# Basic information 2008/0263(COD) COD - Ordinary legislative procedure (ex-codecision procedure) Directive Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes Amended by 2017/0060(COD) Amended by 2021/0419(COD) Subject 3.20.05 Road transport: passengers and freight 3.20.07 Combined transport, multimodal transport

Key players				
European Parliament	Committee responsible	Rapporteur	Appointed	
	TRAN Transport and Tourism	JENSEN Anne E. (A	12/05/2010	
	Former committee responsible	Former rapporteur	Appointed	
	TRAN Transport and Tourism	JENSEN Anne E. (A	08/12/2008	
	Former committee for opinion	Former rapporteur fo	or opinion Appointed	
	ITRE Industry, Research and Energy	The committee decide to give an opinion.	ded not	
Council of the	Council configuration	Meetings	Date	
uropean Union	General Affairs	3012	2010-05-10	
	Transport, Telecommunications and Energy	2987	2009-12-17	
	Transport, Telecommunications and Energy	2949	2009-06-11	
European	Commission DG	ssion DG Commissioner		
Commission	Mobility and Transport KALLAS S		S Siim	

Key events		

Date	Event	Reference	Summary
16/12/2008	Legislative proposal published	COM(2008)0887	Summary
13/01/2009	Committee referral announced in Parliament, 1st reading		
31/03/2009	Vote in committee, 1st reading		Summary
03/04/2009	Committee report tabled for plenary, 1st reading	A6-0226/2009	
22/04/2009	Debate in Parliament	<u></u>	
23/04/2009	Decision by Parliament, 1st reading	T6-0283/2009	Summary
23/04/2009	Results of vote in Parliament	£	
11/06/2009	Debate in Council		Summary
17/12/2009	Debate in Council		Summary
10/05/2010	Council position published	06103/4/2010	Summary
20/05/2010	Committee referral announced in Parliament, 2nd reading		
22/06/2010	Vote in committee, 2nd reading		Summary
28/06/2010	Committee recommendation tabled for plenary, 2nd reading	A7-0211/2010	
05/07/2010	Debate in Parliament	$\bigcirc$	
06/07/2010	Decision by Parliament, 2nd reading	T7-0258/2010	Summary
07/07/2010	Final act signed		
07/07/2010	End of procedure in Parliament		
06/08/2010	Final act published in Official Journal		

Technical information		
Procedure reference	2008/0263(COD)	
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)	
Procedure subtype	Legislation	
Legislative instrument	Directive	
Amendments and repeals	Amended by 2017/0060(COD) Amended by 2021/0419(COD)	
Legal basis	Treaty on the Functioning of the EU TFEU 091-p1	
Stage reached in procedure	Procedure completed	
Committee dossier	TRAN/7/02924	

Documentation gateway				
European Parliament				
Document type	Committee	Reference	Date	Summary
Committee draft report		PE418.288	20/01/2009	

Amendments tabled in committee	PE421.218	26/02/2009	
Committee report tabled for plenary, 1st reading/single reading	A6-0226/2009	03/04/2009	
Text adopted by Parliament, 1st reading/single reading	T6-0283/2009	23/04/2009	Summary
Amendments tabled in committee	PE442.910	03/06/2010	
Committee draft report	PE441.309	04/06/2010	
Committee recommendation tabled for plenary, 2nd reading	A7-0211/2010	28/06/2010	
Text adopted by Parliament, 2nd reading	T7-0258/2010	06/07/2010	Summary

### Council of the EU

Document type	Reference	Date	Summary
Council position	06103/4/2010	10/05/2010	Summary
Council statement on its position	09223/2010	12/05/2010	
Draft final act	00025/2010/LEX	07/07/2010	

