the provisions of the envisaged ERTMS technical solution in line with article 19 of Directive (EU) 2016/797:
 - providing access to details of the technical solutions,
 - forecast of technical meetings and possible audits from the European Union Agency for Railways
- In the case of applications covering a GSM-R component, information regarding interferences, e.g. identification of the problem, mitigation measure(s) undertaken/planned, etc.;
- Information on contractual arrangements with a supplier(s), e.g. offer, contract, provision(s) for future software upgrade, error(s) corrections, maintenance, etc.

For proposals related to an **upgrade of ERTMS (works)**:

- Identification of a specific line and its main characteristics, incl. location, length, single/double track, type of traffic i.e. freight, passenger, mixed, etc.;
- Comprehensive description of the ETCS track-side subsystem already installed, including details of the CCS TSI, baseline, level and optional functions as for example the use of Euroloop;
- A copy of the authorization placing the ETCS-equipped line in service issued by the competent National Safety Authority;
- Existing certificates and declarations of the subsystem and certificates and declarations of conformity of the interoperable constituents shall be provided. A detailed description of all deviations, its restrictions and its conditions of use following the template developed by the European Union Agency for Railways¹³;
- Comprehensive description of the final ERTMS track-side subsystem at the end of the Action including details of the CCS TSI and its set of specifications and baseline, level and optional functions as for example the use of Euroloop;

¹³ <http://www.era.europa.eu/Core-Activities/ERTMS/Pages/Certification-issues.aspx>

- A description of the test strategy, in line with the applicable technical specification for interoperability, to be performed with on-board units provided by at least one different supplier to the one in charge of the equipment of the line. The on-board units used for tests shall be compliant with the technical specification for interoperability;
- Identification and justification for infrastructure eligible works for track-side equipment (falling under the definition in Article 2(5) of the CEF Regulation) which are necessary for the upgrade to ETCS level 2 (e. g. upgrade or renewal of interlockings);
- Expected date when the line will allow ETCS B2/B3 equipped vehicles to run for commercial services;
- Evidence of the activities completed/ planned in order to obtain the authorisation to place the line in service following its upgrade, including information/evidence on involvement of national safety authorities and conformity assessment bodies;
- Description of the provisions of the envisaged ERTMS technical solution in line with article 19 of Directive (EU) 2016/797:
 - providing access to details of the technical solutions,
 - forecast of technical meetings and possible audits from the European Union Agency for Railways
- In the case of applications covering a GSM-R component, if applicable, information regarding interferences, e.g. identification of the problem, mitigation measure(s) undertaken/planned, etc.;
- Information on contractual arrangements with a supplier(s), e.g. provision(s) for software upgrade, error(s) corrections, maintenance, etc.

For proposals related to **preparatory** actions:

- Description of preparatory actions proposed, including its contribution to subsequent physical deployment of ERTMS;
- Identification of the line in subject and its main characteristics, incl. location, length, single/double track, train control system currently in operation, type of traffic i.e. freight, passenger, mixed, etc.;
- Characteristics of the ERTMS track-side subsystem to be installed, including details of the CCS TSI, baseline, level and optional functions as for example the use of Euroloop as well timing for its deployment and expected date for placing in service, if available by the time of the proposal's submission;
- Justification for the need of the preparatory action prior to the procurement process for the deployment of the ERTMS;
- Information demonstrating that the procurement process will start, at least, by the end date for funding requested in the application submitted under this call.
- Description of the provisions of the envisaged ERTMS technical solution in line with article 19 of Directive (EU) 2016/797:
 - providing access to details of the technical solutions,
 - forecast of technical meetings and possible audits from the European Union Agency for Railways

d) Funding conditions

In addition to the general funding principles established in this Work Programme, the following shall apply.

Eligible costs for the **deployment of the lines** shall be limited to a ceiling of EUR 260 000 per kilometre of double-track line equipped with ERTMS.

Infrastructure works for trackside equipment (falling under the definition in Article 2(5) of the CEF Regulation) which are necessary for the implementation of ETCS level 2 (e.g. upgrade or renewal of interlockings) may also be funded and are not covered by the ceiling. In such cases the applicant(s) shall provide thorough technical and financial information substantiating the costs and respective CEF requested support. In the case of non-Cohesion Member States, for these infrastructure works the respective co-financing rate amounts to 40%. The applicants shall present the infrastructure works in (a) separate activity(ies) to facilitate their technical and financial distinction from ERTMS upgrade and subsequent assessment.

Eligible costs for an upgrade of lines, providing that they are duly justified, are not subject to a ceiling and shall be evaluated individually. In such cases the applicant(s) shall provide thorough and detailed financial information substantiating total costs and respective CEF requested support.

Eligible costs for preparatory actions are not subject to a ceiling and will be evaluated individually. In such cases the applicant(s) is invited to provide thorough financial information substantiating the costs and respective CEF requested support.

e) Deliverables (which shall be requested in the grant agreements for projects selected for Union funding):

Assessment of the final outcome of the CEF supported actions shall be based on the completeness and the demonstration of compliance with the technical specification for interoperability of the deliverables listed below.

Deliverables of a proposal selected and implemented within this specific objective shall cover:

- i. For ERTMS upgrade and deployment
 - Engineering rules and operational test scenarios in line with the definition set out in chapter 6 of Commission Regulation (EU) 2016/919;
 - List of interoperability risks and respective mitigation measures. This list shall be updated during the implementation of the action based on the milestones of the project and will be used for monitoring possible deviations from Commission Regulation (EU) 2016/919;
 - Information regarding tests results (test report including operational scenarios) in line with the latest applicable technical specification for interoperability, performed with on-board units provided by at least one different supplier to the one in charge of the equipment of the line. The on-board units used for tests shall be compliant with the applicable technical specification for interoperability;
 - EC declaration of conformity for each interoperability constituent relevant for ERTMS issued by the supplier or the supplier's authorised representative established within the Union, including the certificate of conformity from a notified conformity assessment body; the EC declaration of conformity shall be fully in line with Directive 2008/57/EC;

- EC declaration of verification of the subsystem issued by the applicant for each Control Command Signalling subsystem installed including the EC certificate of verification of subsystem from a Notified Body and the safety assessment report following section 3.2.1 of Commission Regulation (EU) 2016/919; the EC declaration of verification shall be fully in line with Directive 2008/57/EC. The technical compatibility details of the certificates shall be provided using the specific template developed by the European Union Agency for Railways¹⁴;
- Copy of an application for an authorisation for placing the Control Command Signalling trackside subsystem in service or the authorisation in case available by the time the final payment claim is due.

All deliverables shall be sent, ideally according to the milestones' dates included in the grant agreement, and shall be assessed in close cooperation with the European Union Agency for Railways.

ii. for preparatory actions:

- Documentation or other deliverables contributing to speeding up the ERTMS deployment on CNC sections;
- Confirmation that the results of the preliminary activities are included and considered in the procurement procedure for the ERTMS deployment;
- Confirmation of launching the procurement by the end date for funding requested in the application submitted under this call.

All deliverables shall be sent, ideally according to the milestones' dates included in the grant agreement, and shall be assessed in close cooperation with the European Union Agency for Railways.

3.1.4.2. ERTMS on-board deployment

a) Description

Proposals addressing the retrofitting or upgrade (works) with B3 compliant of vehicles already operating on the Union railway network ERTMS may be funded under this specific objective with priority for international traffic.

Retrofitting means

- the installation of the ERTMS B3-compliant equipment (hardware, software, GSM-R in the case of Level 2) on an existing vehicle(s) already in operation and not equipped with this system before.

Upgrade means

- deployment of ERTMS B3 equipment on existing vehicle already in operation (authorised by NSA by the time the application is submitted) and equipped with pre-B2 compliant ERTMS or with B2.

Training activities, specific ad-hoc expertise to follow up the project or other necessary support may be included in the proposal of SMEs.

b) Essential conditions

Works related to Class B system(s) are excluded from the scope of the specific objective.

Works related to a combination of ETCS and a specific transmission module (STM) may also

¹⁴ <http://www.era.europa.eu/Core-Activities/ERTMS/Pages/Certification-issues.aspx>

be funded. However, the costs related to the STM equipment itself may not be funded.

Vehicles must be authorised for operation on the Union railway network (in at least one Member State) prior to submission of the application. For upgrade proposals, the authorisation documentation must identify the ERTMS version already installed, together with information on options, level, software version, hardware, etc.

c) Information to be included in a proposal

To facilitate the evaluation, applicants are requested to provide information related to:

- i. for proposal related to the retrofitting of vehicles (works)
 - Identification of the vehicle(s) type(s), including its basic characteristics, supplier, serial numbers of vehicles to be retrofitted, etc.;
 - Comprehensive description of the current on-board subsystem, including details of the TSI CCS, baseline, optional functions and a copy of the authorisation to place them into service;
 - Description of the authorisation procedure, including evidence of the activities completed/ planned in order to obtain the authorisation;
 - Identification of a line(s) on which vehicles operate today and/or on which they might operate in the near future;
 - A description of tests that will be carried out following technical specification for interoperability to ensure that ETCS B3 vehicles can run on the ETCS equipped line(s), once retrofitted. The description shall include the testing strategy for proving conformity of the on-board equipment (e.g. accredited laboratory, on-site testing, etc.), scenarios requested (e.g. suppliers scenarios, railway scenarios) and a role of a Notified Body(ies);
 - In the case of applications covering a GSM-R component, information regarding interferences, e.g. identification of the problem, mitigation measure(s) undertaken/planned, etc.;
 - Information on contractual arrangements with a supplier(s), e.g. offer, contract, provision(s) for future software upgrade, error(s) corrections, maintenance, etc.;
 - In the case of prototype retrofit applications information on the results sharing and dissemination with the railway sector and the European Union Agency for Railways.
- ii. for proposal related to the upgrade of ERTMS (works)
 - Identification of the vehicle(s) type(s), including its basic characteristics, supplier, serial numbers of vehicles to be upgraded, etc.;
 - Identification of a line(s) on which they operate today and/or on which they might operate in the near future;
 - Definition of the ERTMS on-board subsystem already in service, including details of the TSI CCS, baseline, optional functions and a copy of the authorisation to place in service the ERTMS on-board issued by the competent NSA;
 - Current certificates of conformity of the constituents and certificates of verification of the subsystem. A detailed description of all incompatibilities between the version(s) of ETCS currently installed on the vehicle(s) concerned

by the proposal and ETCS B3-equipped lines. The detailed information concerning the deviations and/or restrictions derived from existing certificates and conformity declarations shall be provided;

- A description of tests that will be carried out following technical specification for interoperability to ensure that ETCS B3 vehicles can run on the ETCS equipped line(s), once upgraded. The description shall include the testing strategy for proving conformity of the on-board equipment (e.g. accredited laboratory, on-site testing, etc.), scenarios requested (e.g. suppliers scenarios, railway scenarios) and a role of a Notified Body(ies);
- Evidence of the activities completed/ planned in order to obtain the authorisation to place the vehicle(s) in service following the upgrade;
- In the case of applications covering a GSM-R component, if applicable, information regarding interferences, e.g. identification of a problem, mitigation measure(s) undertaken/planned, etc.;
- Information on contractual arrangements with a supplier(s), e.g. provision(s) for future software upgrade, error(s) corrections, maintenance, etc.
- In the case of prototype upgrade applications information on the results sharing and dissemination with the railway sector and the European Union Agency for Railways.

d) Funding conditions

For retrofit:

Eligible costs shall be limited to a ceiling of EUR 250 000 per ERTMS on-board subsystem to be deployed (hardware and software including GSM-R) on an already existing vehicle, including prototype(s). In case a vehicle is already equipped with ETCS-compliant hardware, the ceiling may be decreased in the call for proposals. The applicant(s) shall provide thorough and detailed financial information substantiating total costs and respective CEF requested support.

For upgrade:

Eligible costs are not subject to a ceiling and will be evaluated individually. In such cases an applicant(s) is invited to provide thorough financial information substantiating total costs and respective CEF requested support. However, the costs shall be limited to a ceiling of EUR 250 000 per ERTMS on-board subsystem to be deployed (hardware and software including GSM-R) on prototype(s).

For training activities:

Specific ad-hoc expertise to follow up the project, or other necessary support are not subject to a ceiling and shall be evaluated individually. In such cases an applicant(s) shall provide thorough financial information substantiating total costs and respective CEF requested support. In case this condition is not respected, these activities will be aggregated to the retrofit activities and the respective ceiling will be applied.

The applicants shall present tasks not covered by the ceiling in a separate activity(ies) to facilitate their technical and financial differentiation and subsequent assessment.

e) Deliverables (which shall be requested in the grant agreements for projects selected for Union funding):

Deliverables shall demonstrate completeness and compliance with applicable technical specification for interoperability. Assessment of the final outcome of the CEF supported actions shall be based on the completeness and TSI-compliance of the deliverables listed below. Deliverables of a project selected and implemented within this specific objective shall cover:

- Information regarding tests results (test report) in line with the applicable technical specification for interoperability;
- Declaration signed by a laboratory accredited according to ISO 17025 that it has performed the tests in accordance with the applicable technical specification for interoperability;
- EC declaration of conformity for each interoperability constituent relevant for ERTMS issued by the supplier or the supplier's authorised representative established within the Union, including the certificate of conformity from a Notified Body; the EC declaration of conformity shall be fully in line with Directive 2008/57/EC;
- EC declaration of verification of the subsystem issued by the applicant for each Control Command Signalling subsystem installed on a vehicle and including the EC certificate of verification of subsystem from a Notified Body and the safety assessment report following section 3.2.1 of Commission Regulation (EU) 2016/919; the EC declaration of verification shall be fully in line with Directive 2008/57/EC. The technical compatibility details of the certificates should be provided using the template developed by the European Union Agency for Railways¹⁵. A copy of a complete application for authorisation of the vehicle(s) or the authorisation itself, in the event it is available by the time the final payment claim is due.

These deliverables shall be ideally sent following the milestones dates and shall be assessed in cooperation with European Union Agency for Railways.

3.2. Priorities for the objectives of ensuring sustainable and efficient transport systems in the long run, with a view to preparing for expected future transport flows, by supporting innovation and new technologies for all modes of transport

3.2.1. Deployment of innovation and new technology actions in all transport modes, according to points (a) to (d) of Article 33 of the TEN-T Guidelines.

Priority open to all Member States

General Objective

The general objective is to support the deployment of a sustainable and efficient transport system and to promote the decarbonisation of all transport modes along the core network corridors. New technologies and innovative solutions shall be deployed on the core network with particular emphasis along the core network corridors.

¹⁵ <http://www.era.europa.eu/Core-Activities/ERTMS/Pages/Certification-issues.aspx>

Specific Objectives

In order for the core network¹⁶ to keep up with innovative technological developments and deployments, the aim shall be in particular to:

- (a) support and promote the decarbonisation of transport through transition to innovative and sustainable transport technologies;
- (b) make possible the decarbonisation of all transport modes by stimulating energy efficiency introduce alternative propulsion systems, including electricity supply systems, and provide corresponding infrastructure. Such infrastructure may include equipment and tools necessary for intelligent and sustainable integration with electricity grids and other facilities necessary for the energy supply, may take account of the infrastructure-vehicle interface, may include intelligent platforms needed for interoperability and may encompass telematic applications;
- (c) improve the safety and sustainability of the movement of persons and of the transport of goods;
- (d) improve the operation, management, accessibility, interoperability, multimodality and efficiency of the network, including through multimodal ticketing, coordination of travel timetables;

Studies with integrated (pilot) deployment (also referred to as "pilots", "real-life trials") and works are eligible. Studies without integrated (pilot) deployment, i.e. pure paper studies, are **not** eligible. Priority will be given to such studies and works that consider using innovative financial instruments developed by the European Union to achieve a wide-scale roll-out of the technology.

I) Overview

The general objective may be achieved through the implementation of new technologies and innovative technological and organisational systems, based on a market-oriented approach. Supporting the innovation pipeline, this objective may increase the successful deployment of upstream Research and Innovation. In all studies a real-life trial must take place, which dominantly aiming at preparing the wide-scale roll-out into the market by moving towards viability, i.e. by bringing unit costs down and improving the understanding of client's needs.

Transport infrastructure and related infrastructure, facilities, vehicles (only the innovative parts of vehicles) and services as described in points (a) to (d) of Article 33 of the TEN-T Guidelines (specific objectives above) may be supported. Each innovation topic must be in-line with the policy framework established by the Commission for example for actions on alternative fuels the "Clean Power for Transport: a European alternative fuels strategy"¹⁷ and the European Strategy for Low-Emission Mobility¹⁸

In the context of this priority, innovation means the implementation of a new or significantly improved product (goods and/or service), which is ready for deployment, while a market-orientated solution is still being sought. The earlier development and demonstration phases of this product are considered as research activities which are not covered by these priorities.

Innovation of operational processes may be funded under this call, including fleet management, marketing and consumers management, load and fuel management, multimodality and interoperability with respect to all travel phases.

¹⁶ Regulation (EU) No 1316/2013, Annex I, Part I.1. "CEF, Horizontal Priorities"

¹⁷ COM(2013)17 of 24 January 2013

¹⁸ http://ec.europa.eu/epsc/pdf/publications/strategic_note_issue_17.pdf

Union support is also available for the improvement and deployment of telematics applications, coming to support decarbonisation of transport, however telematics shall be only a secondary element within the transport solution, with a view for example to enable roaming functionality, interoperability, multimodality and compatible ticketing systems.

Priority shall be given to projects of high Union added value, which can for instance be demonstrated by including results from projects funded under the Commission's Research and Innovation Framework Programmes. In such cases the project's title and Commission reference code shall be inserted in the proposal.

This part of the call is only open to actions (studies and works) located on the core network as specified in the maps of the TEN-T Guidelines, with particular emphasis along the 9 core network corridors as listed in Annex I, part 1.2 of the CEF Regulation.

II) Action Types

Actions to be selected under this priority shall concern works and studies (with pilot deployment activities). Priority is given to such studies:

- Studies with pilot deployment shall concern a real-life trial (rather than just a demonstration), in which the commercial aspects are a key element and must be present. A dual optimisation shall therefore take place: (1) the optimisation of the technology to bring unit costs down, and (2) the optimisation of the business-client relation to better understand and address the client's needs, including analysing client's satisfaction, and overall market demands, develop a strong business case that would set targets for commercial viability. At the end of the trial, as part of the study, an analysis must be made, showing how to scale-up the trial to mass application, in the form of a business plan. In fact, on the basis of the resulting optimal solution, the roll-out of the innovation onto, at least, a significant part of a corridor in at least 2 Member States shall be elaborated. This must be presented as a deliverable of the study.

Finally, such documentation should allow the evaluation by a bank, such as the European Investment Bank, on whether private investments may come in at the end of the trial. In this respect, attention shall be given to the opportunities offered by the new financial instruments provided by CEF, EFSI (Juncker Plan), Green Shipping Guarantee Programme and other such schemes. This includes attention to constituting viable partnerships and consortia suitable to receive such type of financing.

