# 3. OBJECTIVES PURSUED BY THIS WORK PROGRAMME AND THE FUNDING PRIORITIES:

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

#### 3.3.3.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 EU transport policy in the field of intelligent transport systems, notably the Directive 2010/40/EU 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 transport systems, actions contributing to the deployment of Cooperative ITS (C-ITS), according to EU Regulations and standards and in line with the recommendations/outputs of the "C-ITS platform"1, shall be promoted for all Member States.

C-ITS improve existing and create new ITS services, 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 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) may also be addressed.

Also actions implementing Directive 2010/40/EU and its Delegated Regulations, shall be promoted for the Cohesion Member States only.

## Priority "intelligent transport services for road (ITS)" (for all Member States)

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.

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/transport/themes/its/news/c-its-deployment-platform\_en.htm

Actions shall demonstrate the potential for rapid deployment of C-ITS across the TEN-T network; 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 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 EU-added value, and provide:

- A precise description of the proposed C-ITS service(s) and application(s), including associated equipment and facilities.
- 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 (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 equip 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 in corridors and/or urban nodes and/or in Traffic Management Centres (TMC).
- Address roaming (when relevant) and cross-border/cross-region functionality and interoperability of solutions.
- Provide a precise description of (direct and indirect) partners' roles and responsibilities.
- Take into account the potential contribution of C-ITS to automation.

#### Furthermore, proposed Actions must:

- Deploy works or studies with pilot activities in the Core Network, i.e.: along Core Network corridors and urban nodes. Other geographical areas may be covered if reasons are duly substantiated and related costs do not exceed the 30% of the total budget. Given their specific nature, activities concerning isolated stretches of the Core Network could be considered for funding, upon due and factual justification of the added value of the selected stretches.
- Demonstrate the application of C-ITS for traffic information, traffic management, energy efficiency, road safety. Priority will be given to proposals addressing the "Day-1" C-ITS services<sup>2</sup> recommended by the "C-ITS platform".

<u>Hazardous location notifications</u>: Slow or stationary vehicle(s) & Traffic ahead warning, Road works warning, Weather conditions, Emergency brake light, Emergency vehicle approaching.

<sup>&</sup>lt;sup>2</sup> "Day-1" C-ITS services recommended by the "C-ITS platform":

- Demonstrate commitment and buy-in from all concerned stakeholders (at political and operational levels) 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 should be comparable at European level<sup>3</sup>. Also assessment methodologies shall be aligned with other ongoing initiatives in the EU.
- 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 one or more Member States, preferably along a continuous trajectory and/or within several inter-related priority zones/regions. Priority will 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 EU legislations, in particular the ITS Directive 2010/40/EU and its delegated Regulations.
- Comply with applicable EU standards. Proposals addressing areas where common EU standards or specifications are not yet defined, they should 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 for the "General Envelope"

The multi-annual programme addresses the following areas:

- C-ITS, especially on vehicle-infrastructure communication
- Interoperability and continuity of C-ITS services
- C-ITS services to enhance road safety, security and energy efficiency
- C-ITS applications for traffic information and traffic management
- C-ITS as a catalyst for higher level of automation

<u>Signage applications</u>: 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")

<sup>&</sup>lt;sup>3</sup> i.e. in line with Commission's common indicators stemming from the study "Key Performance Indicators (KPIs) for road transport Intelligent Transport Systems (ITS)"