## **European Commission**

Document type	Reference	Date	Summary
Legislative proposal	COM(2008)0887	16/12/2008	Summary
Document attached to the procedure	SEC(2008)3083	16/12/2008	
Document attached to the procedure	SEC(2008)3084	16/12/2008	
Commission response to text adopted in plenary	SP(2009)3507	25/06/2009	
Commission communication on Council's position	COM(2010)0251	18/05/2010	Summary
Follow-up document	C(2011)6269	08/09/2011	
Follow-up document	SEC(2011)1019	08/09/2011	
Follow-up document	SEC(2011)1020	08/09/2011	
Follow-up document	COM(2014)0642	21/10/2014	Summary
Follow-up document	SWD(2014)0319	21/10/2014	
Follow-up document	SWD(2014)0320	21/10/2014	Summary
Commission working document (SWD)	SWD(2017)0324	26/09/2017	
Follow-up document	COM(2019)0464	08/10/2019	Summary

Follow-up document	SWD(2019)0373	08/10/2019	Summary
Follow-up document	SWD(2019)0368	09/10/2019	Summary
Follow-up document	SWD(2019)0369	09/10/2019	Summary

#### Other institutions and bodies

Institution/body	Document type	Reference	Date	Summary
EESC	Economic and Social Committee: opinion, report	CES0872/2009	13/05/2009	
EDPS	Document attached to the procedure	N7-0014/2010 OJ C 047 25.02.2010, p. 0006	22/07/2009	Summary

Additional information		
Source	Document	Date
National parliaments	IPEX	
European Commission	EUR-Lex	

## Final act

Directive 2010/0040 OJ L 207 06.08.2010, p. 0001

Summary

Delegated acts	Delegated acts		
Reference	Subject		
2013/2703(DEA)	Examination of delegated act		
2013/2712(DEA)	Examination of delegated act		
2013/2761(DEA)	Examination of delegated act		
2013/2772(DEA)	Examination of delegated act		
2014/3020(DEA)	Examination of delegated act		
2015/2658(DEA)	Examination of delegated act		
2017/2714(DEA)	Examination of delegated act		
2019/2651(DEA)	Examination of delegated act		
2022/2528(DEA)	Examination of delegated act		
2023/3009(DEA)	Examination of delegated act		

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 21/10/2014 - Follow-up document

The Commission presented a report on the implementation of Directive 2010/40/EU of the European Parliament and of the Council on the framework for the deployment of Intelligent Transport Systems (ITS) in the field of road transport and for interfaces with other modes of transport.

The ITS Directive aims at accelerating the coordinated deployment and use across Europe of intelligent transport systems in road transport (and interfaces with other modes). It identifies a list of six priority actions and is based on a two-step approach:

- 1. the Commission is empowered first to adopt, through **delegated acts**, the necessary specifications to ensure compatibility, interoperability and continuity for the deployment and operational use of ITS;
- 2. at the latest 12 months after the adoption of the necessary specifications for a priority action, the Commission is to present **a proposal** to the European Parliament and the Council on the **deployment of that priority action**.

To that end, the Commission adopted a working programme covering the period 2011-15 which sets the estimated due dates for the adoption of the specifications related to the six priority actions.

Adopted specifications: so far, the ITS Directive has been an efficient tool for the rapid adoption of common specifications for the following priority actions:

- the harmonised provision for an interoperable EU-wide eCall (Delegated Regulation (EU) No 305/2013);
- data and procedures for the provision, where possible, of road safety related minimum universal traffic information free of charge to users ( Delegated Regulation (EU) No 886/2013);
- the provision of information services for safe and secure parking places for trucks and commercial vehicles (Delegated Regulation (EU) No 885 /2013).

The work on the specifications for the remaining two priority actions (EU-wide real-time traffic information and EU-wide multimodal travel information services) will be dealt with before the end of the working programme in 2015.

Regarding reservation services for safe and secure parking places for trucks and commercial vehicles, no further action in the near future is needed.

Priorities and perspectives: taking into account the emergence of new long-term trends also mentioned in the Commission Staff Working Document on the progress report and review of the ITS Action Plan (e.g. use of crowd-sourcing for transport data) and the possible necessity to set up new priorities beyond the six currently defined priority actions and four priority areas, it seems necessary as a first step to prioritise the remaining actions to be addressed in the current scope of the ITS Directive and ITS Action Plan.