- Works shall address the roll-out of the innovative solution onto a significant part a core network corridor and shall take place in at least 2 Member States.

In summary, for the innovative actions three types are envisaged: (A) Studies with regional or local pilot deployment in at least one Member State and (B) Studies with pilot deployment on a scale of a core network trajectory/corridor of at least 500 km serving at least two Member States or achieving coverage of minimal density of at least 2 complete Member States. Type (C) actions are works and applicable to roll-outs on the core network in at least 2 Member States.

For types (B) and (C) the roaming/cross-border functionality and interoperability of solutions, including cross-borders, shall be addressed and effectively implemented in order to allow public accessibility of the infrastructure, on a non-discriminatory basis.

III) Individual Budgets

As an indication of total project sizes it is advised to aim for the eligible budgets at up to EUR 20 million for type A and up to EUR 50 million (indicative maximum) for type B. In case more than EUR 50 million is required for an action, it shall be carefully examined whether the action is of the type C (= works). Total project sizes shall normally be at least EUR 1 million to achieve an adequate European dimension.

Within grants for "studies with integrated (pilot) deployment", as described above, a co-financing of eligible costs of the "mobile equipment (i.e. vehicles)", shall not exceed:

- 30% for ships and rail mobile equipment;
- 10% for road mobile equipment.

The above co-financing will apply if the following conditions are met:

- The mobile equipment is secondary to the infrastructure part of the action;
- The application explains how the EU support for the mobile equipment will contribute to accelerating the market roll-out, which is planned after the trial/or pilot test;
- The eligible costs of mobile equipment must only relate to the financial difference between a usual, conventional solution and the use of a new technology (e.g. the additional financial effort of using fuel-cell hydrogen instead of diesel propulsion)
- It is priced separately in the grant application presenting a thorough financial information about costs;
- Mobile equipment remains for at least 5 years registered and is operated in a Member State

The interface between infrastructure and vehicles (e.g. the telematics link, the charging cable, adaptors, etc) as well as mobile infrastructure (e.g. innovative cranes, innovative reach-stackers, innovative fuel supply vehicles, etc) are considered as eligible if they are part of the action.

For type C actions (works) with its low Union funding rate and limited maximum amount, it is recommended to consider the new financial instruments available under the CEF and EFSI (Juncker Plan) managed by the European Investment Bank (EIB). Here an application may be made at any time and in addition to the Union grant. For EIB support the conditions published by the EIB apply.

IV) Delimitation to other Priorities of the Work Programme

In general innovation on transport infra-structure for the long distance is a primary element. Telematics, logistics, vehicles, etc, covered by other TEN-T/CEF priorities as their main subject, may only be secondary elements of an innovation action. As an example, in case an action introduces an alternative fuel solely inside an urban node, it shall be submitted to Urban Nodes calls. As a further example, in case an alternative fuel is introduced for 2 ports together with taking up a shipping service between the ports, this application shall be submitted to Motorways-of-the-Sea calls, as the primary element is the logistics chain. All telematics actions having the telematics component as their primary element shall refer to the appropriate telematics calls for the mode of transport concerned (eg RIS, ITS, ERTMS); for example a pure road ITS application shall be submitted to a road ITS call. Under the

innovation calls, single ticketing would only be eligible if being part of an innovative solution encompassing more elements, for instance alternative fuels.

V) Detailed Topical Specifications and Restrictions

The following detailed topical specifications and restrictions are done to focus the available resources on a subset of the very wide range of legally allowed innovation and new technology topics for transport, thereby setting temporary political priorities to address the present innovation requirements of the Union. All studies must include (pilot) deployment. **In case there are no specifications or restrictions mentioned for a topic, the full legally possible range of Article 33 (a-d) of Regulation (EU) 1315/2013 applies.**

All specifications and restrictions only apply to the current work programme and call, as follows:

- Actions (studies & works) supporting the decarbonisation of transport by the roll-out of alternative fuels distribution infrastructure. This encompasses the use of electricity, hydrogen, biofuels, synthetic fuels (preferably from biomass), compressed or liquefied natural gas (CNG and LNG), preferably pure bio-methane or blended with bio-methane), or other innovative systems. Infrastructure may also include emission reduction, smart metering and energy storage equipment. Scrubbers are excluded, even if part of mobile infrastructure. Actions may include transportation of alternative fuel units, such as fuel-containers, to hinterland locations, e.g. to supply satellite terminals or to be placed directly at the end-consumer, to enable cost-efficient, multi-modal alternative fuel supply chains. Such units would be regarded as mobile infrastructure.
 - Mono-modal gas terminals are eligible for all modes of transport, except if located in maritime ports.
 - Multi-modal gas terminals are eligible for all modes of transport, including if located in maritime ports.
 - Maritime ports excluded here may refer to the Motorways-of-the-Sea call.
- Actions (studies & works) for the improvement and deployment of interoperable infrastructure/vehicle interfaces that will support the use of alternative fuels, including telematics applications or energy demand management systems when required. Such applications shall demonstrate their potential or actual contribution to interoperability, multimodality and overall efficiency of the network. The roaming/cross-border functionality and interoperability of solutions (especially for electro-mobility), including cross-borders, shall be addressed and effectively implemented in order to allow public accessibility of the infrastructure, on a non-discriminatory basis. The infrastructure shall use commonly agreed IT protocols and data formats, interoperable Radio Frequency Identification cards, and shall provide static and dynamic data and identifiers to users.
- To facilitate the deployment of a European network of alternative fuels, studies with pilot deployment may be implemented in the form of a grant scheme by public operators only, or by consortia led by public operators. They may support via joint grant schemes or joint procurement, the installation of refuelling/charging stations

accessible to public or private economic operators. Such activities may be divided in several phases to address the needs progressively over a time period and/or by location. This shall aim at stimulating the deployment of interoperable infrastructures within the network. Such a progressive approach shall enable action owners to size the financial support to market price developments in a timely manner. For such actions, the planned number of refuelling/charging stations accessible to the public, of users and of emission savings in particular, shall be forecasted. Also, such actions should foresee the optimisation of the business-client relation to address the client's needs and develop a strong business case using targeted marketing and corporate communication actions.

- To improve the operation, management, accessibility, interoperability, multimodality and efficiency of the network, including through multimodal travel planning and ticketing, payment systems, coordination and integration of travel timetables.

In addition, any combination of the above specific subjects may be addressed in an innovative action as long as there is a significant part of the innovative solution is addressing the transport infrastructure.

3.2.2. Safe and Secure infrastructure, including safe and secure parking on the road core network

Priority open only to the Cohesion Member States.

Actions to be selected under this specific objective shall concern works or studies (that may include pilot activities) and shall be in line with Chapter II, Section 3 of the TEN-T Guidelines.

Under this Priority, only actions related to safe and secure infrastructure, including safe and secure parking areas on the road Core Network may be funded.

Priority shall be given to Actions addressing the following areas:

- Studies for the construction of new roads as far as related road safety impact assessments are concerned, as established by Article 3 of Directive 2008/96/EC. These studies shall be carried out before starting the road design. A road safety impact assessment may be financed as a stand-alone study or as part of a broader feasibility study for the construction of new roads;
- Studies assessing the safety performance level and the compliance with the Directive on tunnel safety. Works, necessary to upgrade tunnels to comply with Directive 2004/54/EC, (e.g. construction of a second tunnel tube to separate the traffic going in opposite directions, modifications to tunnel geometry to improve safety, refurbishing of the drainage system, etc.) may be supported only if they concern a cross-border section;
- Studies including pilot activities to enhance the network safety management and works to correct serious design deficit. Article 5 of Directive 2008/96/EC requests Member States periodically to detect the most dangerous sections of the network in operation, to rank them under a cost benefit analysis, to take appropriate actions to eliminate dangerous sections and to inform road users about the presence of blackspots;
- Works and studies for correcting serious road safety shortcomings (for instance

changing the curvature of a road);

- Works and studies aiming at the removal of level crossings between core network rail sections and any road;
- Works and studies aiming at the development of new safe and secure parking areas on motorways for trucks and commercial vehicles (including Information and Communication Technologies) approximately every 100 km;
- Works and studies aiming at upgrading the safety and security of existing rest areas (including parking for trucks and commercial vehicles and safety and security Information and Communication Technologies);
- Works and studies optimising the use of existing safe and secure parking areas for trucks and commercial vehicles through dynamic information (to be tested and demonstrated through the project) including the collection, processing and dissemination of parking information (static and dynamic). These interventions shall comply with Commission Delegated Regulation No (EU) 885/2013¹⁹ and apply Union standards (e.g. DATEX2) and Guidelines (Easyway Deployment Guidelines), set up methods for measuring accurate and reliable data from sensors/cameras/or other monitoring devices and analyse priority zones needs, as defined in Delegated Regulation No (EU) 885/2013, taking into account traffic conditions, infrastructure shortages or weaknesses and driving regulations.

Support is not given to maintenance under this Priority.

Studies shall concern Actions for which the initial investment decision has been taken and in particular studies related to design, permits, including EIA, etc. that are close to the actual implementation of these Actions.

3.3. Priorities for the objective of optimising the integration and interconnection of transport modes and enhancing the interoperability of transport services, while ensuring the accessibility of transport infrastructures

3.3.1. Single European Sky – SESAR

Priority open to all Member States

The objective in the area is to support the timely and efficient implementation of the Single European Sky (SES), in particular the deployment of SESAR (Single European Sky ATM Research and Development).

The achievement of this objective requires improving the performance of air traffic management (ATM) in Europe by modernising and harmonising ATM systems, synchronising the deployment of essential ATM functionalities, enhancing civil-military interoperability, reducing fragmentation and consolidating the provision of air navigation services.

The SESAR project represents the technological pillar of the Single European Sky. It aims to modernise ATM in Europe and to provide the Union with a high performing ATM infrastructure that will enable the safe, efficient and environmentally friendly operation and development of air transport.

¹⁹ Commission Delegated Regulation No (EU) 885/2013 of 15 May 2013 supplementing ITS Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles (OJ L 247, 18.9.2013, p. 1).

The proposed Actions under this objective shall include works and studies²⁰ under one of the following 2 categories:

1. Common Projects

This category includes civil and military **Implementation projects** deploying ATM functionalities²¹ identified in Common Projects²², in accordance with the **Deployment Programme**²³. The proposed Actions may include prerequisites, preparatory activities (for example supporting industrialisation²⁴ of ATM functionalities identified in the Common Projects) and additional validation activities that are either not covered by the SESAR Joint Undertaking or that are not already receiving financial support from the Union.

In order to optimise the impact of Union funding on the implementation of the Deployment Programme, the Commission may focus the scope of the call for proposals on specific ATM functionalities or parts of them.

Grants for projects in this category shall be awarded through Specific Grant Agreements established under the SESAR Deployment Framework Partnership Agreement concluded between the Deployment Manager²⁵ and the implementing partners, on the one hand, and the Commission on the other hand²⁶. **The Deployment Manager is to act as coordinator in each of these projects.** Applicants who are awarded a grant under this call and are not partners in the SESAR Deployment Framework Partnership shall be required to join the SESAR Deployment Framework Partnership, as partners, by signing the Framework Partnership Agreement before being able to sign the Specific Grant Agreements covering their projects.

Applicants under this category must coordinate their applications with the Deployment Manager who shall perform a screening of these applications to assess their relevance to this category. For this purpose the above mentioned applicants shall provide the Deployment Manager with all the necessary information that it requires to ensure coherence and effective coordination of the projects in accordance with the Deployment Programme. Based on this assessment, the Deployment Manager may advise the applicants to revise their applications or to submit them under the "Other projects" category (See paragraph 2 below).

The amount of financial assistance to be granted to the actions selected may be modulated on the basis of a cost benefit analysis of the Common projects or the cost-effectiveness analysis of the project proposals.

The model Specific Grant Agreement for SESAR Implementation projects and the model SESAR Framework Partnership Agreement shall be published with the call for proposals.

²⁰ To qualify for funding under the Common Projects category, studies are to be directly relevant to improving civil/military cooperation and/or specifically leading to accelerated implementation of Common Projects.

²¹ Commission Implementing Regulation (EU) No 409/2013 of 3 May 2013 on the definition of common projects, the establishment of governance and the identification of incentives supporting the implementation of the European Air Traffic Management Master Plan (OJ L 123, 4.5.2013, p. 1).

²² The first Common project is defined in Commission Implementing Regulation (EU) No 716/2014 of 27 June 2014 on the establishment of the Pilot Common Project supporting the implementation of the European Air Traffic Management Master Plan (OJ L 190, 28.6.2014, p. 19).

²³ Section 2 of Implementing Regulation (EU) No 409/2013; the Deployment Programme as approved and published by the Commission. The Deployment Programme can be found at: <http://www.sesardeploymentmanager.eu/sesar-deployment-manager-delivered-first-atm-infrastructure-deployment-programme/>

²⁴ Article 2(5) of Implementing Regulation (EU) No 409/2013.

²⁵ <http://www.sesardeploymentmanager.eu/contact/>

²⁶ More information about the SESAR deployment set-up is available at http://ec.europa.eu/transport/modes/air/sesar/deployment_en.htm.

Applicants for Actions under this category shall provide evidence that national civil-military coordination has taken place. This has to be validated by the Member States, which need also to provide their agreement on the proposals in accordance with Article 9(1) of Regulation (EU) No 1316/2013.

Furthermore, Member States shall verify that the projects proposed under this category are consistent with their adopted performance plans referred to in Commission Implementing Regulation (EU) 390/2013.

2. Other projects

This category comprises other projects not included in Common Projects and not falling under the competence of the Deployment Manager that contribute to the implementation of the SES by promoting the optimal provision of air navigation services and seamless functioning of the European ATM system.

In this category, priority shall be given, to proposals for Actions that:

- (a) deploy new technologies and best practices²⁷ aiming to implement or support interoperable and harmonised ATM systems and equipment (e.g. primarily focusing on meeting the requirements of existing implementing rules and/or their related means of compliance under Regulation (EC) No 552/2004 of the European Parliament and of the Council²⁸);
- (b) aim to specify and deploy new generation of flight and radar data processing systems based on European standards, open source and modular systems;
- (c) address the optimal provision of air navigation services, mainly in the context of the functional airspace blocks (FAB) and in particular to those Actions concerning:
 - commonality of technical systems or at least of subsystems and tools;
 - infrastructure rationalisation such as replacement of legacy or overlapping secondary surveillance radars with lower cost technology solutions;
 - Introduction of Performance Base Navigation (PBN) procedures and ground and airborne equipment, in particular those related to the use of satellite technologies, together with a planned reduction in legacy infrastructure;
 - airspace projects culminating in the cross-border implementation of Free Routing across the FAB;
 - common Air Traffic Flow Management (ATFM) Flow Management Position (FMP), starting with joint operation of FMPs, joint ATFM;
 - cross-border operation of Air Traffic Control (ATC) within a FAB;
 - optimal vertical profiles (climb as well as descent) at airports and in TMAs (Terminal Control Areas);
 - airspace planning carried out (cooperatively) for the whole FAB region;
 - removal of national boundaries in upper airspace for air traffic control purposes;
 - dynamic sectors spanning across national borders;

²⁷ Best in class technologies and practices: technologies and operational practices that are demonstrated to be best in class from cost-efficiency and performance perspective when compared with other technologies and practices applied in similar environments.

²⁸ Regulation (EC) No 552/2004 of the European Parliament and of the Council of 10 March 2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation) (OJ L 96, 31.3.2004, p. 26).

- sector boundaries put in low-interaction areas;
- cross-border sectorisation.

(d) aim to deploy or support the deployment of ATM functionalities defined in the European ATM Master Plan and the deployment baseline that are not included in Common Projects. Priority shall be given to projects addressing those ATM functionalities that are defined as “essential” in the European ATM Master Plan or that constitute SESAR solutions²⁹;

In order to optimise the impact of Union funding on the implementation of other projects, the Commission may focus the scope of the call for proposals on some of the above-mentioned priorities or parts thereof.

The Actions proposed under this category must not duplicate or oppose the implementation of Common Projects or the activities of the SESAR Joint Undertaking and must contribute to meet the performance targets in the context of the performance scheme.

For both categories mentioned above:

- Priority shall be given to proposals for Actions or parts of Actions that: most contribute to ATM performance; or are organised at FAB level or promoting Union-wide, inter-FAB or civil-military coordination, or address effective change management; or that create new employment opportunities.
- Indicatively, 80% of the funding available under Priority "Single European Sky - SESAR" shall be dedicated to projects selected under the Common Projects category (Category 1). However, the final allocation of funding may be adjusted between Common Projects and Other Projects (Category 2) depending on the actual funding needs of the selected proposals, while giving priority to the implementation of Common Projects.
- Funding under this call shall not be granted for Actions or parts of Actions addressing obligations under Union Law, in particular relating to the SES, whose deadline for implementation has expired by the date on which this call is published. In any case, costs for such actions shall not be eligible after the above-mentioned deadline for implementation.

3.3.2. *Intelligent Transport Services for road (ITS)*

Priority open to all Member States

General objectives

Intelligent Transport Systems (ITS) for roads of the trans-European transport network as "intelligent" interface between roads and other transport infrastructure vitally contribute to enhancing road safety and reducing carbon emissions of the transport system by boosting the efficiency of infrastructure use and traffic operations for both passengers and freight. They also open up new perspectives for user services. TEN-T infrastructure shall be equipped with the relevant components in compliance with the Union transport policy in the field of intelligent transport systems, notably the Directive 2010/40/EU of the European Parliament

²⁹ SESAR Solutions are operational and technological improvements developed by SESAR Joint Undertaking members and partners which aim to contribute to the modernisation of the European and global ATM system (<http://www.sesarju.eu/solutions>).

and of the Council³⁰ to support the deployment of systems which are interoperable and provide for continuity of services across Member States and operators.

These measures contribute to a sustainable transport system (in terms of economic, environmental and social impacts) and connected mobility.

In the framework of the development and deployment of intelligent and increasingly automated transport systems, actions contributing to the deployment of Cooperative ITS (C-ITS), according to Union Regulations and standards and in line with the recommendations/outputs of the "C-ITS platform"³¹, shall be promoted for all Member States.

C-ITS improve existing and create new ITS services, paving the road for automated vehicles, with high potential for all road users and operators while offering significant socio-economic benefits. Research projects on C-ITS have delivered promising results which have been consolidated by pilots and are increasingly considered mature for deployment.

When relevant for the development and/or deployment of ITS and C-ITS services and with a view to ensure reliable positioning services, actions to ensure compatibility of information and value added ITS services with the systems established under the Galileo and EGNOS programmes (set out in Regulation (EU) 1285/2013 of the European Parliament and of the Council³²) may also be addressed.