In a second phase, it will be necessary to reflect on, and start preparing work for a **possible revision of the ITS Directive and of the supporting ITS Action Plan**, taking into account the constant technical evolution of ITS and building also on the conclusions of the Commission Staff Working Document on the progress report and review of the ITS Action Plan.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 21/10/2014 - Follow-up document

This Commission Staff Working Document concerns the progress and review of the intelligent transport systems (ITS) Action Plan.

This progress report examines the current situation in implementing the ITS Action Plan. It reviews all actions since its adoption in December 2008, assesses the impacts of individual actions and their combined influence in accelerating ITS uptake in Europe, and makes recommendations for follow-up initiatives.

**Main findings**: overall, implementation of the Action Plan is **well advanced**. A significant number of the 24 actions are considered to be well on track (i. e. more than 70% completion), with substantial outcomes realised.

#### Five actions have been completed:

- a dedicated legal framework has been established supporting the harmonised deployment in the EU of ITS solutions in road transport;
- specifications for data and procedures for the free provision of minimum universal traffic information services have been defined with the
  adopted specifications under the ITS Directive;
- the introduction of eCall has been supported through the proposed comprehensive regulatory framework for eCall deployment by October 2015:
- the promotion of multimodal journey planners;
- the Urban ITS platform has been set up to provide a dedicated forum to raise awareness among the ITS community about the specific needs
  of local authorities.

Furthermore, actions on EU-wide real-time traffic and travel information services, and on secure parking places for trucks and commercial vehicles, benefited from the work completed under the ITS Directive on specifications for safe and secure parking places and for road safety related minimum universal traffic information.

A number of actions have experienced delays or have been suspended during their implementation.

Achievements in the implementation of the ITS Action Plan include mainstreaming ITS and raising awareness, boosting stakeholder cooperation and promoting multimodality. Issues to be dealt with include the lack of prioritisation and the diversity of stakeholders and vested interests.

The report concludes that the ITS Action Plan is still relevant in addressing the objectives of all the defined priority areas. Implementation of the remaining actions of the ITS Action Plan should therefore be pursued, especially through taking forward implementation of the ITS Directive.

To ensure better effectiveness, it is envisaged to define or complement, as appropriate, a detailed work plan for each of the remaining actions. Based on feedback from the stakeholder consultations, the following areas may be considered for future work: (i) transport data dimension multimodality dimension; (ii) connectivity (ICT networking) dimension and; (iii) coordination platforms.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 17/12/2009

The Council took note of the state of play regarding a proposal for a directive on the deployment of Intelligent Transport Systems (ITS) in the field of road transport.

The Commission proposal, presented in December 2008, has been considerably modified during its examination by the Council preparatory bodies, which also took into account the European Parliament's first-reading opinion of April 2009. Moreover, changes have been introduced following several informal talks with the European Parliament in recent weeks in order to prepare the ground for an early agreement between Council and Parliament.

The objective of the proposed directive is to accelerate and to coordinate deployment of interoperable ITS in road transport, including interfaces with other transport modes, by creating the necessary conditions and mechanisms through a coherent EU-wide framework.

The text as it stands is, in substance, acceptable for the Member States. On the eve of the Council meeting, the European Parliament also signalled its readiness to accept the substance of the text. Consequently, the Council now invited the competent bodies to finalise the agreement with the Parliament so that the directive can swiftly be adopted by both institutions once the Council has adopted its first-reading position at a forthcoming meeting.

However, there remains a more technical legal issue to be discussed with the Parliament, namely the provisions on "delegated acts", newly introduced following the entry into force of the Lisbon treaty. "Delegated acts" are decisions taken by the Commission in implementing legislative acts adopted by the Parliament and the Council.

Compromise reached: thekey question where opinions diverged until recently was if, or to what extent, the deployment of ITS applications and services should be mandatory. Many Member States think, notably in view of the financial and administrative implications, that any decision to deploy ITS services should be taken at national level. Other Member States initially favoured making at least some ITS services mandatory, but were not unanimous as to which services should be chosen.

The European Parliament, in its first-reading opinion, advocated mandatory introduction of certain ITS services.