Also actions implementing Directive 2010/40/EU and its Delegated Regulations, shall be promoted.

In the framework of the deployment of the 112 eCall, the issue of retrofit/aftermarket devices may be addressed to define common rules for 112 eCall aftermarket devices which would ensure that a minimum of quality is reached, in order not to jeopardise the well-functioning of the Public Safety Answering Points receiving and handling the 112 eCalls.

Priority "Cooperative ITS (C-ITS) services and automation"

Actions to be supported under this priority shall consist of implementation of works and/or studies with pilot activities for the deployment of Cooperative ITS (C-ITS) services and automation.

Actions shall demonstrate the potential for rapid deployment of C-ITS and automation across the TEN-T network and urban nodes; thereby overcoming possible barriers (whether technical, financial, legal or organisational), achieving relevant maturity and creating the necessary critical mass for scalable roll out. A pragmatic "user/operator/market-oriented" rather than a "research-oriented" approach must be followed.

Actions that include higher levels of road transport automation shall demonstrate the integration of C-ITS with automation in relevant sections of the network overcoming fragmented approaches at national levels.

Actions may include both works and studies with pilots activities provided that the two activities are clearly distinguished and explained.

Submitted proposals are expected to clearly demonstrate their Union-added value, and provide:

³⁰ Directive 2010/40/EU of the European Parliament and of the Council 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 (OJ L 207, 6.8.2010, p. 1).

³¹ http://ec.europa.eu/transport/themes/its/news/c-its-deployment-platform_en.htm

³² Regulation (EU) No 1285/2013 of the European Parliament and of the Council of 11 December 2013 on the implementation and exploitation of European satellite navigation systems and repealing Council Regulation (EC) No 876/2002 and Regulation (EC) No 683/2008 of the European Parliament and of the Council (OJ L 347, 20.12.2013, p. 1).

- A precise description of the proposed service(s) and application(s), including associated equipment, software and facilities in the area of C-ITS and automation;
- A clear description of the project management planned for the effective delivery of the proposed Action, including internal cooperation and external interactions. Cost breakdowns aligned with level of efforts (i.e. by sub-activities and partners) shall be provided and risk management measures shall be anticipated.

Proposed Actions are expected to:

- Demonstrate the long term viability and scalability of C-ITS / automation (in terms of technology, financial sustainability, governance) also in conjunction with legacy systems.
- Provide a substantiated vision of future roll out / larger scale deployment of C-ITS.
- Provide a precise description of technologies developed and/or implemented.
- Concentrate the area of the pilot and include a sufficient number of vehicles in order to achieve a critical mass of users and produce meaningful results.
- Cover a variety of vehicle types/fleets and operational environments, based on the needs and priority of the applicant(s).
- Demonstrate the use of C-ITS on the Core Network including the Core Network corridors and/or urban nodes and/or in Traffic Management Centres (TMC).
- Provide a precise description of (direct and indirect) partners' roles and responsibilities.
- Prepare the convergence of cooperative and automated vehicles, by for instance:
 - Equipping sections of the core and comprehensive networks with the necessary physical as well as digital infrastructure, including the availability of the minimum relevant datasets essential for automation
 - Demonstrating hybrid communication (use of both Wi-Fi and cellular based communications) for both C-ITS and automation
 - Demonstrating the integration of C-ITS and automation in relevant sections of the network to overcome fragmented approaches

Furthermore, proposed Actions must:

- Deploy works or studies with pilot activities in the Core Network, including along Core Network corridors and urban nodes. Other geographical sections linked to the Core Network shall be specified in the call text. Demonstrate the application of C-ITS for traffic information, traffic management, energy efficiency, road safety. Priority shall be given to proposals addressing the "Day-1" and "Day 1'5" C-ITS services³³

³³

"Day-1" C-ITS services recommended by the "C-ITS platform":

Hazardous location notifications: Slow or stationary vehicle(s) & Traffic ahead warning, Road works warning, Weather conditions, Emergency brake light, Emergency vehicle approaching, Other hazardous notifications

Signage applications: In-vehicle signage, In-vehicle speed limits, Signal violation / Intersection Safety, Traffic signal priority request by designated vehicles, Green Light Optimal Speed Advisory (GLOSA), Probe vehicle data: CAM Aggregation, Shockwave Damping (falls under ETSI Category "local hazard warning")

"Day-1.5" C-ITS services recommended by the "C-ITS platform":

Information on fuelling & charging stations for alternative fuel vehicles, Vulnerable Road user protection, On street parking management & information, Off street parking information, Park & Ride

recommended by the "C-ITS platform". This can as well include pilots to overcome fragmented approaches on higher levels of automation towards harmonisation on the European level.

- Demonstrate commitment and buy-in from all concerned stakeholders (at political and operational levels), including concerned road operators, that will contribute to the successful delivery of the Actions.
- Address an evaluation activity, i.e.: assessment of the achieved results. Indicators shall be used to monitor and demonstrate progress, and to evaluate impacts and performance. These indicators shall be comparable at European level³⁴. Also assessment methodologies shall be aligned with other ongoing initiatives in the Union.
- Cooperate with and build upon the C-Roads platform, and provide feedback on the results of the proposed Actions (including best practices, recommendations on policy making) to the "C-ITS platform" and the "EU ITS Committee".
- Be submitted by applicants from one or more Member States, preferably along a continuous trajectory and/or within several inter-related cross-border priority zones/regions. Priority shall be given to proposals engaging multiple Member States and/or covering corridors and geographical areas that close the gaps between existing C-ITS pilots and activities.
- Comply with legislation, in particular the ITS Directive 2010/40/EU and its delegated Regulations.
- Comply with applicable standards. Proposals addressing areas where common standards or specifications are not yet defined, they shall make provision for timely compliance with such standards or specifications as and when they become available and/or contribute to the development of such standards or specifications.

Specific objectives

The multi-annual programme addresses the following areas:

- C-ITS, especially on vehicle-infrastructure communication
- Interoperability and continuity in the area of C-ITS and automation
- Enhance road safety, security and energy efficiency in the area of C-ITS and automation
- Applications for traffic information and traffic management in the area of C-ITS and automation
- Develop a digital road infrastructure to facilitate higher levels of automation
- Convergence of C-ITS and increasing levels of automation, based on a hybrid communication approach enabling the use of both Wi-Fi and cellular based communications.

Priority "intelligent transport services for road (ITS)"

information, Connected & Cooperative navigation into and out of the city (1st and last mile, parking, route advice, coordinated traffic lights), Traffic information & Smart routing

³⁴ i.e. in line with Commission's common indicators stemming from the study "Key Performance Indicators (KPIs) for road transport Intelligent Transport Systems (ITS)"

Actions to be supported under this priority shall consist of implementation of works and/or real life pilots³⁵ for the deployment of ITS for road.

Actions may include both works and studies with pilot activities provided that the two activities are clearly distinguished and explained.

The proposed Actions shall aim at:

- Improving the interoperability, continuity and seamless mobility in the Union, with a particular attention to cross border sections, urban nodes and urban-interurban interfaces.
- Improving the harmonisation of ITS services across Europe from an end user perspective.
- Improving the operational excellence and cost-efficiency from a road operator/traffic manager perspective.

Submitted proposals are expected to clearly demonstrate their Union-added value, and in particular provide all the following:

- A precise description of the ITS service(s) and application(s), including associated equipment or facilities, proposed for interoperable and/or scalable roll out across Europe.
- A geo-localised description of the baseline situation (i.e. situation prior to deployment of the proposed Action). The proposals shall provide the consolidated outcomes of any ex-ante study, cost-benefit analysis and state of the art already carried out when available.
- A precise description (geo-localised and when possible quantified) of the problem(s) to be addressed by the proposed Actions (e.g. bottlenecks, gaps, poor quality of services).
- Explicit targets (quantitative and/or qualitative), in terms of contribution to Union policies (i.e. ITS Directive) and level of services for ends users (i.e. quality and harmonisation of services).
- A clear description of the project management planned for the effective delivery of the proposed Action, including internal cooperation and external interactions. Cost breakdowns aligned with level of efforts (i.e. by sub-activities and partners) shall be provided and risk management measures shall be anticipated.

Proposed Actions must:

³⁵ Pilot activities shall serve at least one of the following objectives:

- to develop, improve or adapt a new technology or an innovative solution and implement it in order to test its feasibility and suitability as well as its added value before deploying it on a larger scale.
- to deploy an existing technology, infrastructure or service (i.e. already in use elsewhere but new to a particular sector, system or geographical area) in order to gain experience and/or create market conditions for deployment on a larger scale.

The pilot activities may include the deployment of a certain type of infrastructure or technology but on a limited scale and at a reasonable price and with the objective of testing and validating the viability of the innovative Actions proposed for future scale up and roll out.

Pilot activities shall not be associated with research activities that are not eligible under this type of Action.

- Deploy works or pilot activities along the Core Network including on the Core Network corridors and/or urban nodes. Other geographical sections linked to the Core Network shall be specified in the call text.
- Address an evaluation activity, i.e.: assessment of the achieved results. Indicators shall be used to monitor and demonstrate progress, and to evaluate impacts and performance. These indicators shall be comparable at European level³⁶. Also assessment methodologies shall be aligned with other ongoing initiatives in the Union.
- Report to the "EU ITS Committee" and/or another relevant coordination group/platform. In particular, proposed Actions have the responsibility to effectively contribute to pan-European harmonisation and interoperability of services, as well as to contribute to the monitoring and evaluation of impacts supporting the consolidation of results of ITS deployment at European level.
- Be submitted by applicants from one or more Member States, preferably along a continuous axis and/or within several inter-related cross-border priority zones/regions. Priority shall be given to proposals engaging multiple Member States and/or covering corridors/geographical areas not covered yet by the "ITS corridors"³⁷.
- Comply with legislations, in particular the ITS Directive 2010/40/EU and its delegated Regulations.
- Comply with applicable standards. Proposals addressing areas where common Union standards or specifications are not yet defined, they shall make provision for timely compliance with such standards or specifications as and when they become available and/or contribute to the development of such standards or specifications.

Specific objectives

The multi-annual programme addresses the following areas:

- Europe-wide traffic and travel information services, including inter alia cross border services for seamless door-to-door mobility
- Europe-wide traffic management systems to optimise traffic operations and enhance energy efficiency
- Systems to enhance road safety and security
- Expansion of "ITS corridors", or new ITS corridors coordinated with the existing ITS corridors, to cover the Core Network Corridors or the core network
- Definition of physical and operating requirements for aftermarket 112 eCall in-vehicle devices, including the definition of a certification process, in liaison with corresponding standardisation developments.
- infrastructure communication.

3.3.3. Motorways of the Sea (MoS)

Priority open to all Member States

³⁶ i.e. in line with Commission's common indicators stemming from the study "Key Performance Indicators (KPIs) for road transport Intelligent Transport Systems (ITS)" & the guidance of the EU ITS Platform

³⁷ The details of "ITS Corridors" (2014-EU-TM-0310-W, 2014-EU-TM-0365-W, 2014-EU-TM-0563-W, 2014-EU-TM-0588-W and 2014-EU-TM-0597-W) are available at: <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport/projects-by-transport-mode/its-for-road>

General objectives:

Motorways of the Sea (MoS) are considered the maritime pillar of the Trans-European Transport Network. They consist of short-sea routes, ports, associated maritime infrastructure and equipment, facilities as well as simplified administrative formalities enabling Short Sea Shipping or sea-river services between at least two maritime ports (core/comprehensive), including hinterland connections. They shall contribute towards the achievement of a European Maritime Transport Space without Barriers, connect Core Network Corridors by integrating the maritime leg and also facilitate maritime freight transport with neighbouring countries. In this context, they shall also promote sustainable shipping concepts which contribute to reducing negative impacts of heavy fuel oil powering in support of the implementation of the requirements of Annex VI of the IMO MARPOL Convention and of Directive 2012/33/EU³⁸ of the European Parliament and of the Council, the Directive 2014/94/EU³⁹, as well as reduction of CO₂, NO_x and PM in maritime transport.

The general objectives of the present work programme for MoS are consistent with the Detailed Implementation Plan (DIP) of the European Coordinator for MoS. More specifically the DIP identifies three pillars of action in view of developing further the MoS priority:

- 1) Environment. This pillar aims to reduce the overall environmental impact from maritime transportation.
- 2) Logistics and integration. This pillar aims to integrate MoS better in the trade and logistical chains.
- 3) Safety, human element and traffic management. This pillar aims to promote seamless and safe movement of people and goods.

Actions addressed by this programme may concern works or studies with pilot activities

Specific objectives:

I) To support Motorways of the Sea, the following measures shall be promoted:

- Development of emission abatement methods⁴⁰ contributing to environmentally sustainable maritime transport, covering batteries, innovative propulsion such as wind assistance and hydrodynamic improvements, new clean fuels facilities and related on-board installations (LNG, methanol and other), contributing to the reduction of air emissions such as CO₂, SO_x, NO_x and PM. Innovative technologies shall be admitted provided that they allow reducing emissions beyond requirements of current legislation. Early adoption of technologies intended to meet future, more stringent requirements of legislation can also be considered⁴¹, Use of shore side electricity, and energy efficiency measures fall under this category. Exhaust gas cleaning systems

³⁸ Directive (EU) 2016/802 of the European Parliament and of the Council of 11 May 2016 relating to a reduction in the sulphur content of certain liquid fuels (OJ L 132, 21.5.2016, p. 58–78)

³⁹ Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure (OJ L 307, 28.10.2014)

⁴⁰ Art. 2 (o) of the Directive (EU) 2016/802 (*'emission abatement method' means any fitting, material, appliance or apparatus to be fitted in a ship or other procedure, alternative fuel, or compliance method, used as an alternative to low sulphur marine fuel meeting the requirements set out in this Directive, that is verifiable, quantifiable and enforceable;*)

⁴¹ For example in accordance with art. 6 p. 1(b) of the Directive (EU) 2016/802, outside SO_x Emission Control Areas, 0,50 % sulphur limit in marine fuels will enter into force as of 1 January 2020.

shall only be admitted on ships operating on short sea shipping routes outside the SECA.

- Infrastructure development in ports and upgrade of existing or establishment of new sea-based transport services integrated in logistics chain.
- Development of infrastructure for sea access, hinterland connections and freight terminals, in the effort to increase collaboration and efficiency in shipping and port operations. Moreover, actions aiming at reducing bottlenecks in maritime transport and multimodal routes, providing safer, more secure and more environmentally-friendly maritime transport services will be promoted. This may include improvements in quality and capacity handling of ro-ro or ro-pax services and transfer of cargo to inland waterway and rail freight.
- Development of sea-based transport services, in combination with port investments, which are open, integrated in door-to-door logistic chains and concentrate flows of freight on viable, regular, frequent, high-quality and reliable Short Sea Shipping links connecting the Core Network Corridors.
- Development of maritime ICT systems and services addressing logistics management systems in ports, safety and security for port handling operations as well as administrative and customs procedures. The developed systems shall fully comply with the regulatory and technical specifications established under the relevant EU legal acts (Directives 2010/65/EU⁴² and 2002/59/EC⁴³, Regulation (EU) No 952/2013⁴⁴).
- Promotion of "wider benefits" of the MoS development, not linked to specific geographic areas or ports but benefiting the industry widely, such as services and actions to support the mobility of persons and goods, improvement of environmental performance (clean fuel provisions in ports including either a fixed or mobile LNG refuelling equipment⁴⁵ and/or infrastructure, waste reception facilities etc.), icebreaking and year round navigability, geographical surveying, infrastructure development in ports, notably including alternative fuelling facilities, safety and vocational training.

II) Priority will be given to funding the following areas:

- Implementation of actions focusing on **upgrading or establishing new MoS links** with a considerable port investment component (expected port involvement representing minimum 50% of the project budget); especially when clearly demonstrating synergies

⁴² Directive 2010/65/EU of the European Parliament and of the Council of 20 October 2010 on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC (OJ L 283, 29.10.2010, p. 1)

⁴³ Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC (OJ L 208, 5.8.2002, p. 10)

⁴⁴ Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code (OJ, L 269, 10.10. 2013, p. 1)

⁴⁵ Art. 2 (8) and (9) Directive 2014/94/EU ('(8) *'refuelling point'* means a refuelling facility for the provision of any fuel with the exception of LNG, through a fixed or a mobile installation; (9) *'refuelling point for LNG'* means a refuelling facility for the provision of LNG, consisting of either a fixed or mobile facility, offshore facility, or other system.')

between MoS service and other transport sectors, especially in the context of assuring a connection with the Core Network Corridors.

– **Acquiring superstructure units such as port cranes, fork lifts, vehicles, etc is not eligible.**

– Actions supporting the development of **port reception facilities for oil and other waste**, including residues from exhaust gas cleaning systems.

III) Two types of actions will be promoted for the purpose of Motorways of the Sea:

1) **Studies with pilot activities** considered as projects testing or deploying new technological solutions in real operational conditions. Actions of this type may address a wide spectrum of needs in maritime sector including alternative fuels and new emission abatement technologies (in particular related to NO_x, PM and CO₂,) or pilot projects permitting to increase the image and quality of shipping. The innovative and unique character of such projects must be clearly demonstrated.

2) **MoS works** considered either as wider benefit implementation measures (e.g. construction of LNG bunkering infrastructure for ships serving a group of ports, coordinated enhancement of maritime security or safety systems both on board at sea as well as in ports, in several countries) at regional or EU level, or as implementation measures for the purpose of upgrading an existing or setting up a new maritime link with a possibility of its further intermodal extension i.e. integration with other modes of transport on the TEN-T network. The wider benefit actions may include, but not limited to, a group of EU ports, infrastructure managers, ship owners or consortia bringing together different maritime entities. The proposed Actions related to the upgrade or establishment of a maritime link, must involve at least two EU ports (two core ports or one core and one comprehensive), which is demonstrated by considerable port investments, corresponding at least to 50% of the total investment costs, and a maritime operator. The involvement of the operator may be direct as a beneficiary or indirect as an associated entity participating in a project without receiving a grant.

Pure studies projects will not be supported.

IV) The eligible costs of upgrading MoS links may involve, among others, costs borne by ship owners in order to comply with the provisions of the MARPOL Convention Annex VI and Sulphur Emission Control Area requirements, or costs contributing to better environmental performance of a maritime service, including installations related to on-shore power supply or deployment of alternative clean fuels in ports and on-board. These kinds of actions should be promoted by ship owners operating strictly on a particular maritime link together with the EU ports the link relates to. Upgrades on vessels are limited to the additional efforts for environmental purposes and cannot cover the full costs of acquiring or constructing a vessel. Projects purely involving the retrofitting of fleets/larger number of vessels under one proposal or an aggregated number of proposals and non-related to the specific maritime link upgrade are not supported.

Should the upgrade of the existing link or establishment of a new MoS service not be implemented by the end of a co-funded project, the European Commission reserves the right to revoke, reduce or recover part of the grant accordingly.

Ships receiving support through the MoS Programme will be required to serve the co-funded actions within the EU area for at least 5 years after the project end date.

For large multi-beneficiary actions, project proponents should exploit the possibility of establishing European Economic Interest Grouping (EEIG) for the purpose of project implementations in line with Council Regulation (EEC) N° 2137/85 of 25 July 1985.

3.3.4. Actions implementing transport infrastructure in nodes of the core network, including urban nodes

Priority open to all Member States

General objectives

In the TEN-T context, urban nodes often are the starting point or the final destination ("first mile" or "last mile") for passengers and freight moving on the network. On urban nodes, changes within or between different transport modes occur. Urban nodes are a priority as:

- they may impact the effectiveness of the network, especially when characterized by bottlenecks or missing links for integrated transport connections;
- high potential impact on life quality, including negative externalities of the trans-European traffic flows (emissions, noise, congestion, safety) and opportunities (quality public space and behaviour change).

This priority aims to address actions consistent with Article 30 of the TEN-T Guidelines, in order to better integrate long-distance transport with the urban traffic system. Such actions should ideally build on the EU policy on sustainable urban mobility and especially the [Urban Mobility Package](#).

The policy focuses on: increasing multi-modality (use of a mix of transport modes for one journey), including urban-regional linkages, sustainably shifting from cars to softer modes (public transport, cycling, walking) for freight and/or passengers, shifting from fossil to alternative fuels and improving road safety.

Actions aiming at designing and/or implementing replicable good practices to contribute to such policy may be given priority, with particular focus on relevant infrastructures.

Only actions located in urban nodes listed in Annex II part 1 of the TEN-T Guidelines and those listed in Annex II part 2 of the TEN-T Guidelines which are located on a Core Network Corridor may be funded.

Specific objectives

Proposed actions may include works, studies and/or deployment of pilots and address the following issues:

- The identification of missing links and/or bottlenecks within and between transport modes of the TEN-T in urban nodes, with consequent proposal of viable solutions addressing the issue in the short, medium and long term. Urban bypasses are included as long as associated to transport aspects such as multimodal and enhanced public transport services;

- The identification of missing links and/or bottlenecks in the connection between the trans-European and the urban parts of journeys, with consequent proposal of viable solutions addressing the issue in the short, medium and long term.
- Concepts increasing multi-modality, sustainably shifting from cars to softer modes (public transport, cycling, walking) for freight and/or passengers, shifting from fossil to alternative fuels and/or improving road safety.

This includes (not exhaustive): public transport optimisation (for example through segregated lanes), development of bikes and cargo-bikes transport patterns, alternative fuels infrastructure and/or solutions & services, low-noise and low-carbon urban freight delivery (including through transshipment facilities between long-distance and urban transport), car-sharing and ride-sharing schemes, better use of public space, etc.

Where relevant, integration with Sustainable Urban Mobility Plans, including aspects of their development and implementation, should be part of the proposed actions.

Identification of sustainable business models and enhanced financing solutions, involving different stakeholders where viable, are welcome.

Road bypasses are not in the scope of this priority unless they are associated to transport aspects such as multimodal and enhanced public transport services.

As regards mobile equipment, it must be secondary to the infrastructure-related part of the action. In order to ensure the focus on infrastructure of the innovative CEF actions, a capping of 10% of the Union grant shall in principle be applicable to mobile equipment used in an action. Furthermore, the eligible costs of mobile equipment must only relate to the financial difference between a conventional solution and the use of a new technology (e.g. the additional financial effort between a diesel propulsion and a fuel-cell hydrogen propulsion). It shall be evaluated individually and applicant(s) shall provide thorough financial information substantiating the unit costs presented. The subsidized mobile equipment must remain for at least 5 years registered and operated in a Member State.

3.3.5. *Connections to and development of multimodal logistics platforms*

Priority open only to the Cohesion Member States.

General objectives:

Multimodal logistics platforms cover maritime ports, inland ports, airports and rail-road terminals for the transshipment of freight between two or more modes of transport. Multimodal logistics platforms shall contribute to optimising the performance of multimodal logistics chains, which is key to the achievement of a competitive and resource efficient transport system, and shifting freight transport from road to other more sustainable modes.

Actions addressed with this programme shall be related to freight terminals, as defined in Article 3(s) of Regulation (EU) No 1315/2013, which form part of multimodal logistics platforms, as defined in Article 3(r) of Regulation (EU) No 1315/2013. Freight terminals shall comply with Chapter II, Section 6 of Regulation (EU) No 1315/2013. Only freight terminals such as core maritime ports, core inland ports, core airports or core rail-road terminals listed in part 2 of Annex II to Regulation (EU) No 1315/2013 may be funded.

Actions addressed with this programme shall include works and/or studies concerning connections by road, rail, inland waterways and short sea shipping to freight terminals and/or further development of these terminals. Studies shall concern actions where the initial investment decision has been taken and shall be close to the foreseen implementation of the investment.

Specific objectives:

To support the general objectives of multimodal logistics platforms, the following measures shall be promoted:

- Connections to existing freight terminals including access infrastructure and “last mile” connections, which contribute to the effective interconnection and integration of these terminals to the core network.
- Where relevant, Actions shall provide for interconnection between the existing freight terminals and other modes of transport, particularly rail, inland waterways and short sea shipping.
- Further development of existing freight terminals through small-scale ancillary infrastructure (e.g. connecting or siding tracks, power connections, adaptations for 740 m train length etc), ICT equipment and applications for the provision or improvement of information flows within the terminal and along the logistic chain.

Buildings, storage and warehouse facilities, cranes, conveyors and other devices for moving freight, and mobile assets such as locomotives shall not be supported.

Actions shall not provide selective advantage to a particular operator or group of operators and shall be accessible on a non-discriminatory basis.

Actions aiming at increasing the capacity of freight terminals shall not be supported.

Connections to and development of new freight terminals shall not be supported.

General observation for all priorities under section 3:

In addition to specific objectives, priority will be given to projects that include the use of private finance, in particular EU-backed finance instruments such as the European Fund for Strategic Investments.

4. PROGRAMME SUPPORT ACTIONS 2016 ONWARDS

Programme support actions are covered by 2016 - 2020 commitment appropriations only.

Where programme support actions involve the award of grants without a call for proposals, the selection and award criteria set out in the following sections of this Work Programme apply.

The breakdown per budget line and type of expenditure is presented in Annex IV to this Decision.

4.1. Bridging missing links, removing bottlenecks, increasing rail interoperability and improving cross boarder connections (budget line 06.02.01.01)

4.1.1. Programme Support Actions related to the TENTEC information system for the Trans-European Transport Networks

4.1.1.1. In the form of procurement

TENTEC services

Creation, maintenance and update of the computerised data information system for the TEN-T, involving all stakeholders, providing state-of-the-art IT tools, in particular interactive satellite-based maps, with a private and a public portal. TENtec supports all aspects of the development of the TEN-T and its funding by mirroring and monitoring the reality of transport infrastructure as closely as possible to ensure efficiency of funding and financing allocated to the TEN-T. It provides for synergies with the other CEF sectors.

The Commission shall use the consolidated operational reporting provided by INEA Agency from the Action Status Reports from the CEF-funded projects on completion of TEN-T performance indicators required by the CEF legal basis under Articles 3 and 4. The consolidated data shall be used by the Commission for preparing the accompanying budgetary statements and as an input to the mid-term evaluation of the CEF required under Article 27 of the CEF.

The legal basis for this PSA is point (a) of Article 5(2) and Article 7(2) of the CEF.

		Indicative timeframe for launching the procurement procedure	Multiple award of specific contracts under Framework Service Contract
2016		Q1 of 2016	EUR 1.150.000 on 2016 appropriations
2017		Q1 of 2017	EUR 1.150.000 on 2017 appropriations
2018		Q1 of 2018	EUR1.150.000 on 2018 appropriations
2019		Q1 of 2019	EUR 1.150.000 on 2019 appropriations
2020		Q1 of 2020	EUR 1.150.000 on 2020 appropriations
Nb of contracts: multiple contracts under Framework Service Contract	10		Comments: EUR 1,000,000 on 2014 appropriations covering multiple service contracts with duration 2015-until Q1 of 2016

Modelling system for Union and Neighbouring countries- integration of the modelling into TENTEC

The development of Union transport and transport infrastructure policies needs to be supported by robust quantitative analysis, providing a comprehensive and consistent picture of the European transport sector and its evolution while at the same time giving due consideration to the transport network.

The new transport network model (financed under Horizon 2020 and not from the CEF) shall cover all modes of transport for passenger and freight, with focus on trans-European trajectories and nodes of European/international importance. It shall cover the core and comprehensive TEN-T networks and aspects related to trip generation, trip distribution, mode choice and trip assignment.

The objectives of this Programme Support Action are the improvement of the TEN-T network by means of producing a connected network (network with topology); the maintenance and adaptation of this network to the future needs of the transport network model; the integration of the new model with TENtec. The costs are related to the integration of the modelling system into TENTEC.

Due to the fact that TENTEC activities are proposed to funding objective 1, this modelling tool is also aligned with main TENTEC tasks on funding objective 1.

Programme support Action under Article 2(5), point (a) of Article 5(2) and Article 7(2) of Regulation (EU) 1316/2013.

Indicative amount to be committed in 2016	215.000	Indicative timeframe for launching the procurement procedure	Q2 of 2020
Period (Years)		Comments	Comment: EUR 1.000.000 on 2014 appropriations
Nb of contracts under Framework Service Contract	2		

Studies and support for the work of the European Coordinators and the Corridor Forum

European Coordinators and the work of the Corridor Forum requires constant support in terms of analysis of progress made on the corridors, on the evolution of traffic, on the reporting, including through TENtec and for the organisation of the Corridor Forum meetings.

Following the introduction of work plans of second and third generation, the work of European Coordinators shall focus on monitoring implementation. Studies and support will be necessary to gather and analyse data on the implementation of the Core Network Corridors.

Their work shall also be devoted to the preparation of the next phase of project development leading to the completion of the TEN-T core network by 2030. Studies will therefore be necessary to identify the remaining projects to be financially supported under the next multi-annual financial framework 2021-2028.

Similar support shall also be devoted to the European Coordinator for the Motorways of the Sea. It concerns in particular the preparation of next generation of implementation plans and their monitoring based on experiences and developments relating to Union maritime transport as well as the forecast traffic on the motorways of the sea.

The procurement shall be done via an open call for tender.

Indicative total amount (2018 appropriations only)	EUR 10,000,000 On 2018 commitments	Indicative timeframe for launching the procurement procedure	Invitation to tender: Q1/Q2 2017 Contracts may be only
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			signed on 2018 budget
Indicative number of contracts	10	Comments	Estimated duration of the contracts: three years Previous contracts: 9,900,000 on 2014 appropriations

4.1.1.2. In the form of other expenditure: transfer of operational appropriations to the INEA Agency for specific TENTEC tasks

TENTEC services

The Programme Support Action also supports 'front-office modules' in that they cover external grant processes exposed to beneficiaries and Member States, which are implemented by INEA, with an annual estimated cost of EUR 250,000 transferred to INEA on an annual basis by DG MOVE.

The front office developments include business analysis, technical specifications, design and system architecture and shall concentrate on provision of the following services/functions:

- Exchanges with potential beneficiaries on the forms and amounts of Union financial assistance for CEF projects.
- Submission of data regarding the technical and financial progress of CEF co-funded projects.
- Facilities for the geographical representation of CEF projects through interactive viewers (GIS).
- Updates, reviews and maintenance.
- Helpdesk support to external users.

New tasks shall consist in gathering, consolidating of operational reporting from the CEF funded projects from the Action Status Reports managed by the Agency on completion of TEN-T performance indicators required by the CEF legal basis under Articles 3 and 4. The consolidated data on indicators and milestones shall be used by the Commission for preparing the accompanying budgetary statements and as an input to the mid-term evaluation of the CEF required under Article 27 of the CEF.

		Transfer of appropriations to INEA	
2016		250.000	EUR on 2016 appropriations.
2017		250.000	EUR on 2017 appropriations
2018		250.000	EUR on 2018 appropriations

2019		250.000	EUR on 2019 appropriations
2020		250.000	EUR on 2020 appropriations
			Comments: EUR 250,000 on 2014 appropriations have been transferred to INEA for front office tasks

4.1.1.3. In the form of grants

a. Support to enhanced participation of Member States in the core network corridors

The objective of this Programme Support Action is the continuation of the direct support to the Member States in implementing the core network corridors including the cross border projects in 2017-2020.

The core network corridors are an essential implementation tool of the TEN-T core network and are intended, in particular, to improve cross-border links within the Union. According to Article 44(1) of Regulation (EU) No 1315/2013 (TEN-T Regulation), Member States shall participate in the relevant corridors.

The objectives of the action are to facilitate the participation of Member States in the corridor structures in order to improve the information flows and to streamline the implementation of cross-border projects. The targeted development of information flows (for instance through dedicated twinning programmes) is also intended to ensure the improved cooperation between the Member States as regards the implementation of cross-border projects and exchanging best practices across the Union.

This action will result in further development and smoother implementation of the Corridors' Work Plan referred to in Article 47 of the TEN-T Guidelines and initially presented by the European Coordinators in December 2014 and approved by the Member States in 2015. Other updates of these Work Programmes are foreseen until 2020. Another result will be a better cooperation with the European Coordinators, as detailed in Article 45(7) of the Regulation (EU)1315/2013.

For the purpose of this action, a grant shall be directly awarded to each Member State (or to the body/ies designated by it under its responsibility to develop major cross-border projects) to cover the direct eligible costs for the participation in the relevant corridors as well as to cover the direct eligible costs related to specific communication, best-practice exchange and knowledge sharing actions in relation to the managing of major cross-border projects identified in the relevant Corridor Work Plans.

Considering that the workload depends on the number of corridors covering each Member State, the maximum amount to be awarded is determined, as follows:

The legal basis for this PSA is point (a) of Article 5(2) of the Regulation (EU) 1316/2013.

The direct award to the Member States – Ministries being in a position of monopoly for the above described tasks, or the designated bodies under their responsibility is Article 190(1)(c) Rules of Application to the EU Financial Regulation.

Member States participating in one or two corridors	Bulgaria ; Croatia ; Cyprus ; Denmark ; Estonia ; Finland ; Greece ; Ireland ; Latvia ; Lithuania ; Luxembourg ; Malta ; Poland ; Portugal ; Romania ; Slovenia ; Spain ; Sweden ; United Kingdom	Maximum grant per Member State: EUR 384,600
Member States participating in three or four corridors	Austria ; Belgium ; Czech Republic ; Hungary ; Italy ; Netherland ; Slovakia	Maximum grant per Member State: EUR 769,200
Member States participating in five or more corridors	Germany ; France	Maximum grant per Member State: EUR 1,153,800

Indirect costs shall not be eligible.

Maximum rate of co-financing of direct eligible costs	100%	Indicative Timetable	<p>Invitation to submit a proposal to be sent in Q3 2016 Deadline for applications: Q4 2016 Information to applicants on the outcome of the evaluation: Q4 2016 Start of implementation: Q1 2017 Contracts may be signed on 2017 budgets</p>
Indicative total amount (2017 appropriations only)	<p>EUR 15,000,000 On 2017 appropriations</p>		
		Comments	<p>Estimated duration of the actions: 4 years Previous action on 2014 commitments: EUR 12 000 000</p>

b. Programme Support Actions related to increasing interoperability through the development of the Rail Freight Corridors "Support to the establishment and implementation of the Rail Freight Corridors"

In the context of ensuring interoperability, Union Rail Freight Corridors (RFCs) need to be established and developed in line with Regulation (EU) No 913/2010, as the rail freight backbone of the TEN-T Core Network Corridors (see Articles 44 and 48 of the TEN-T Guidelines). The general objective of this PSA is to assist the RFCs, through support of their activities, in their establishment, development and extensions, in line with the legal requirements and the market demands and to help them provide a high level of service to the customers.

The PSA shall provide support to the secretarial, managerial and communication activities of the RFC to the Member States in their capacity of the Executive Boards and to the Infrastructure Managers in their capacity of the Management Boards (including Working Groups, Corridor One-Stop-Shops and Advisory Groups), as well as all the other RFC activities, including studies only and exclusively covered by the provisions of Regulation (EU) No 913/2010 as amended by Article 29 of the CEF Regulation.

With regard to the RFCs which have already benefitted from the Union grant support under the CEF call for proposals, no task/activity already co-financed through such a grant shall be financed through the PSA.

In the framework of this PSA, the Commission may set specific priorities in its invitation to submit a grant and further define the tasks/activities concerned.

Infrastructure works on the RFCs shall not be financed through this PSA.

The grant shall be awarded to:

- (i) Member States, acting in their capacity of the Executive Board, carrying out the tasks provided by the Regulation (EU) 913/2010.
- (ii) a consortium of Railway Infrastructure Managers (RIMs) and, where applicable, Allocation Bodies (ABs) acting in their capacity of the Management Board, which may take the form of an EEIG⁴⁶, in the case of absence of a legal entity;

Applications for grants for each of the Rail Freight Corridors shall be coordinated by one Railway Infrastructure Managers or, where applicable, Allocation Bodies or the Member States who will act as the coordinator on behalf of the others participating in the RFC.

The legal basis for this PSA is point (a) of Article 5(2) of the CEF Regulation.

Direct grant shall be justified on the basis of Articles 190(1) (c) and 190(1) (f) of the Rules of Application of the EU Financial Regulation.

The initial list of Rail Freight Corridors is specified in Annex II to the CEF Regulation.

Indicative list of Beneficiaries:

RFC	Member States	Infrastructure Managers
RFC 1	NL, BE, DE, CH, IT	EEIG Corridor Rhine-Alpine
RFC 2	NL, BE, FR, LU, CH, UK	EEIG RFC North Sea – Med
RFC 3	NO, SE, DK, DE, AT, IT	<u>Infrastructure Managers:</u> Jernbaneverket (NO) Trafikverket (SE) the Øresundsbro Konsortiet Banedanmark (DK) DB Netz AG (DE)

⁴⁶ In the case of absence of legal entity, in view of ensuring pan-European coordination of the RIMs participating in a RFC, it is required that the application be coordinated by one RIM/AB acting as Coordinator on behalf of the others participating in the RFC.