The compromise solution which has now been found includes, on the one hand, an assurance to Member States that they will have the final say on the deployment of ITS on their territory, and on the other hand, a two-stage procedure for introducing ITS through EU legislation: (i) first, the Commission adopts the necessary specifications for the action concerned; (ii) then, within 12 months and, where appropriate, after an impact assessment, the Commission presents a proposal for deployment of this action to the European Parliament and the Council, which will jointly decide upon it.

Some Member States, however, still fear that the non-mandatory character of the deployment provisions might not be clear enough and intend to make a statement on this issue when the directive is being adopted.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 07/07/2010 - Final act

PURPOSE: to ensure a coordinated and effective deployment of ITS within the European Union.

LEGISLATIVE ACT:Directive 2010/40/EU of the European Parliament and of the Council on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.

CONTENT: this Directive establishes a framework in support of the **coordinated and coherent deployment and use of Intelligent Transport Systems** (ITS) within the Union, in particular across the borders between the Member States, and sets out the general conditions necessary for that purpose. It

provides for the development of **specifications** for actions within the priority areas, as well as for the development, where appropriate, of **necessary standards**.

Priority areas: the following shall constitute priority areas for the development and use of specifications and standards:

- · optimal use of road, traffic and travel data;
- continuity of traffic and freight management ITS services;
- ITS road safety and security applications;
- linking the vehicle with the transport infrastructure.

The Commission may adopt guidelines and other non-binding measures to facilitate Member States' cooperation relating to the priority areas.

**Priority actions**: within the priority areas the following shall constitute priority actions for the development and use of specifications and standards, as set out in Annex I:

- the provision of EU-wide multimodal travel information services;
- the provision of EU-wide real-time traffic information services;
- data and procedures for the provision, where possible, of road safety related minimum universal traffic information free of charge to users;
- the harmonised provision for an interoperable EU-wide eCall;
- the provision of information services for safe and secure parking places for trucks and commercial vehicles;
- the provision of reservation services for safe and secure parking places for trucks and commercial vehicles.

**European ITS Advisory Group**: the Commission shall establish a European ITS Advisory Group to advise it on business and technical aspects of the deployment and use of ITS in the Union. The group shall be composed of high level representatives from relevant ITS service providers, associations of users, transport and facilities operators, manufacturing industry, social partners, professional associations, local authorities and other relevant fora.

Rules on privacy, security and re-use of information: Member States shall ensure that the processing of personal data in the context of the operation of ITS applications and services is carried out in accordance with Union rules protecting fundamental rights and freedoms of individuals, in particular Directive 95/46/EC and Directive 2002/58/EC. In particular, Member States shall ensure that personal data are protected against misuse, including unlawful access, alteration or loss.

Delegated Acts: the Commission may adopt delegated acts in accordance with Article 290 of the TFEU in respect of the adoption of specifications.

**Reporting**: Member States shall submit to the Commission by 27 August 2011 a report on their national activities and projects regarding the priority areas. Member States shall provide the Commission by 27 August 2012 with information on national ITS actions envisaged over the following five year period. Guidelines for reporting shall be adopted by the Member States.

Following the initial report, Member States shall report every three years on the progress made in the deployment of the actions.

The Commission shall submit a report every three years to the European Parliament and to the Council on the progress made for the implementation of this Directive. The report shall be accompanied by an analysis on the functioning and implementation, including the financial resources used and needed and shall assess the need to amend this Directive, where appropriate.

In accordance with the advisory procedure referred to in the Directive, the Commission shall adopt a working program by 27 February 2011. The working program shall include objectives and dates for its implementation every year and if necessary shall propose the necessary adaptations

ENTRY INTO FORCE: 26/08/2010

TRANSPOSITION: 27/02/2012.

# Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 11/06/2009

In a public deliberation, the Council took note of the **Presidency progress report** on a draft Directive establishing the framework for the deployment of intelligent transport systems (ITS) in the field of road transport. The Commission presented its proposal in December 2008. The European Parliament adopted its first-reading opinion in April 2009.