		ÖBB Infrastruktur AG (AT) Rete Ferroviaria Italiana S.p.a (IT)
RFC 4	PT, ES, FR, DE	EEIG Atlantic Corridor
RFC 5	PL, CZ, SK, AT, SI, IT	EEIG Baltic-Adriatic Corridor
RFC 6	ES, FR, IT, SI, HU, HR	EEIG Mediterranean corridor
RFC 7	AT, CZ, SK, HU, RO, BG, EL, DE	<u>Infrastructure Managers/Allocation Bodies:</u> ÖBB-Infrastruktur (AT) SŽDC (CZ) ŽSR (SK) MÁV (HU) GYSEV (HU & AT) VPE (HU) CFR (RO) NRIC (BU) OSE(GR) DB Netz AG (DE)
RFC 8	BE, NL, DE, CZ, PL, LT, LV, EE	<u>Infrastructure Managers/Allocation Bodies:</u> DB Netz AG (DE) Infrabel (BE) ProRail (NL) SZDC (CZ) PKP PLK SA (PL) Lietuvos geležinkeliai (LT) Valstybinė geležinkelio inspekcija (LT) ..(EE) ..(LV)

RFC 9	CZ, SK, AT, HU, RO, FR, DE	<u>Infrastructure Managers/Allocation Bodies:</u> SNCF Reseau (FR) DB Netz (DE) SZDC (CZ) ZSR (SK) ÖBB Infra (AT) GYSEV (HU & AT) MAV (HU) VPE (HU) CFR (RO)
RFC 10	AT, SL, BG, SB	<u>Infrastructure Managers/Allocation Bodies:</u> AT, SL, BG, SB
RFC 11	SI, SK, PL, HU	<u>Infrastructure Managers/Allocation Bodies:</u> ..(SI) ..(SL) MAV (HU) GYVEV (HU) VPE (HU) ZSR (SK) PKP PLK SA (PL)

Union financial aid shall be in the form of a grant: up to 100% of the eligible direct cost (indirect costs shall not be eligible).

Maximum rate of co-financing	100 %	Indicative timetable: Award of a multiannual specific grant in annual instalments
Indicative amount to be committed		
		Invitation by the

		Commission to submit an application for a grant: Q1 2017 Evaluation of the grant applications: Q2 2017 Clarifications Signature of specific grant agreements and Implementation: June 2017
2017	12 Mio EUR on 2017 appropriations	Payments in annual instalments
Comments	Foreseen duration of the grants: 4 years The amounts per RFC may vary, depending on the number of IMs, on the degree of development of the RFC and the activities proposed.	

4.2. Ensuring sustainable and efficient transport in the long run (referring to the budget line 06.02.01.02)

4.2.1. Programme support Action in the field of "safe and secure infrastructure"

4.2.1.1. In the form of grants

Programme Support Action: "Enhancing the cooperation between Railway Infrastructure Managers for better safety management"

The objective of this PSA is to assist European rail infrastructure managers in sharing knowledge and best practice across railways to support new approaches to safety management. The action shall result in a shared understanding of what are the possible opportunities, benefits, but also blockers to a more mature and just safety culture. It shall prepare grounds for implementation of occurrence reporting.

The Railway Safety Directive 2004/49/EC establishes rules for development and improvement of safety on the Union's railways, including common principles for the management of railway safety. Article 9 of that Directive provides that infrastructure managers and railway undertakings shall establish their respective safety management systems, i.e. the organisation and arrangements to ensure the safe management of its operations.

Promoting safety and just culture in organisations is an essential element of effective implementation of occurrence reporting. Occurrence reporting and systematic analysis of rail incident and accident data is a cornerstone of modern safety management systems. Railways remain the only major transport mode in which an Union-wide common collection of information on occurrences is not in place.

This Programme Support Action shall be implemented through a grant to support a Twinning Programme for management staff of rail infrastructure managers with safety responsibility. The grant shall be awarded to a consortium consisting of:

- a coordinator, who may also be a sending/hosting organisation; it has to be either an Union Member State rail infrastructure manager or an association of Union rail infrastructure managers;
- other beneficiaries - at least 10 sending and/or hosting Union Member State rail infrastructure managers.

The grant shall cover up to 100% of the direct eligible costs of the action.

The legal basis for this PSA are point (a) of Article 5(2) and point (j) of Article 7(2) of the CEF Regulation.

Given that it requires a particular type of body on account of its technical competence and administrative power, this Programme Support Action shall be implemented through a grant awarded without a call for proposals to Union/EFTA Member State rail infrastructure managers or an association of Union/EFTA rail infrastructure managers on the basis of point (f) of Article 190(1) of the Rules of Application of the Financial Regulation.

Indicative amount to be committed in 2016	280,000	Indicative timeframe	Invitation to submit a proposal to be sent in Q1 2016
Period (Years)	1	Comments	EUR 280,000 from the 2016 budget
Indicative number of contracts	1		

4.2.2. Programme Support Action in the field of Ensuring sustainable and efficient transport in the long run: Big Data for Aviation

4.2.2.1. In the form of grants: direct award to European Aviation Safety Agency

Big Data for Aviation

In the “Aviation Strategy for Europe”, published in December 2015, the European Commission welcomes the launch of the Big Data for Civil Aviation initiative. The objectives of the European Big Data for Civil Aviation Programme are to make the European aviation system even safer, to support the European technological and market leadership in Civil Aviation and to enhance the European know-how in Big Data technology.

The action will build on the independent Feasibility Study commissioned in 2015 by the European Aviation Safety Agency. This study confirmed the importance of the Big Data programme for aviation safety and concluded that its development is feasible. The study recommended to start with a Proof of Concept phase, involving a limited number of stakeholders, including European airlines, aircraft manufacturers and Member State aviation authorities, prior to full implementation. The Proof of Concept will concentrate on the collection of existing flight safety data from aircraft Flight Data Monitoring and occurrence reports. The Big Data programme as developed for Civil Aviation can be used as a platform

for Big Data applications for other modes of transport. The programme will be one of the first pilot projects in the area of Big Data applications. The Programme Support Action will enable the development and implementation of the Proof of Concept phase.

Expected results and underlying tasks:

- Designing and implementing a Big Data solution adapted to the safety of transport sectors, starting with Civil Aviation. The design of the solution will comprise:
- the creation of a data structure that will enable to extract, transform and load all relevant safety data into a Big Data system; for the Proof of Concept this data will be flight safety data and occurrence reports;
- the design of innovative data processing and query algorithms that will extract knowledge from data. Big Data is expected to enable a step change transition from reactive safety management to proactive safety management in transport in Europe;
- design and implementation of the relevant IT infrastructures; for the Proof of Concept this will be based on a 500 TB big data analytics platform, with software licences, architecture, integration and data feeds of the IT platform;

Establishing and maintaining cooperative arrangements with all the relevant stakeholders to ensure that the data are continuously provided and that the participation and contribution of the whole sector is ensured in order to provide analysis capacities and so that system outputs (risk mitigation measures) are implemented by the players; to this extend a collaborative governance structure will have to be designed and tested during the Proof of Concept phase;

The role of the European Aviation Safety Agency (EASA), which is at the centrepiece of the European Aviation System, is provided by Regulation (EC) No 216/2008 on aviation safety and establishing the Agency, the so-called Basic Regulation. The Agency is involved in the coordination of the gathering, exchange and analysis of information on matters regarding aviation and aviation safety (within the scope of the Basic Regulation). As such, EASA has already established a network with the aviation safety partners needed to contribute data and aviation expertise to make this initiative a success. In the future, the role of EASA in this field will be strengthened as outlined in the Commission proposal for revising the Basic Regulation⁴⁷.

EASA has the administrative position, the technical network and the expertise to govern the collection of the necessary data. It also has the required trustworthiness for handling these data, which are often subject to personal data protection rules or of a confidential or a commercially sensitive nature. The transmission of this data by aviation stakeholders, either on a mandatory or on a voluntary basis, will be essential for the development of the Big Data programme and for the further improvement of aviation safety. The Big Data programme will fully support the implementation of the performance/risk based approach needed to have a more efficient and cost-effective European aviation safety system.

For the purpose of this Programme Support Action a grant will be awarded to EASA in order to develop the analysis platform and the IT platform, for which EASA will award contracts to specialised organisations.

EU financial aid in the form of a grant: up to 100% of eligible direct costs (indirect costs shall not be eligible).

The award of a grant to EASA can be allowed as a provisional measure, for the period until the new EASA Basic Regulation becomes applicable. However, as from that point in time, the funding of the Big Data project shall be made from the budget of EASA.

⁴⁷ COM(2015) 613 final

Legal Base:

Article 5(2)(a) of the CEF Regulation referring to implementation of the horizontal priority in Annex I of the CEF on "New Technologies and Innovation", in accordance with Article 33(c) of the TEN-T Guidelines "improve the safety and sustainability of the movement of persons and of the transport of goods".

The PSA will be implemented as a grant from the European Commission directly provided to the European Aviation Safety Agency based on 190(1)(f) of the Rules of Application of the EU Financial Regulation.

The Commission will issue an invitation to submit a proposal to EASA in Q1/Q2 2016.

EASA will carry out the competitive call for tender procedures to award contracts for the different work packages to specialised organisations.

Indicative amount to be committed in 2016	EUR 2,000,000 on 2016 appropriations	Indicative timeframe for submitting a proposal to the Commission	Q1/Q2 2016
Period (Years)	3		Estimated duration of the Proof of Concept Phase is 3 years (2016 – 2019). EUR 2,000,000 from budget 2016
Indicative number of contracts	3	Comments	One contract for the Work Package on the IT Platform. One Contract for the WP on the Analysis Platform. One contract for the WP on Project Management Office. There may be some lower value contracts depending on operational needs
Indicative amount to be committed in 2017	EUR 3,000,000 on 2017 appropriations	Indicative timeframe for the procurement procedure	Q1/2 2017
Period (Years)	2		Estimated duration of the Proof of Concept Phase is 3 years (2016 – 2019). EUR 3,000,000 from budget 2017
Indicative number of contracts	3	Comments	One contract for the Work Package on the IT Platform. One Contract for the WP on the Analysis Platform. One contract for the WP on Project Management Office. There may be some lower value contracts depending on

			operational needs.
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4.3. Optimising integration and interconnection of transport modes and enhancing interoperability of transport services, while ensuring the accessibility of transport infrastructure (budget line 06.02.01.03)

4.3.1. Programme Support Actions in the field of the Single European Sky

General objectives

The objective in the area of the Single European Sky (SES) is to support its timely implementation and in particular to support the deployment of SESAR, its technological pillar.

Specific objectives

The specific objectives in this sector are:

- consolidate and accelerate the process of modernisation of Air Traffic Management (ATM) in Europe, in particular by addressing, through the deployment of new technologies, the inefficiencies in the provision of air navigation services and the fragmentation of the European ATM system.
- timely and synchronised deployment of SESAR, in particular through the common projects in compliance with Commission Implementing Regulation (EU) No 409/2013⁴⁸ on the definition of common projects, the establishment of governance and the identification of incentives supporting the implementation of the European Air Traffic Management Master Plan.
- Implementing the performance framework that applies to the SES and SESAR in compliance with Commission Implementing Regulation (EU) No 390/2013⁴⁹.

The legal bases for the following Programme Support Actions (PSA) are point (a) of Article 5(2) and point (j) of Article 7(2), where implemented by means of grants, of the Regulation (EU) 1316/2013.

4.3.1.1. In the form of grants

a. Specific grant agreement under the framework partnership agreement for the financing of the deployment of SESAR and of its Management Level (the Deployment Manager)

In the deployment phase of the SESAR project, operational stakeholders shall deploy a new generation of air traffic management (ATM) equipment, systems and standards that constitute the SESAR concept of operations. The essential functionalities of this concept shall be deployed in accordance with framework laid down in Implementing Regulation (EU) No 409/2013 on the "definition of common projects, the establishment of governance and the identification of incentives supporting the implementation of the European ATM Master

⁴⁸ Commission Implementing Regulation (EU) No 409/2013 of 3 May 2013 on the definition of common projects, the establishment of governance and the identification of incentives supporting the implementation of the European Air Traffic Management Master Plan (OJ L 123, 4.5.2013, p. 1).

⁴⁹ Commission Implementing Regulation (EU) No 390/2013 of 3 May 2013 laying down a performance scheme for air navigation services and network functions (OJ L 128, 9.5.2013, p. 1).

Plan" and shall be coordinated and managed by the Deployment Manager. This framework defines four main deployment instruments: Common Projects, deployment governance, the Deployment Programme and implementation projects. Moreover, the deployment governance encompasses the Policy level, under the responsibility of the Commission, the Management level under the responsibility of the Deployment Manager and the implementation level, under the responsibility of operational stakeholders that implement Common Projects. The contractual instrument that binds the three levels of governance is the SESAR Framework Partnership Agreement. The first common project, referred to as the "Pilot Common Project" or PCP, was adopted as Commission Implementing Regulation (EU) No 716/2014⁵⁰.

The appointment of the Deployment Manager, through the signing of the SESAR Deployment Framework Partnership agreement bringing together the Management Level (the Deployment Manager) and the Implementation Level of SESAR Deployment Governance, and the delivery of a preliminary version of the Deployment Programme, were finalised on 5 December 2014. The Framework Partnership Agreement with the Deployment Manager has been concluded for a period going up to the end of 2020.

The objective of this PSA is to continue to support the tasks of the Deployment Manager in accordance with Article 9 of Implementing Regulation (EU) No 409/2013, in particular to:

- develop, propose, maintain and implement the Deployment Programme;
- associate the civil and military operational stakeholders that are required to implement common projects;
- establish mechanisms and decision-making processes that ensure efficient synchronisation and overall coordination of the implementation projects and the related investment in line with the deployment programme;
- ensure effective management of risks and conflict of interest;
- advise the Commission on issues related to the implementation of common projects and to the setting up of new common projects;
- implement Commission decisions and to ensure and monitor their implementation by the implementation level;
- identify the most appropriate financing mechanisms combining public and private funding;
- monitor implementation of the Deployment Programme;
- report to the Commission;
- ensure appropriate coordination with National Supervisory Authorities.

The legal bases for this PSA are point (a) of Article 5(2) and point (j) of Article 7(2) of the CEF Regulation.

Union financial aid in the form of a grant: up to 100% of eligible direct costs (indirect costs shall not be eligible).

⁵⁰ Commission Implementing Regulation (EU) No 716/2014 of 27 June 2014 on the establishment of the Pilot Common Project supporting the implementation of the European Air Traffic Management Master Plan (OJ L 190, 28.6.2014, p. 19).

Maximum rate of co-financing	100%	Indicative Timetable: Award of a multi-annual specific grant in annual instalments	
Indicative amounts to be committed:			
2016	EUR 9,000,000	Q4 of 2016	
2017	EUR 8,000,000	Q4 of 2017	
2018	EUR 5,000,000	Q4 of 2018	
2019	EUR 4,000,000	Q4 of 2019	
2020	EUR 4,000,000	Q4 of 2020	
Period (Years)	5	Comments	Previous commitments: 2014: EUR 5,500,000 2015: EUR 6,000,000

b. Specific grant agreements to EUROCAE and to the European Standardisation Organisations to support the development of standards and technical specifications for SESAR technologies

The objectives and expected results of this action are the effective and efficient coordination of industrial stakeholders involved in standardisation processes by ESOs and EUROCAE in order to achieve the timely availability of technical specifications and standards necessary for the implementation of new ATM technologies.

Award without a call for proposals to EUROCAE and to ESOs: beneficiaries identified in the basic act on the basis of point (d) of Article 190(1) of the Rules of Application of the Union Financial Regulation in conjunction with Article 4(1) of Regulation (EC) No 552/2004 and Regulation (EU) No 1025/2012.

Union financial aid in the form of a grant: up to 100% of direct eligible costs (indirect costs shall not be eligible)

Maximum rate of co-financing	100%	Indicative Timetable	Invitation to submit a proposal to be sent in Q2 2016 Deadline for application: Q3 2016 Information to applicants on the outcome of the evaluation: Q4 2016
Indicative amount to be committed in 2016	1,500,000		
Maximum rate of	100%	Indicative	Invitation to submit a proposal to be sent in Q2

co- financing		Timetabl e	2017 Deadline for application: Q3 2017 Information to applicants on the outcome of the evaluation: Q4 2017 Commitment may not be done before 2018
Indicative amount to be committed in 2018	1.500.000 on 2018 appropriations		
Period (Years)	4	Comment s	Estimated breakdown of each EUR 1,500,000: • EUR 1,000,000 for EUROCAE and • EUR 500,000 for ESO's (ETSI and CEN) Estimated duration of the actions: 4 years
Indicative nr of contracts	3 (one for Eurocae; one for ETSI; one for CEN)		Comments: previous commitment: EUR 1.000.000 in 2014 (Eurocae)

4.3.1.2. In the form of procurements

c. Specific Contract for the implementation of Single European Sky Interoperability Regulations and the development of SES related ATM technical specifications for SESAR deployment

Nine Commission Implementing Regulations have been adopted under the "interoperability" Regulation (EC) No 552/2004, covering topics ranging from the exchange of flight data between air traffic control units, to data link services or surveillance systems. Despite some existing reporting mechanisms, a comprehensive implementation/ monitoring overview of the Implementing Regulations, taking into account the obligations of all regulated parties and stakeholders, is currently missing. A closer follow-up of each individual interoperability IR, through e.g. the organisation of dedicated workshops or targeted consultations of stakeholders is necessary to complete this overview and address possible issues. In addition, some of the adopted Regulations contain specific provisions, e.g. on exemptions, to be addressed by the Commission. As was the case for the exemptions to the Data Link Regulation⁵¹ with the assistance of EUROCONTROL, new technical assistance would be required to review, maintain and process exemptions requests e.g. related to the Surveillance Performance

⁵¹ Commission Regulation (EC) No 29/2009 of 16 January 2009 laying down requirements on data link services for the single European sky (OJ L 13, 17.1.2009, p. 3).

Interoperability (SPI)⁵² or Voice Channels Spacing (VCS)⁵³ Implementing Regulations and produce a report to the Commission, in view of the adoption of the required Decision(s) on exemptions.

Additionally, and complementing the development of standards and specifications developed by EUROCAE and the European Standardisation Organisations (ESOs), assistance would be required to help update existing EUROCONTROL specifications or develop new ones as required for the deployment of SESAR.

The objective of this PSA is the provision of the technical support in the implementation of the Single European Sky Interoperability Implementing Regulations and the development of SES related ATM specifications, including those required for the SESAR deployment.

The legal bases for this PSA are point (a) of Article 5(2) and Article 7(2) of the Regulation (EU) 1316/2013.

Union financial aid in the form of procurement, up to the amount indicated below:

Indicative amount to be committed in 2016	500,000	Indicative timeframe for the procurement procedure	Signature of the contracts in 2016
Period (Years)	1	Comments	EUR 500,000 from the 2016 budget. Comment: previous action: EUR 500.000 in 2015 has not been carried out and appropriations have been added to the MAP Programme 2015-2020
Indicative number of contracts	2		

d. Procurement contracts on assistance to the implementation of SES performance and charging schemes

The objective of this PSA is technical assistance to the European Commission and/or the Performance Review Body (see Article 11(2) of Regulation (EC) No 549/2004 of the European Parliament and of the Council⁵⁴) in the implementation of the Performance and

⁵² Commission Implementing Regulation (EU) No 1207/2011 of 2 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky (OJ L 305, 23.11.2011, p. 35).

⁵³ Commission Implementing Regulation (EU) No 1079/2012 of 16 November 2012 laying down requirements for voice channels spacing for the single European sky (OJ L 320, 17.11.2012, p. 14).

⁵⁴ Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) (OJ L 96, 31.3.2004, p. 1).

Charging Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013⁵⁵ in the area of air navigation services.

Regarding the performance scheme, the tasks for which the Commission seeks assistance are the following:

- collection, examination, validation and dissemination of performance-related data;
- the definition or adaptation of key performance areas and key performance indicators;
- the setting and the revision of Union-wide performance targets and alert thresholds;
- the consistency assessment of adopted performance plans, including performance targets, with the Union-wide targets;
- where appropriate, the assessment of the revised performance targets or the corrective measures taken by the Member States concerned;
- monitoring, benchmarking and review of the performance of air navigation services including investment and capital expenditure, at local and Union levels; monitoring, benchmarking and review of the performance of the network functions;
- monitoring of the overall performance of the European ATM network, including the preparation of annual reports to the Single Sky Committee;
- assessment of the achievement of the performance targets at the end of each reference period with a view to preparing for the following period;
- assessment of the performance plan of the Network Manager, including its consistency with the Union-wide performance targets;
- maintenance and support in the coordination of a stakeholder consultation calendar.

In addition, the Commission seeks assistance in the implementation of the charging scheme (see Implementing Regulation (EU) No 391/2013. This includes (i.a.) the compliance assessment of annual unit rates of charges under Article 17, the assessment of cost-exempt from cost-sharing (Article 14(2)), market conditions of terminal services (Article 3), restructuring costs (Article 7(4)).

Indicative amount to be committed in 2016	EUR 15,000,000	Indicative timeframe for the procurement procedure	Q4 2016
Period (Years)	2	Comments	EUR 15,000,000 from the 2016 budget – the contract shall cover 2 years of tasks (2016 and 2017)
Indicative number of contracts	2		
Indicative amount to be committed in 2018	EUR 15.000.000 on 2018 appropriations	Indicative timeframe for the procurement procedure	Q2 2018

⁵⁵ Commission Implementing Regulation (EU) No 391/2013 of 3 May 2013 laying down a common charging scheme for air navigation services (OJ L 128, 9.5.2013, p. 31).

Period (Years)	2		
Indicative number of contracts	2	Comments	EUR 15.000.000 from the 2018 budget – the contract shall cover 2 years of tasks (i.e. 2019 and 2020). The activities in the years 2017 and 2018 shall be financed from the 2016 appropriations (also EUR 15.000.000)

e. Studies in the context of the implementation of SES performance and charging schemes for the year 2016

The objective of this PSA in the context of the assistance to the European Commission and the Performance Review Body (PRB) in the implementation of the Performance and Charging Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 in the area of air navigation services is to launch two new studies.

The first study is on the further development and/or reform of the performance and charging scheme (development of options for the third reference period, which indicators in all four key performance areas as well as consideration of extension of the scheme to other areas).

The study is a follow-up from an ex-post evaluation of the performance and charging scheme that is launched in the second half of 2015 (covered by 2015 appropriations) and is to assess legal and economic impacts of a further development/reform of the schemes.

The second study is to compare and assess the design of incentives schemes to promote the efficient use of ATM infrastructure.

Indicative amount to be committed in 2016	EUR 500,000	Indicative timeframe for the procurement procedure	Q4 2016
Period (Years)	1	Comments	EUR 500,000 from the 2016 budget Comment: previous contracts: EUR 500,000 for an evaluation study on 2015 appropriations
Indicative number of contracts	2		

f. Studies in the context of the implementation of SES performance and charging schemes for the years 2017-2019

The objective of this PSA in the context of the assistance to the European Commission and the Performance Review Body (PRB) in the implementation of the Performance

and Charging Regulations (EU) N° 390/2013 and (EU) N° 391/2013 in the area of air navigation services is to launch four new studies to support the work of the Commission and the PRB in the implementation of the performance and charging schemes.

Study 1: The objective of study 1 is to support the Commission in setting the Union-wide performance targets for the third reference period of the SES performance scheme, which starts in 2020. For this work, target values in at least four key performance areas need to be defined at Union-level, which are then to be broken down at the level of Member States (or Functional Airspace Blocks). The study needs to develop a methodology by which the allocation to the national or local level can be done in a justified manner. This study may be split into two, where the first study relates to the development work of Union-wide targets and their breakdown into local or national targets and the second study would be concentrated on assessing the impact of those targets on the respective levels.

Study 2: The objective of study 2 is to support the Commission in the monitoring of implementation of the SES performance and charging schemes specifically in relation to investment programmes. The study should consider ATM investments made since the first reference period and assess the benefits delivered (also in terms of the deployment of SESAR). Furthermore, the study should compare the realised programme with planned investments contained in the performance plans and assess the handling of any postponed expenditures.

Study 3: The objective of study 3 is to support the Commission in refining the methodology and defining the legal requirements for a more harmonised allocation of costs between en-route and terminal air navigation services. This includes developing a consistent definition of the boundaries of these two services, the allocation of the costs in a structured way, including common costs, to the services and the analysis of the impact of changes to the cost allocation method. This study is a follow-up to the study done by a contractor on behalf of the Commission in 2014 on modulation of charges and cost allocation.

Study 4: The objective of study 4 is to support the Commission in setting up a new long term framework for a future SES performance scheme (to be implemented by 2025) in order to adapt the scheme to the developing ATM environment in Europe and by building on the practical experience of the first Reference Periods since 2012. This will be a follow-up study to the work done in preparation of the third reference period, which starts in 2020. The study should propose an improved organisational framework in order to enhance the independence and effectiveness of the scheme, to reduce overall costs for stakeholders and stabilise or decrease the financing from the Commission's budget. A second important element of the study is to simplify the scheme and to improve transparency of the underlying factors, in Member States and at the level of Air Navigation Service Providers.

Indicative amount to be committed in 2017 for Study 1	EUR 200.000 on 2017 appropriations	Indicative timeframe for the procurement procedure	Q3 2017
Indicative amount to be committed in 2018 for Studies 2	EUR 400.000 on 2018 appropriations	Indicative timeframe for the procurement	Q1 2018

and 3		procedure	
Indicative amount to be committed in 2019 for Study 4	EUR 200.000 on 2019 appropriations	Indicative timeframe for the procurement procedure	Q4 2019
Period (Years)	2		
Indicate number of contracts	4		

g. Technical support to the Industry Consultation Body (ICB), National Supervisory Authorities (NSA) and Expert Group on the Social Dimension (EGSD) of the Single European Sky

ICB is a consultation body created in the framework of the Single European Sky in accordance with Article 6 of Regulation (EC) No 549/2004 of the European Parliament and the Council. Therefore it is a legal requirement under the Single European Sky that the Commission must meet.

The Single Sky legislation (SES and SES II) foresees the adoption of enabling legislation (implementing rules) in the form of Commission Regulations adopted through the comitology procedure (Single Sky Committee). The development of regulations requires an open and transparent consultation process that provides for participation of all stakeholders, to ensure that they are well founded and provide for balance between the different groups. Therefore all interested groups — notably service providers, airlines, equipment manufacturers, staff associations — need to be closely involved in all aspects of regulation. The Single European Sky legislation obliges the Commission to establish the Industry Consultation Body for the appropriate involvement of stakeholders in the implementation of the Single Sky, in particular in relation to the development and introduction of new concepts and technologies in the European Air Traffic Management (ATM) network. There is a need for the provision of EU policy oriented consolidated information required to support the decision making within the industry consultation process in terms of strategy, operational concept, high level architecture, roadmap and implementation. It supports the definition of ensuing roadmaps for rules and standards, support to SESAR, support to Research and Development elements outside of SESAR and support to the Trans European Transport Networks.

The aim of this PSA is to provide the ICB with the consolidated information it needs to formulate its opinions on legislative initiatives and activities in the area of the Single European Sky.

The technical and administrative support to be provided by the contractor is critical to the functioning of the ICB and its sub-groups, which meet at least twelve times per year in three separate formations. Each meeting requires the preparation of technical issues papers and professional facilitation to allow a high-quality output to be taken into consideration by the Commission when undertaking initiatives, conducting activities, or drafting proposals in support of the Single European Sky policies. The potential award of up to €2.000.000 does not cover only technical and administrative support to the ICB but also to the two groups below – the NSA Coordination Platform (NCP), comprised of Member State National Supervisory Authorities and to the Expert Group on the Social Dimension of the SES (EGSD), comprised of professional staff associations (unions).

Technical and administrative assistance to the Coordination Platform for the National Supervisory Authorities (NCP)

The NSA Coordination Platform (NCP) has been created to support the tasks of NSAs in the Single European Sky framework in accordance with Article 2 of Regulation of the European Parliament and the Council (EC) No 550/2004. The NCP and its Working Groups have been meeting since the end of 2009 by the Commission with support from a technical contractor (until now fulfilled by Eurocontrol).

The objective of this PSA is to finance the assistance to the Commission in establishing and following-up a Multi-Annual work programme related to the NCP and its Working Groups. The main tasks are:

- providing guidance material to NSAs on legislative, technical and interoperability matters, cross fertilisation of knowledge and uniformisation of practices at the level of the NSAs;
- organising working group and plenary meetings, including reporting and the development of work programmes

Member States and the European Commission have agreed that the Platform will contribute to the SES implementation under the aegis of the Single Sky Committee and therefore the Platform will report to the Single Sky Committee on a regular basis.

The NCP currently has five working groups that also meet several times per year. The meetings serve the needs of the NSAs by providing a platform to exchange best practices. Technical and organisational support is required to ensure high-quality exchanges.

Technical and administrative support to the Expert Group on the Social Dimension (EGSD) of the Single European Sky

The Single Sky legislation foresees the adoption of enabling legislation (implementing rules) in the form of Commission Regulations adopted through the comitology procedure (Single Sky Committee). The development of regulations requires an open and transparent consultation process that provides for participation of all the stakeholders, to ensure that they are well founded and provide for balance between the different groups. Therefore all interested groups — notably service providers, airlines, equipment manufacturers and professional staff representative bodies — need to be closely involved in all aspects of regulation.

The Single European Sky legislation (Regulation (EC) No 549/2004, Article 10(2)) obliges the Commission to establish a consultation mechanism with stakeholders at Union level and that the specific Sectoral Social Dialogue Committee set up under Commission Decision 98/500/EC shall be involved in the consultation.

As a result, a consultative expert group on the social dimension of the Single European Sky was established (hereinafter referred to as "the Expert group on the single European sky") by the Commission decision C(2010)9016.

The task of the Expert group on the single European sky is to advise the Commission with respect to the implementation and development of the single European sky regarding all measures having significant social implications.

The purpose of this contract is to provide the necessary administrative assistance in particular:

- provision of advice on agenda and the proposals addressed to the Single Sky Committee set
- up in Article 5 of Regulation (EC) No 549/2004 (Article 2(3) of the Decision C(2010)9016);
- provision of advice on other topics agreed together with the Commission (Article 4(3) of the
- Decision C(2010)9016).

The travel and subsistence budget will only cover the expenses of the contractor as the travel expenses of the members of the group are reimbursed based on the Decision C(2010)9016 (Article 5(3)).

Technical and administrative support is required to facilitate the challenging discussions in the meetings on highly technical topics.

Indicative amount to be committed in 2017	EUR 2.000.000 on 2017 app.	Indicative timeframe for the procurement procedure	Q1 2017
Period (Years)	1	Comments	
Indicative number of contracts	1		
Indicative amount to be committed in 2018	EUR 2.000.000 on 2018 app.	Indicative timeframe for the procurement procedure	Q1 2018
Period (Years)	1	Comments	
Indicative number of contracts	1		
Indicative amount to be committed in 2019	EUR 2.000.000 on 2019 app.	Indicative timeframe for the procurement procedure	Q1 2019
Period (Years)	1	Comments	
Indicative number of contracts	1		
Indicative amount to be committed in 2020	EUR 2.000.000 on 2020 app.	Indicative timeframe for the procurement procedure	Q1 2020

h. Study, supporting the review of the Pilot Common Project Regulation.

The objective of this PSA is to launch a study supporting the Commission for the mandatory review of the Regulation (EU)716/2014 on the Pilot Common Project (as per Article 6 of this regulation). The Commission will require support from an

independent consultant to assess the technical and economic information and advice from the SESAR Deployment Manager and the information collected through the monitoring of the implementation of the Pilot Common Project.

Study: Support to the decision for the review of the PCP Regulation

Indicative amount to be committed in 2017	EUR 100.000 on 2017 appropriations	Indicative timeframe for the procurement procedure	Q1 2017
Period (Years)	1	Comments	EUR 100.000 from 2017 budget
Indicative number of contracts	1		

i. Support to the SESAR Deployment Policy level for setting up a second Common Project (Regulation (EU) 409/2013)

The adoption of Common Projects to deploy SESAR ATM functionalities follows a three phase process that includes: Setting the content; Extensive stakeholder consultations; formal adoption. These phases require a significant amount of work to collect and assess data and conduct large scale consultations with aviation stakeholders. The first common project was adopted in June 2014 (Regulation (EU)716/2014). The objective of this PSA is to provide assistance to the European Commission as Policy level of the SESAR deployment governance, defined in Regulation (EU) No 409/2013, to launch a the process for setting up a second Common Project (as per Article 8 of this regulation).

Study: Support to the setup of a second Common Project

Indicative amount to be committed in 2017	EUR 150.000 on 2017 appropriations	Indicative timeframe for the procurement procedure	Q1 2017
Period (Years)	1	Comments	EUR 150.000 from 2017 budget
Indicative number of contracts	1		

j. Studies on the establishment of a Single European Sky programme.

The objective of this PSA in the context of the assistance to the European Commission for the implementation of the Single European Sky is to launch studies supporting a future Commission decision to establish an autonomous Single European Sky (SES) programme.

The SES is a key component of the Union's Aviation Strategy. Accelerating its full implementation and ensuring full consistency and synchronisation of its instruments and mechanisms (Performance and charging schemes, functional airspace blocks, network management, SESAR, civil-military cooperation, global interoperability, safety enhancement, human factors) will allow to achieve the desired performance objectives and truly modernise the Union's ATM systems. The delays experienced to

date in implementing the SES could be removed if its mechanisms could be coordinated, synchronised and support through a dedicated legal and financial framework. Some implementing activities, such as those stemming from the SESAR project, require custom-fit financial support synchronised with the delivery of validated technical solutions by the SESAR Joint Undertaking.

Planned studies:

- Preliminary assessment on the potential and the requirements for establishing an autonomous SES programme;
- Impact assessment for the establishment of an autonomous SES programme.

Indicative amount to be committed	EUR 150.000 on 2017 appropriations EUR 300.000 On 2018 appropriations	Indicative timeframe for the procurement procedure	Q1 2017
Period (Years)	2	Comments	
Indicative number of work orders	2		

k. Support to the Commission for collecting and consolidating statistics related to the Single European Sky.

The objective of this PSA, in the context of the assistance to the European Commission for the implementation of the Single European Sky (SES), is to collect and consolidate statistical data on the progress and results of the various SES instruments and mechanisms in terms of impact on employment, investments, partnerships, uptake of technological solutions, the environment, etc. This information will be used by the Commission for a periodical reporting to the political level, to stakeholders and to the general public.

Indicative amounts to be committed		Indicative timetable for the procurement procedure
2017	EUR 100,000 on 2017 appropriations	Q4 2016 - Q1 2017
2018	EUR 100,000 on 2018 appropriations	Q4 2017 - Q1 2018
2019	EUR 100,000 on 2019 appropriations	Q4 2018 - Q1 2019
2020	EUR 100,000 on 2020 appropriations	Q4 2019 - Q1 2020

Period (Years)	4	Comments	Sequence of work orders should ensure seamless provision of data to enable the Commission to provide regular and continued reporting.
Indicative No of work orders	4		

1. Support relating to the implementation of the SES in the field of interoperability and network functions

Procurement for:

1. the monitoring of the implementation of the Implementing Rules, through e.g. consultation of relevant stakeholders or workshops; the setting-up and administration of needed "exemptions" schemes related to those Implementing Rules; the ex-post evaluation of the implementation of such Implementing Rules, including a review of the technical and economic impact, e.g. through the organisation of workshops; the preparation of non-binding guidelines for stakeholders; support of implementation in third countries; the monitoring, including impact, of ATM related projects carried out in the context of the TEN-T and Connecting Europe Facility (CEF) programme; ATM standardisation questions, with a particular focus on global harmonisation and the relationship between the SESAR programme.
2. Support in relation to the functioning of the Network Manager, including its evolution in view of the third reference period.

Indicative amount to be committed in 2017	EUR 250.000 On 2017 appropriations	Indicative timeframe for the procurement procedure	Q2 2017
Indicative amount to be committed in 2018	EUR 250.000 On 2018 appropriations	Indicative timeframe for the procurement procedure	Q3 2018
Indicative amount to be committed in 2019	EUR 250.000 On 2019 appropriations	Indicative timeframe for the procurement procedure	Q3 2019
Indicative amount to be committed in 2020	EUR 250.000 On 2020 appropriations	Indicative timeframe for the procurement procedure	Q3 2020
Period (Years)	4	Comments	
Indicative number of contracts	4		

4.3.2. Programme Support Actions in the field of Intelligent Transport Systems

General objectives

Intelligent transport systems for roads of the trans-European transport network vitally contribute to multimodality of the transport system, enhancement of road safety, reduction of carbon emissions by fostering the optimisation of infrastructure use and efficiency of traffic operations for both passengers and freight. They also open up new perspectives for user services and towards the achievement of connected mobility. TEN-T infrastructure shall be equipped with the relevant components in compliance with the Union transport policy in the field of ITS, notably the Directive 2010/40/EU and its delegated acts. In particular, the establishment of a common European ITS Framework Architecture will provide a level playing field for ITS applications and implementers (i.e. common definitions and interdependencies of ITS applications). It will subsequently facilitate the coordination of operations and the exchange of data and information among stakeholders that will foster the deployment of interoperable systems and the continuity of services across Member States and operators.

4.3.2.1. In the form of grants (call for proposals)

Specific objectives and expected results

The European ITS Framework Architecture is a high-level reference architecture covering most of existing ITS functionalities. It provides an overview of ITS and what their relationships are, providing a technology independent description of each application and service. It supports multimodal travel and movement of goods using different transport modes, for inter-urban areas and corridors as well as urban areas. It is already being used by a number of cities, regions and Member States.