The Council invited the competent bodies to pursue the examination of this proposal in order to reach a political agreement by the end of 2009.

The objective of this proposal is to create the conditions and to put in place the mechanisms to foster the uptake of ITS services and applications for road transport and their interfaces with other modes of transport in order to support a more efficient and environmentally friendly, safer and more secure freight and passenger mobility in the EU. To that end the proposal provides for the comitology procedure (regulatory procedure with scrutiny) to be applied to common and legally binding specifications defining detailed provisions and procedures for the deployment of ITS across the EU.

The Council working party examined this proposal and the accompanying action plan at several meetings.

A majority of delegations share the general aim of this proposal to accelerate and coordinate the deployment and use of Intelligent Transport Systems applied to road transport, including the interfaces with other transport modes. Although agreeing to the objective, Member States expressed concerns on the:

- a) competence for the different priority areas proposed i.e. Community vs. Member States,
- b) scope of the comitology procedure and obligations resulting thereof,
- c) priorities of the different actions envisaged,
- d) impact of the draft Directive on already existing ITS and national policies,
- e) financial and administrative implications for the Member States.

A number of delegations could in principle follow the Commission's approach to apply the comitology procedure for establishing specifications and procedures for a coordinated and accelerated use of ITS across the EU. These delegations nonetheless express the wish to clearly define the areas to which the comitology procedure should be applied.

Member States express different views on the best ways and means to deploy ITS across the EU.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 22/07/2009 - Document attached to the procedure

Opinion of the European Data Protection Supervisor (EDPS) on the Communication from the Commission on an Action Plan for the Deployment of Intelligent Transport Systems in Europe and the accompanying proposal for a Directive of the European Parliament and of the Council laying down the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other transport modes.

The EDPS welcomes the proposed ITS deployment plan put forward by the Commission that aims at harmonising the data processes throughout Europe in order to facilitate the provision of ITS services, and in which data protection is put forward as a core condition for the proper deployment of ITS in Europe. It notes that the Directive raises a number of privacy and data protection issues that need to be further addressed at EU and national level:

- there is a risk that the lack of clarity of the proposed legal framework will create diversity in the implementation of ITS in Europe which will lead to different levels of data protection in Europe. The EDPS emphasises the need for further harmonisation on these issues at EU level to clarify outstanding issues (such as definition of the roles and responsibilities of ITS actors, which specific ITS applications and systems must be embedded in vehicles, the development of harmonised contracts for the provision of ITS services, the specific purposes and modalities of use of ITS, etc.). It is particularly crucial to identify who the data controllers will be in respect of the data processing performed, as they will bear the responsibility to ensure that privacy and data protection considerations are implemented at all levels of the chain of processing;
- decisions concerning certain modalities of the processing that could seriously impact on the privacy and data protection rights of individuals should be taken by the European Parliament and the Council, and not through comitology procedure;
- it is paramount to consider privacy and data protection from an early stage of the processing and in all stages of the processing; the
  implementation of 'Privacy by design' should be encouraged for the design of ITS applications and systems, and should be incorporated within
  standards, best practices, technical specifications, and systems;
- any interconnection of applications and systems should be done with due respect for data protection principles and practical safeguards on security;
- with regard to the uncertainties that remain at this stage concerning the modalities of deployment of ITS, the EDPS particularly welcomes the
  initiative put forward by the Commission in its Communication that a privacy assessment be conducted by 2011. He furthermore strongly
  advises that privacy and data protection impact assessments are conducted in relation to particular sectors and/or purposes of use for the
  definition of appropriate security measures and that Best Available Techniques for privacy, data protection and security in ITS are developed;
- the EDPS further stresses that Member States will bear responsibility in implementing the Directive in a proper fashion so that ITS operators
  implement systems and services that offer an appropriate level of data protection across Europe;
- appropriate safeguards should be implemented by data controllers providing ITS services so that the use of location technologies, such as
  satellite positioning and RFID tags, is not intrusive of the privacy of individuals using vehicles in a purely private or in a professional context.
  This will notably require limiting the processing to the data strictly necessary for that purpose, ensuring that appropriate security measures are
  built in the systems so that location data are not disclosed to unauthorised recipients, and providing users with an effective means of
  deactivation of the location device/feature.