The objective of this activity is to maintain, adapt and further develop a European ITS Framework Architecture. Adaptive maintenance of such a European ITS Framework Architecture and support tools needs to be ensured to reflect the continuous development of ITS services, as well as users oriented activities to ensure support, training, outreach and promotion.

This activity shall accompany and facilitate the implementation of delegated Regulations⁵⁶ under Directive 2010/40/EU which apply to the TEN-T network.

The legal basis for this PSA are point (a) of Article 5(2) and point (j) of Article 7(2) of the CEF Regulation.

This Programme Support Action shall be implemented through a grant awarded following a call for proposals published in Q2 2016 managed by DG Mobility and Transport.

Union financial aid in the form of a grant: up to 80% of direct eligible costs (indirect costs shall not be eligible).

Indicative amount to be committed in 2016	1,200,000	Indicative timeframe for launching the call for proposals procedure	Q2 2016
Period (Years)	4	Comments:	EUR 1,200,000 from the 2016 budget. Comment: a PSA on DATEXII amounting at 2,000,000 EUR was

⁵⁶ http://ec.europa.eu/transport/themes/its/road/action_plan/

		launched on 2015 appropriations
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Programme support action for the implementation of data exchange used for digital maps for Union-wide multimodal travel and real-time traffic information services on the TEN-T network

The objective of this action is to support the implementation of delegated regulations under Directive 2010/40/EU regarding the requirements to make road, traffic and transport services data used for digital maps accurate and available to digital map producers and service providers.

The Commission shall use the results of this PSA to enhance the implementation by the Member States of delegated regulations under Directive 2010/40/EU, in particular on European corridors. The aim is to stimulate and accelerate the coordinated provision of ITS road spatial data to enhance the quality of services based on these data.

The initiative is intended to benefit all stakeholders of the sector and the data exchange procedure shall be made accessible to all interested digital map producers and service providers under common terms and conditions.

The legal basis for this PSA are point (a) of Articles 5(2) and point (j) of Article 7(2) of the CEF Regulation, and Article 31(1), point (b) of Article 19 and point (d) of Article 33 of the TEN-T Regulation.

This Programme Support Action shall be implemented through a grant awarded following a call for proposals published in 2017 managed by DG Mobility and Transport.

This Programme Support Action shall be implemented through a grant awarded following a call for proposals, up to 80% of direct eligible costs (indirect costs shall not be eligible).

Indicative amount to be committed in 2017	2 million EUR on 2017 appropriations	Indicative timeframe for launching the call for proposals procedure	1 st Semester 2017 On DG Mobility and Transport website and Europa website
Period (Years)	4	Comments:	

Security architecture for connected infrastructure and vehicles in Europe

Following the results of the Commission's C-ITS Platform expert groups and recommendations of the envisaged follow-up Communication ("Master Plan for the deployment of Interoperable Cooperative Intelligent Transport Systems in the EU") the active support of a uniform and widely accepted security solution for connected vehicles and public infrastructure elements in Europe is needed. This means the development of Union-wide commonly agreed solutions for the essential topics of C-ITS security, privacy and compliance assessment processes are paradigm to ensure interoperable, seamless and secure C-ITS end user services on the European road and transport network. This support action shall support the joint effort of public stakeholders and industry that is necessary to develop and set-up Union-wide security and compliance assessment policies and associated governance bodies and entities. It shall support the setup of the necessary governance structure(s) needed to coordinate, implement and maintain the Union-wide commonly agreed elements (e.g. certificate policy) for C-ITS applications deployment. The central elements of this security architecture (e.g. Certificate Authorities with complete set of policies for operation) for

connected mobility need to be established and setup for extensive testing and validation before series introduction in vehicles and at large infrastructure networks.

The Commission shall use the results of this PSA to support all Union-funded and national C-ITS implementation initiatives to ensure interoperable, secure and harmonised C-ITS deployment, in particular on European corridors.

The initiative is intended to benefit all C-ITS stakeholders and the resulting architecture shall be made accessible under common terms and conditions.

The legal basis for this PSA are point (a) of Article 5(2) and point (j) of Article 7(2) of the CEF Regulation and Article 31, point (d) of Article 17(1) and Article 17(4) of Regulation (EU) No 1315/2013.

This Programme Support Action shall be implemented through a grant awarded following a call for proposals published in Q3 2016 managed by DG Mobility and Transport.

Union financial aid in the form of a grant: up to 100% of direct eligible costs. Indirect costs shall not be eligible.

Indicative amount to be committed in 2017	4,000,000 On 2017 appropriations	Indicative timeframe for launching the call for proposals procedure	Q3 2016 on DG Mobility and Transport website and Europea website Contracts may be signed on 2017 appropriations
Period (Years)	4	Comments:	

4.3.2.2. In the form of grants (direct award to the Member States)

Programme support action for the implementation of Union-wide multimodal travel information services on the TEN-T network

The objective of the action is to support the early implementation of the delegated regulation under Directive 2010/40/EU by Member States, including the public transport authorities, public transport operators and service providers in their territory, for the provision of Union-wide multimodal travel information services which apply to the TEN-T network. The delegated act will provide for making existing public transport data accessible in interoperable European data format/exchange protocol via national access points and the direct linking of different local/regional and/or national multimodal travel information services. The action will support both public transport data conversion to prescribed European interoperable standards and/or the use of standardized interfaces to link directly different travel information services along the TEN-T network and corridors. The action shall result in an increased level of multimodal travel information along the core network and its corridors at an early stage.

The objective is to contribute to fulfil the 2020 objective of seamless multimodal door-to-door travel (*Initiative 22*) of the 2011 transport white paper. In view of this objective, the Commission shall use the results of this PSA to further support the deployment of multimodal travel information services across the Union.

The legal basis for this PSA are point (a) of Article 5(2) and point (j) of Article 7(2) of the CEF Regulation, and Article 31(1), point (b) of Article 19 and point (d) of Article 33 of the TEN-T Regulation.

For the purpose of this action, a grant shall be directly awarded to each Member State to cover the direct eligible costs. Indirect costs shall not be eligible.

The direct award to the Member States – to the Ministries being in a monopoly of law position for the above tasks, or the designated bodies under their responsibility is Article 190(1)(c) Rules of Application to the EU Financial Regulation.

Member States participating in one or two corridors	Bulgaria ; Croatia ; Cyprus ; Denmark ; Estonia ; Finland ; Greece ; Ireland ; Latvia ; Lithuania ; Luxembourg ; Malta ; Poland ; Portugal ; Romania ; Slovenia ; Spain ; Sweden ; United Kingdom	Maximum grant per Member State: EUR 178,571
Member States participating in three or four corridors	Austria ; Belgium ; Czech Republic ; Hungary ; Italy ; Netherland ; Slovakia	Maximum grant per Member State: EUR 357,143
Member States participating in five or more corridors	Germany ; France	Maximum grant per Member State: EUR 535,714

Maximum rate of co-financing of direct eligible costs	100%	Indicative Timetable	<p>Invitation to submit a proposal to be sent in Q2 2016 Deadline for applications: Q3 2016 Information to applicants on the outcome of the evaluation: Q4 2016 Start of implementation: Q1 2017 Contracts may be signed on 2017 budgets</p>
Indicative total amount (2017 appropriations only)	<p>EUR 5,000,000 On 2017 appropriations</p>		
		Comments	Estimated duration of the actions: 4 years

4.3.3 In the form of procurement:

Contribution from CEF – Transport to the Corporate Communication Action in 2016 under the Multiannual Financial Framework 2014-2020 (Commission decision C(2015)7346 of 27.10.2015)

The general objective of corporate communication is:

- To raise public awareness about the Union as a whole, its values and political priorities and its work to address current issues 1) in line with the political priorities set out by the Commission in its Work Programme; and 2) in line with the general objectives of sector specific regulations under 2014-2020 Multiannual Financial Framework.

The general objective shall be reached through the pursuit of the following specific objectives:

- To achieve a better understanding by European citizens of the Union, its priorities and activities;
- To inform and engage different target groups of European citizens about the Union's political priorities;
- To focus communication aimed at non-specialist audiences and increase the coherence of Commission messages.

Corporate communication consists in joining and maximising resources to better communicate results and how the Union has an impact on the lives of Europeans, in line with the principles of “an Union budget focused on results”.

The main results expected are a better understanding of the Commission activities on Jobs and Growth, an increased awareness of both stakeholders and general public of the opportunities offered by Union initiatives, and ultimately an enhanced image of the Union with measurable positive trends in public perception.

To achieve the above objectives, the following range of specific actions may be used:

- Production of content, including photos, audio-visual, graphic and written material; provision of other corporate technical services which benefit the institution as a whole such as online services and social media activity;
- Dissemination of information through integrated communication actions on television, radio, web, print, social, outdoor and indoor media;
- Acquisition of media space, including TV and radio air time, outdoor and indoor advertising, web adverts and other online promotion techniques and print media space;
- Organisation of events, including exhibitions, forums, dialogues and other activities aimed at citizens;
- Studies and evaluations, where relevant.

These activities shall be implemented through Framework Contract of DG Communication, or where possible, direct awards for low-value contracts.

Indicative amount to be committed in 2016	EUR 750,000	Indicative timeframe for the procurement procedure	Q2, Q3 and Q4 of 2016
Period (Years)	2	Comments	To be implemented via co-delegation to DG Communication
Indicative number of contracts	5		

4.4. Bridging missing links, removing bottlenecks, increasing rail interoperability and improving cross border connections (budget line 06.02.01.04)

4.4.1. In the form of grants

a. Technical assistance for the preparation and implementation of projects from the CEF cohesion envelope, in the framework of the EU-EIB JASPERS initiative and in the form of direct assistance to the Member States

The objective of this Programme Support Action is to allow the Member States eligible for support from the Cohesion Fund to ensure the highest absorption possible of their national envelope under the last CEF cohesion call before the expiry of the national envelope protection, as provided for in Article 11(2) of the CEF Regulation.

This PSA intends to support the Member States needing additional technical assistance:

- from the EIB- Jaspers for the preparation of grant applications for projects as well as preliminary assessments (including the feasibility studies, Cost Benefit Analyses and other preparatory activities) to be submitted in the call for proposals for the Cohesion Member States expected to be launched in the last quarter of 2016;
- or directly via a grant to the Member States eligible to the Cohesion Fund to support preparation and implementation of projects developing the TEN-T Core Network listed in Annex I to the CEF Regulation.

These technical assistance activities must be additional to:

- the support already granted to Jaspers/EIB concluded in the framework of the support from the CEF under 2014 appropriations;
- the grants directly awarded to the Member States under CEF 2014 appropriations.

The Commission expects to send out the invitations to request grants for technical assistance to the Member States after the conclusion of the selection of projects from the 2015 call for proposals. This will enable the Commission and the Member States to assess more accurately the remaining technical assistance needs for the outstanding call for proposals planned in Q4 2016.

For the purpose of this action a grant shall be awarded to the European Investment Bank (EIB), having regard to Article 125(7) of the Financial Regulation. The grant shall be awarded in the framework of the JASPERS Framework Partnership Agreement, on the basis of specific requests from the eligible Member States for JASPERS technical assistance.

For direct awards to the Member States, this PSA is based on Article 190(1)(c) of Rules of Application to the EU Financial Regulation.

The grant amount shall be deducted correspondingly from the national allocations under the CEF cohesion envelope of the respective beneficiary Member States.

For information purposes, after the conclusion of the grant agreements from the call for proposals of 2014 and of the Programme Support Actions to the Cohesion Member States on 2014 Cohesion appropriations, the following amounts are available as published at the website of INEA (date of 22 December 2015), to be updated with results of the 2015 calls for proposals.

https://ec.europa.eu/inea/sites/inea/files/20151222_remaining_cohesion_ms_allocations_for_publication.pdf

The legal basis for this PSA is Article 11(3) of the CEF Regulation in conjunction with Article 125(7) of the Union Financial Regulation. Indirect costs shall not be eligible.

Maximum rate of co-financing of direct eligible costs	100%	Indicative Timetable	Invitation to submit a proposal to be sent in Q3 2016 Deadline for applications: Q4 2016
Indicative total amount (2016 appropriations only)	EUR 500,000 On 2016 appropriations		Information to applicants on the outcome of the evaluation: Q4 2016 Start of implementation: Q4 2016 Contract with EIB and grants to Member States may be signed on 2016 budget
		Comments	Estimated duration of the actions: 1 year Previous action on 2014 commitments: EUR 1,262,170

5. RESULTS EXPECTED

The implementation of the 2014-2020 Multi-annual Work Programme aims at contributing at the realisation of the transport core network by 2030, thereby further enhancing the effectiveness and visibility of the trans-European transport network, while promoting growth and job creation, in line with Europe 2020 strategy. It is expected that the granting of support on the basis of this programme will contribute to the timely and efficient development of a number of core network corridors in their entirety or in significant parts, will support the realisation of a robust and resource efficient European transport system and will contribute to addressing climate change.

The actions which will be completed with financial assistance allocated under the 2016 calls implementing the 2014-2020 Multi-annual Work Programme will directly contribute to the achievement of important transport policy objectives, such as: the establishment of major interoperable transport axes interconnecting national networks and facilitating the functioning of the internal market; the optimal use of existing infrastructure capacities; improving the safety and reliability of the network; enhancing accessibility of peripheral areas of the Union; facilitating congestion relief on rail infrastructure and more balanced modal distribution; and savings in terms of the environmental effects of transport, in particular contributing to addressing climate change.

Granting of financial assistance to these actions shall help to reach important milestones marking the way towards the completion of the trans-European transport network, as approved by the European Parliament and the Council. Union funding shall help to mobilise as much public and private financing as needed to meet the challenging timetables.

For all priorities under chapter 3, the Commission encourages that eligible actions under the CEF may use services provided by EGNOS/ Galileo.

6. INDICATIVE TIMETABLE AND AMOUNTS AVAILABLE FOR THE MULTI-ANNUAL CALLS FOR PROPOSALS 2016

Objective	Priority	Calls under general envelope (indicative date of publication)	Indicative amounts under general envelope	Calls under cohesion envelope (indicative date of publication)	Indicative amounts under Cohesion envelope
		Call open to all Member States		Call open only to the Cohesion Member States	
Bridging missing links, removing bottlenecks, enhancing rail interoperability, and, in particular, improving cross-border sections	Projects on the Corridors of the Core Network			October 2016	€400 million
	Projects on the other sections of the Core Network			October 2016	€100 million
	Rail interoperability			October 2016	€20 million
	European Rail Traffic Management Systems (ERTMS)	October 2016	€70 million	October 2016	€80 million
Sub-total			€70 million		€600 million
Ensuring sustainable and efficient transport systems in the long run, as well as enabling all modes of transport to be decarbonised	New technologies and innovation in all transport modes	October 2016	€80 million	October 2016	€59.5 million
	Safe and Secure infrastructure			October 2016	€10 million
Sub-total			€80 million		€69.5 million
Optimising the integration and interconnection of transport modes and enhancing the interoperability of transport services, while ensuring the accessibility of transport infrastructures	Single European Sky – SESAR	October 2016	€300 million	October 2016	€100 million
	Intelligent Transport Services for road (ITS)	October 2016	€120 million	October 2016	€20 million
	Motorways of the Sea (MoS)	October 2016	€40 million	October 2016	€20 million
	Actions implementing transport infrastructure in nodes of the Core Network, including urban nodes	October 2016	€40 million	October 2016	€20 million
	Connections to and development of multimodal logistics platforms			October 2016	€20 million
Sub-total			€500 million		€180 million
TOTAL			€650 million		€849.5 million

Of each budget line an amount up to 0.1% and no more than EUR 1,000,000 is earmarked for evaluation expenses and translation costs involved in the evaluation of proposals (Article 204 FR).

7. ELIGIBILITY CRITERIA

7.1. Eligible applicants

Applications must be presented by:

- one or more Member States, and / or
- with the agreement of the Member States concerned, by international organisations, joint undertakings, or public or private undertakings or bodies or entities established in Member States.

In addition to the above all proposals in the areas of Motorways of the Sea (MoS) priority must include applicants from (and be supported by) a minimum of two different Member States.

Proposals may be submitted by entities which do not have legal personality under the applicable national law, provided that their representatives have the capacity to assume legal obligations on their behalf and offer a guarantee for the protection of the Union's financial interests equivalent to that offered by legal persons.

Project proposals submitted by natural persons are not eligible.

Third Countries and entities established in third countries may participate in actions contributing to projects of common interest where necessary in order to achieve the objectives of a given project of common interest. They may not receive financial assistance except where it is indispensable to the achievement of the objectives of a given project of common interest.

In such cases and pursuant to Article 8(1) of the TEN-T guidelines, applications may be presented by neighbouring countries or entities established in neighbouring countries, with the agreement of a Member State.

Actions involving a cross-border section or a part of such a section shall be eligible to receive Union financial assistance only if there is a written agreement between the Member States concerned, or between the Member States and third countries concerned relating to the completion of the cross-border section.

Grounds for Exclusion

In the call for proposals the Commission shall draw applicants' attention to Articles 106 to 109 and Article 131 of the Financial Regulation, as well as to Article 141 of the Rules of Application.

7.2. Eligible projects

7.2.1. Common interest

Only projects which can be qualified as projects of common interest identified in the TEN-T Guidelines may receive Union financial assistance. Projects have to comply with the following provisions of Article 7 of the TEN-T guidelines:

- (1) contribute to the objectives falling within at least two of the four categories set out in Article 4 of the TEN-T guidelines;
- (2) comply with Chapter II and, for core networks, Chapter III of the TEN-T guidelines;
- (3) be economically viable on the basis of a socio-economic cost-benefit analysis⁵⁷,

⁵⁷ According to Article 10(6) of the CEF Regulation and point (c) of Article 7(2) of the TEN-T Regulation the amount of financial assistance granted to a project shall be modulated based on a cost-benefit

(4) demonstrate European added value.

For the assessment of (3), a project which concerns a part or section of a larger project of common interest may be covered by a socio-economic cost-benefit analysis for this larger project of common interest. For projects in Member States eligible to the Cohesion Fund, the use of the Cohesion Policy methodology⁵⁸ for cost-benefit analysis is recommended.

For projects generating net revenue, the Cost Benefit Analysis shall be followed by a calculation of the "funding gap" i.e. the share of the project's costs that is not covered by net revenue in a clear and concise manner. Where projects generate revenues during the requested period of the Union funding, the applications must quantify in clear and precise manner in the relevant documents the revenues generated by the project to justify the request for additional Union funding.

Only projects and horizontal priorities listed in Part I of Annex I of the CEF Regulation are eligible for the purpose of this work programme.

7.2.2. Compliance with the Union Law

The granting of Union financial assistance to projects of common interest is conditional upon compliance of the project with relevant Union law⁵⁹ inter alia concerning interoperability, environmental protection⁶⁰, competition and public procurement.

7.2.3. Other sources of financing

No Union financial assistance shall be awarded for actions receiving funds from other sources of Union financing, without prejudice of the Article 15(4) of the CEF Regulation.

7.2.4. Type of actions

A proposal must address either works or studies, within the meaning of Article 2(5) and (6) of the CEF Regulation. Proposals may combine studies and works as long as the respective activities and related budget are clearly defined and separated.

In accordance with Article 2(6) of the CEF Regulation, studies may include pilot activities that shall serve at least one of the following objectives:

- to develop, improve or adapt a new technology or an innovative solution and implement it in order to test its feasibility and suitability as well as its added value before deploying it on a larger scale.
- to deploy an existing technology, infrastructure or service (i.e. already in use elsewhere but new to a particular sector, system or geographical area) in order to gain experience and/or create market conditions for deployment on a larger scale.

analysis of each project, the availability of Union budget resources, and the need to maximise the leverage of Union funding. Consequently, all the project proposals for 'works' must be accompanied by a cost-benefit analysis proposing the co-funding rate requested for the project, while taking into account the maximum funding rates stipulated in the CEF Regulation. Member States shall be asked to use a recognised methodology. As far as the actions applying for co-funding under the Cohesion envelope of the CEF are concerned, the Cohesion Policy methodology for the CBA is recommended, in order to simplify the process of project preparation under the CEF and ESIF funds.

⁵⁸ http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/cba_guide.pdf

⁵⁹ According to Article 23 of the CEF Regulation

⁶⁰ In particular, but not limited to: the EIA (Directive 2011/92/EU), SEA (Directive 2001/42/EC), Habitats (Directive 92/43/EEC) and Birds Directives (Directive 2009/147/EC) , as well as the Water Framework Directive (Directive 2000/60/EC) (these exact references – number and title - of these legislations should be given)

The pilot activities of a study may include the deployment of a certain type of infrastructure or technology but on a limited scale and at a reasonable price and with the objective of testing and validating the viability of the innovative actions proposed for future scale up and roll out. Pilot activities of a study shall be of an experimental nature and designed to test the feasibility of an innovative Action and its usefulness for future large scale implementation. They shall not be associated with research activities that are not eligible under this type of action.

7.2.5. Eligibility of costs

A grant may be awarded for an action which has already begun provided that the applicant can demonstrate the need for starting the action prior to signature of the grant agreement or notification of the grant decision.

In accordance with Article 130(1) of the Financial Regulation, costs incurred prior to the date of submission of the grant application shall not be eligible for financing.

For the 3rd call for proposals launched in 2016, under the Cohesion envelope – Funding Objective 1, costs incurred as of the date of application may be considered eligible until 31 December 2023 and can be included in the applications for grants in reasonable and duly justified cases.

No grant may be awarded retroactively for actions already completed.

8. SELECTION CRITERIA

The applicant(s) must have access to solid and adequate funding sources, so as to be able to maintain activities for the period of the project funded and to co-finance the project. The applicant(s) must have the professional skills and qualifications required to complete the proposed Action. Those selection criteria also apply to applicants for programme support actions supported by grants.

The verification of the financial and operational capacity does not apply to applicants which are a Member State, third country, a public sector body established in a Member State (i.e. regional or local authority, body governed by public law or association formed by one or several such authorities or one or several such bodies governed by public law, in particular Joint Undertaking in line with eligibility criteria established under Article 187 of the Treaty on the Functioning of the European Union (ex Article 171 TCE), international organisation⁶¹.

8.1. Financial capacity

The applicant(s) must have the financial capacity to complete the Action for which the grant is sought. The applicant will provide their financial statements certified by an external auditor for the last financial year for which the accounts have been closed with the application. In the event that the applicant is a newly created company (and therefore does not have certified financial data available for the last financial year), a business plan must be provided together with a letter of support from another company (parent company for instance) or from another applicant in the same proposal.

8.2. Operational capacity

⁶¹ According to Article 43(2) of the Rules of Application, international organisations are:
(a) international public sector organisations set up by intergovernmental agreements, and specialised agencies set up by such organisations;
(b) the International Committee of the Red Cross (ICRC);
(c) the International Federation of National Red Cross and Red Crescent Societies;
(d) other non-profit organisations assimilated to international organisations by a Commission decision.

The applicant(s) must have the operational and technical capacity to complete the project for which the grant is sought and must provide appropriate documents attesting to that capacity.

Information submitted by applicants who benefited from TEN-T support as from 2004 may be taken into account in the evaluation of these applicants' operational capacity.

9. AWARD CRITERIA

Only proposals compliant with the eligibility and selection criteria shall be evaluated against the award criteria. A decision to grant Union financial assistance shall take into account, inter alia, the following general award criteria:

- the European added value as defined in point (d) of Article 3 of the TEN-T Guidelines;
- removal of bottlenecks, enhancing rail interoperability, bridging missing links and improving cross-border sections as stipulated in the CEF Regulation;
- the maturity of the action in the project development;
- soundness of the implementation plan proposed;
- stimulating effect of the Union support on public and private investment, when applicable;
- the need to overcome financial obstacles, such as the lack of market finance;
- when applicable, the economic, social, climate and environmental impact, and accessibility;
- the cross-border dimension, when applicable.

Within the scope of the global objectives herewith established, additional non-essential specific criteria may be set out in the text of the call for proposals.

Upper and / or lower thresholds of Union financing may be recommended in the calls for proposals or accompanying documents.

According to Article 11 of the CEF Regulation, until 31 December 2016, the selection of projects eligible for financing under the Cohesion envelope shall respect the national allocations under the Cohesion Fund. With effect from 1 January 2017, resources transferred to the CEF which have not been committed to a transport infrastructure project shall be made available to all Member States eligible for funding from the Cohesion Fund, to finance transport infrastructure projects in accordance with the CEF Regulation.

During the final selection process, the Commission shall in particular take into account the following aspects, as appropriate:

- The contribution of the proposed Action to the balanced development of the network,
- The complementarity of the proposed Action with other Union funded projects, in view of optimising the impact of investments already made in the region/country/global project,
- The comparative Union added value (high, medium, low) of the proposed Action in relation to other proposed Actions, taking into account the respective Cost Benefit Analysis where appropriate,

- Any identified/identifiable risks of double-funding from other Union sources,
- Potential synergies across the different CEF sectors and/or other Union Programmes, notably Horizon 2020, where particular consideration shall be given to Actions involving the deployment of innovation and technology developed under the Union's research programmes,
- Budgetary constraints.

And, in addition, for the Cohesion envelope:

- The programming for the ESIF funds in order to ensure complementarity between the two sources of funding,
- How the proposed project fits in the national Transport Plan of the Member State(s) concerned.

When it is considered that a proposal is more relevant to a funding priority other than that under which it was submitted, the Commission services may propose to transfer the proposal to the priority in question. Such transfer is only carried out during the phase of evaluation of the proposals and provided that: (i) the proposal is eligible under the conditions of the funding priority to which it is proposed to be transferred; and (ii) there is written agreement of the applicant(s). In such case, the funding conditions of the funding priority to which a proposal has been transferred shall apply.

10. MAXIMUM POSSIBLE RATE OF CO-FUNDING FOR GRANTS (EXCLUDING PROGRAMME SUPPORT ACTIONS)

10.1 For the General envelope of the CEF⁶²

The amount of Union financial assistance shall not exceed the following rates:

- (a) with regard to grants for studies, 50% of the eligible costs;
- (b) with regard to grants for works:
 - (i) for inland transport, connections to and the development of multimodal logistics platforms including connections to inland and maritime ports and airports, as well as the development of ports: 20% of the eligible costs;
 - (ii) for actions supporting new technologies and innovation for all modes of transport: 20% of the eligible costs;
- (c) with regard to grants for telematic applications systems and services:
 - (i) for land-based components of the ERTMS, of the SESAR system: 50% of the eligible costs;
 - (ii) for land-based components of ITS for the road sector: 20% of the eligible costs;
 - (iii) for on-board components of ERTMS: 50% of the eligible costs;
 - (iv) for on-board components of the SESAR system, and of ITS for the road sector: 20% of the eligible costs, up to a combined ceiling of 5% of the budgetary resources referred to in point (a) of Article 5(1) of the CEF Regulation;

⁶² According to Article 10(2) of the CEF Regulation

- (v) for actions to support the development of motorways of the sea: 30% of the eligible costs;

The above funding rates may be increased by up to 10 percentage points for actions with synergies between at least two of the sectors covered by the CEF Regulation.

10.2 For the Cohesion envelope of the CEF⁶³

The maximum funding rates shall be those applicable to the Cohesion Fund.

10.3 No profit principle

For projects generating income, the no-profit principle applies, as defined in Article 125(4) and (5) of the Financial Regulation.

⁶³ According to Article 11(5) of the CEF Regulation

ANNEX III: Breakdown of annual instalments version of September 2016

Budget lines		2014-2020 commitments	2014 commitments	2015 commitments	2016 commitments	2017 commitments	2018 commitments	2019 commitments	2020 commitments	TOTAL
06.020101	MAWP (Grants) 2014-2020	7,114,195,877	958,609,301	598,682,336	554,172,084	1,132,396,261	1,282,682,193	2,200,851,382	386,802,321	7,114,195,877
	MAWP (Grants) 2015-2020	199,999,926	0	0	40,165,731	0	35,632,025	53,407,037	70,795,133	199,999,926
	MAWP (Grants) 2016-2020	70,000,000	0	0	0	7,700,000	14,000,000	17,500,000	30,800,000	70,000,000
	PSA	79,765,579	35,550,579	0	1,615,000	28,400,000	11,400,000	1,400,000	1,400,000	79,765,579
	Costs for the experts	679,601	0	579,041	100,560	0	0	0	0	679,601
	AWP (Grants) 2014 pour mémoire	127,686,432	127,686,432	0	0	0	0	0	0	127,686,432
	AWP (Grants) 2016 pour mémoire	150,000,000	0	0	150,000,000	0	0	0	0	150,000,000
Total reserved by the CEF Transport Work Programmes			1,121,846,311	599,261,378	746,053,375	1,168,496,261	1,343,714,218	2,273,158,419	489,797,454	7,742,327,416
CEF commitment appropriations (MFF 2014-2020) including the EFSI contribution and transfers between the CEF lines			1,118,525,421	591,973,905	746,053,375	1,170,649,717	1,351,309,832	2,282,658,419	1,179,858,644	8,441,029,313
Internal assigned revenue and additional revenue			4,262,311	7,287,472	0	-2,153,456	0	0	0	9,396,327
CEF Total commitment appropriations			1,122,787,732	599,261,377	746,053,375	1,168,496,261	1,351,309,832	2,282,658,419	1,179,858,644	8,450,425,640
06.020102	MAWP (Grants) 2014-2020	135,886,461	51,120,003	18,689,857	0	50,574,302	9,882,341	4,824,005	795,953	135,886,461
	MAWP (Grants) 2015-2020	73,846,107	0	21,255,700	22,424,802	0	19,035,452	6,019,037	5,111,116	73,846,107
	MAWP (Grants) 2016-2020	80,000,000	0	0	0	12,000,000	28,000,000	20,000,000	20,000,000	80,000,000
	PSA	12,070,000	1,000,000	5,790,000	2,280,000	3,000,000	0	0	0	12,070,000
	Costs for the experts	131,400	0	56,400	75,000	0	0	0	0	131,400
	AWP (Grants) 2014 pour mémoire	17,739,997	17,739,997	0	0	0	0	0	0	17,739,997
	AWP (Grants) 2016 pour mémoire	60,000,000	0	0	60,000,000	0	0	0	0	60,000,000
Total reserved by the CEF Transport Work Programmes			69,860,000	45,791,957	84,779,802	65,574,302	56,917,793	30,843,042	25,907,069	379,673,965
CEF commitment appropriations (MFF 2014-2020) including the EFSI contribution and transfers between the CEF lines			69,864,350	43,000,681	84,779,802	65,574,302	56,917,793	30,843,042	202,629,470	553,609,440
Internal assigned revenue and additional revenue			0	2,791,276	0	0	0	0	0	2,791,276
CEF Total commitment appropriations			69,864,350	45,791,957	84,779,802	65,574,302	56,917,793	30,843,042	202,629,470	556,400,716

The indicative breakdown of annual instalments is the following

06.020103	MAWP (Grants) 2014-2020	782,498,447	158,231,888	277,011,554	50,939,459	190,761,638	73,613,718	19,538,358	12,401,832	782,498,447
	MAWP (Grants) 2015-2020	799,028,147	0	0	516,649,293	35,809,855	139,809,746	63,362,947	43,396,306	799,028,147
	MAWP (Grants) 2016-2020	500,000,000	0	0	0	111,800,000	158,000,000	119,200,000	111,000,000	500,000,000
	PSA	123,966,150	17,416,150	18,700,000	28,450,000	21,950,000	24,550,000	6,550,000	6,350,000	123,966,150
	expert costs	720,859	0	318,639	402,220	0	0	0	0	720,859
	AWP (Grants) 2014 pour mémoire	33,941,962	33,941,962	0	0	0	0	0	0	0
Total reserved by the CEF Transport Work Programmes			209,590,000	296,030,194	596,440,972	360,321,493	395,973,464	208,651,305	173,148,138	2,240,155,566
CEF commitment appropriations (MFF 2014-2020) including the EFSI contribution and transfers between the CEF lines			209,593,050	223,550,414	533,359,706	359,249,493	394,839,464	207,955,305	172,388,138	2,100,935,570
Internal assigned revenue and additional revenue			0	72,479,779	63,081,266	1,072,000	1,134,000	696,000	760,000	139,223,046
CEF Total commitment appropriations			209,593,050	296,030,193	596,440,972	360,321,493	395,973,464	208,651,305	173,148,138	2,240,158,616
06.020104	MAWP (Grants) 2014-2020	4,551,406,957	967,080,000	846,132	0	767,534,737	969,073,838	884,861,125	962,011,125	4,551,406,957
	MAWP (Grants) 2015-2020	5,609,533,017	0	1,214,667,889	1,863,128,475	660,096,929	487,970,570	701,235,715	682,433,439	5,609,533,017
	MAWP (Grants) 2016-2020	849,554,916	0	0	258,394,562	160,562,415	192,342,224	108,293,654	129,962,061	849,554,916
	PSA	16,416,970	15,916,970	0	500,000	0	0	0	0	16,416,970
	Costs for the experts	608,177	0	250,757	357,420	0	0	0	0	608,177
	AWP (Grants) 2016 pour mémoire	250,000,000	0	0	250,000,000	0	0	0	0	0
Total reserved by the CEF Transport Work Programmes			982,996,970	1,215,764,778	2,372,380,457	1,588,194,081	1,649,386,632	1,694,390,494	1,774,406,625	11,277,520,037
CEF commitment appropriations (MFF 2014-2020)			982,996,970	1,215,582,454	2,372,380,457	1,588,194,081	1,649,386,632	1,694,390,494	1,774,406,625	11,277,337,713
Internal assigned revenue and additional revenue			0	182,324	0	0	0	0	0	182,324
CEF Total commitment appropriations			982,996,970	1,215,764,778	2,372,380,457	1,588,194,081	1,649,386,632	1,694,390,494	1,774,406,625	11,277,520,037
TOTAL UNDER the amended 2014-2020 MAP (GRANTS)		20,765,949,855	2,135,041,192	2,131,153,468	3,305,874,406	3,129,236,137	3,410,042,108	4,199,093,259	2,455,509,286	20,765,949,856
AWP pour mémoire (GRANTS)		639,368,391	179,368,391	0	460,000,000	0	0	0	0	639,368,391
PSA and experts		234,358,736	69,883,699	25,694,837	33,780,200	53,350,000	35,950,000	7,950,000	7,750,000	234,358,736
CEF total commitments appropriations			2,385,242,102	2,156,848,305	3,799,654,606	3,182,586,137	3,453,587,721	4,216,543,260	3,330,042,877	22,524,505,009

ANNEX IV: Breakdown of the Programme Support Actions covered by the Multi-Annual Work Programme version of September 2016

Budget line	Form of Programme Support Action	2014 commitments	2015 commitments	2016 commitments	2017 commitments(2)	2018 commitments(2)	2019 commitments(2)	2020 commitments(2)
6.020101	Grants	12,000,000	0	0	27,000,000	0	0	0
	Procurement	27,320,000	0	1,365,000	1,150,000	11,150,000	1,150,000	1,150,000
	Other: Reimbursement of travel and subsistence costs to the European Coordinators	5,894,000	0	0	0	0	0	0
	Other: transfer of appropriations to INEA for the front office tasks of TENTEC			250,000	250,000	250,000	250,000	250,000
	Total	45,214,000	0	1,615,000	28,400,000	11,400,000	1,400,000	1,400,000
	Unused commitments, to be added to the budget of the call (1)	(9,663,421)	0	0	0	0	0	0
Total		35,550,579	0	1,615,000	28,400,000	11,400,000	1,400,000	1,400,000
6.020102	Grants	0	490,000	2,280,000	3,000,000	0	0	0
	Procurement	1,000,000	5,300,000.	500,000	0	0	0	0
	Other expenditures	0		0	0	0	0	0
	Total	1,000,000	5,790,000	2,780,000	0	0	0	0
	Unused commitments, to be added to the budget of the call (1)	0	0	(500,000)	0	0	0	0
Total		1,000,000	5,790,000	2,280,000	3,000,000	0	0	0
6.020103	Grants	6,500,000	8,000,000	11,700,000	19,000,000	6,500,000	4,000,000	4,000,000
	Procurement	12,900,000	11,200,000	16,750,000	2,950,000	18,050,000	2,550,000	2,350,000
	Other expenditures:	0		0				0
	Total	19,400,000	19,200,000	28,450,000	21,950,000	24,550,000	6,550,000	0
	Unused commitments, to be added to the budget of the call (1)	(1,983,850)	(500,000)	0	0	0	0	0
Total		17,416,150	18,700,000	28,450,000	21,950,000	24,550,000	6,550,000	6,350,000
6.020104	Grants	15,916,970	0	1,000,000	0	0	0	0
	Procurement	0	0	0	0	0	0	0
	Other expenditures	0	0	0	0	0	0	0
	Total	15,916,970	0	1,000,000	0	0	0	0
	Unused commitments, to be added to the budget of the call (1)			(500,000)	0	0	0	0
Total		15,916,970		500,000	0	0	0	0
GRAND TOTAL		69,883,699	24,490,000	32,845,000	53,350,000	35,950,000	7,950,000	7,750,000

(1) Comment: where shown, the reduction of the appropriations corresponds to several actions, which have been cancelled and which are appropriately reflected in the amendments to the MAP, as well as, in case of procurements, conclusion of contracts for prices which are lower than estimated amounts. All unspent appropriations for PSAs have been used to increase the budgets of the calls for proposals under the MAP 2014-2020.

(2) Additional PSAs may be included in the amendments to the WP"