The EDPS recommends that **Article 6 of the proposal on rules on privacy, security and re-use of information** is amended, in line with Directive 95/46 /EC:

- data minimisation should be encouraged for the data processing performed through ITS;
- it is important that personal data processed through interoperable systems are not used for further purposes that are incompatible with those
  for which they were collected, and this should be reflected in the wording;

 the EDPS recommends adding an explicit reference to the notion of 'privacy by design' for the design of ITS applications and systems in Article 6 of the proposal. Moreover, he recommends that the Article 29 Working Party and the EDPS are consulted on further actions taken on this issue through the comitology procedure.

Lastly, the EDPS recommends that data protection authorities, in particular through the Article 29 Working Party, and the EDPS are closely involved in initiatives related to the deployment of ITS, through consultation at a sufficiently early stage before the development of relevant measures.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 10/05/2010 - Council position

In establishing its position at first reading, the Council has taken full account of the proposal of the Commission and the European Parliament's opinion at first reading.

With respect to the amendments proposed by the European Parliament, the Council observes that a considerable number of amendments have – in spirit, partially or fully – already been included in its first reading position. The European Parliament adopted its opinion at first reading on 23 April 2009, approving 57 amendments. The Commission did not present a modified proposal.

**General**: although the Council agreed with the Commission as regards the objective of the proposal, the Council's approach involves major adaptations of the original proposal on the following issues:

**Subject matter and scope**: the Council specifies that the proposed framework shall be in support of the coordinated and coherent use of ITS, in particular across the borders between Member States. The Council, in line with the Parliament, foresees that this directive shall not prejudge matters of national security or of interest of defence.

**Priority areas**: in the Commission proposal four priority areas (optimal use of road, traffic and travel data, continuity of traffic and freight management ITS services on European Transport corridors and conurbations, road safety and security, and integration of the vehicle into the transport infrastructure) were listed in which the Commission should, in particular, define specifications for the deployment and use of ITS applications and services. The European Parliament confirmed the above priority areas, but deleted the possibility to adopt specifications in other areas than the four listed above. The Council position at first reading conforms largely with the position of the European Parliament and foresees an article on its own for the following four priority areas:

- optimal use of road, traffic and travel data;
- · continuity of traffic and freight management ITS services;
- ITS road safety and security applications;
- linking the vehicle with the transport infrastructure.

The scope of these priority areas is specified in Annex II of the directive.

**Priority actions**: no priority actions were set out by the Commission or the Parliament. However, the European Parliament defined four areas (the provision of EU-wide real-time traffic and travel information services, data and procedures for the provision of free minimum universal traffic information services, the harmonised introduction of e-Call throughout Europe and appropriate measures on secure parking places for trucks and commercial vehicles and on telematics-controlled parking and reservation systems ) in which the Commission should define specifications for the obligatory deployment and use of the minimum level of ITS applications and services.

The Council position at first reading picks up the idea of the European Parliament to give priority to certain ITS applications and services. To this end, the Council sets up the following **six priority actions**:

- the provision of EU-wide multimodal travel information services;
- the provision of EU-wide real-time traffic information services;
- data and procedures for the provision, where possible, of road safety related minimum universal traffic information free of charge to users;
- the harmonised provision for an interoperable EU-wide e-Call;
- the provision of information services for safe and secure parking places for trucks and commercial vehicles;
- the provision of reservation services for safe and secure parking places for trucks and commercial vehicles.

Deployment of ITS applications and services: the Commission proposal foresaw that the Member States take the necessary measures for a coordinated deployment and use of interoperable ITS applications and services within the Union. To this end, the Commission proposed to adopt specifications through the comitology procedure (regulatory procedure with scrutiny) which might also entail obligations for Member States to deploy ITS applications and services. The European Parliament followed largely the Commission proposal by strengthening the respective wording to avoid geographical fragmentation and discontinuity of ITS applications and services. The Council clarifies that Member States decide whether or not to deploy ITS applications and services on their territory. However, if ITS applications and services are deployed, the specifications adopted under this directive shall be respected. The Council also foresees that Member States shall make efforts to co-operate in respect of the aforementioned priority areas insofar no specifications have been adopted.

Specifications: the Council position at first reading develops the idea of the European Parliament to prioritize certain ITS applications and services reflected in the priority actions. For this purpose, the Commission shall aim to adopt specifications for the above priority actions. Further, at the latest 12 months after the adoption of the necessary specifications for a priority action, the Commission shall, where appropriate, and after having conducted

an impact assessment accompanied by a cost-benefit-analysis, present a proposal to the Parliament and the Council on the deployment of that priority action. Further, the Council specifies that specifications may include functional, technical, organisational and service provisions. The Council conforms with the Parliament's position that Member States, after notification to the Commission, may establish additional rules for the provision of ITS services on their territory. The Council foresees that specifications shall, where appropriate, be based on standards and that the Commission shall always conduct an impact assessment prior to the adoption of specifications. Lastly, the Council foresees that the Commission may adopt specifications through the delegated acts procedure in accordance with Article 290 of the Treaty of the Functioning of the European Union. The power of adopting specifications according to this procedure will end after a period of seven years following the entry into force of this directive. The Parliament or the Council may revoke the delegations of powers to adopt specifications at any time. The European Parliament or the Council may object to specifications within a period of two months from the date of notification. At the initiative of the Parliament or the Council this period may be extended by two months.

Standards and non-binding measures: the Commission proposal and the European Parliament did not make a reference to standards and non-binding measures. The Council makes reference to standards which may be developed in the priority areas and priority actions following the procedure laid down in Directive 98/34/EC. These standards should provide for interoperability, compatibility and continuity for the deployment and operational use of ITS applications and services. Further, the Council introduces an article on the adoption of guidelines and other nonbinding measures by the Commission in order to facilitate Member States' co-operation relating to the priority areas.

Data protection: the Council strengthens the provisions on data protection and privacy.

Rules on liability: the Commission proposal did not foresee rules on liability. The European Parliament considered liability issues as a necessary precondition for the swift development and deployment of ITS applications and services. The Council takes account of the Parliament's position and makes a reference to relevant existing Union law and national legislation.

Principles for specifications and deployment of ITS: the Commission proposal established certain principles to be respected when selecting and deploying ITS applications and services. The European Parliament strengthened and expanded the above mentioned principles. The Council, inspired by the EP position, develops further the respective provisions by making reference to proportionality, interoperability, backward compatibility and respect existing national infrastructure and network characteristics, equality of access, quality of timing and positioning, and coherence.

Other amendments adopted by the European Parliament but not included in the Council first reading position concern:

- a reference to advanced applications and Community mechanisms for different transport modes such as for railway transport (ERTMS and TAF-TSI), open sea and inland waterways (LRITS, SafeSeaNet, VTMIS, RIS), air transport (SESAR) and land transport, for example, livestock transport;
- a reference to Dedicated Short Range Communication (DSRC);
- a reference to travellers, vehicles and infrastructure and their interaction in the field of road transport, including urban transport, in the article "subject matter and scope";
- the establishment and definition of a minimum level of ITS applications and services;
- additional provisions concerning "Type-approval of road-infrastructure related ITS equipment and software";
- a transposition period of 12 months following the entry into force of this directive;
- the obligation to Member States to draw up a correlation table between adopted national provisions and this directive.

# Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 18/05/2010 - Commission communication on Council's position

The position of the Council has **slightly modified the initial Commission proposal**. Taking into account the amendments proposed by the European Parliament, it has clarified the scope of the Directive by specifying the priority areas and by focusing, in the first instance, on **six priority actions** for the development and use of specifications to be adopted by the Commission. The Council position has also reinforced the importance, in the context of ITS deployment, of protection of personal data and of liability issues, as underlined by the European Parliament and in the opinion of the European Data Protection Supervisor.

With the slight modifications as compared to the initial proposal of the Commission, the Council position in 1st reading reflects the agreement reached between the institutions and confirmed by an exchange of letters between the president of Coreper I and the chair of the Transport and Tourism committee of the European Parliament in March 2010.

The Commission considers that this agreement is fully in line with the objective of its proposal, and therefore can support it.

The agreement sets out three Commission statements and one statement by the three institutions:

(1) The deployment of ITS priority actions: the Commission shall aim at adopting specifications for one or more of the priority actions by 30 months following the date of entry into force of this Directive. At the latest 12 months after the adoption of the necessary specifications for a priority action, the Commission shall, where appropriate, after conducting an impact assessment including a cost-benefit analysis, present a proposal to the European Parliament and the Council in accordance with Article 294 of the TFEU on the deployment of that priority action. On the basis of the information currently available, the Commission takes the view that for the adoption of the necessary specifications for the priority actions, the following indicative time table could be envisaged: specifications for:

- the provision of EU-wide multimodal travel information services as set (no later than 2014);
- the provision of EU-wide real-time traffic information services (no later than 2013);

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the data and procedures for the provision, where possible, of road safety related minimum universal traffic information free of charge to users (no later than 2012):

- the harmonised provision for an interoperable EU-wide eCall (no later than 2012);
- the provision of information services for safe and secure parking places for trucks and commercial vehicles (no later than 2012);
- the provision of reservation services for safe and secure parking places for trucks and commercial vehicles (no later than 2013).

This indicative timetable is based upon the assumption that agreement on the ITS Directive between the EP and the Council is reached through early second reading at the beginning of 2010.

- (2) Liability: the deployment and use of ITS applications and services may raise a number of liability issues that can be a major barrier to wide market penetration of some ITS services. Addressing these issues constitutes one of the priority actions put forward by the Commission in its ITS Action Plan. Taking into account existing national and Community legislation on liability, and notably Directive 1999/34/EC, the Commission will carefully monitor the developments in the Member States concerning the deployment and use of ITS applications and services. If necessary and appropriate, the Commission will elaborate guidelines on liability, notably describing the stakeholders' obligations in relation to the implementation and use of ITS applications and services.
- (3) Notification on delegated acts: the European Commission takes note that except in cases where the legislative act provides for an urgency procedure, the European Parliament and the Council consider that the notification of delegated acts shall take into account the periods of recess of the institutions (winter, summer and European elections), in order to ensure that the European Parliament and the Council are able to exercise their prerogatives within the time limits laid down in the relevant legislative acts, and is ready to act accordingly.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 16/12/2008 - Legislative proposal

PURPOSE: to establish a framework for the coordinated deployment and use of intelligent transport systems within the Community.

PROPOSED ACT: Directive of the European Parliament and of the Council.

BACKGROUND: the increasing congestion on our transport system (freight road transport is expected to increase by 55% and passenger road transport by 36% by 2020) and the related energy consumption and negative environmental impacts (CO2 emissions from transport will grow a further 15% by 2020) call for an innovative approach to respond to the growing needs and requirements for transportation and mobility.

The Mid-term review of the European Commission's White Paper on Transport Policy suggests that innovation will play a significant part in making road transport more sustainable, in particular by applying information and communication technologies: Intelligent Transport Systems (ITS). However, take-up of ITS solutions in road transport has been slower than expected and, in general, services are being deployed on a fragmented basis. This has led to a patchwork of national, regional and local solutions without clear harmonisation, endangering the integrity of the single market. As a consequence, inefficient use is being made of ITS which cannot therefore contribute effectively achieving (transport) policy objectives and mastering the increasing challenges facing road transport.

IMPACT ASSESSMENT: the impact analysis considers 3 policy options: (a) no additional new action; (b) overcoming problems by concentrating on co-ordination and synergy measures; (b+) a Directive concentrating on co-ordination and synergy measures with a Comitology procedure. The Commission selected the latter option because it would have more impact than the other options, especially as regards co-operation and the potential for more rapid agreements on particular issues hampering deployment of ITS across Europe.

CONTENT: the general objective of this proposal is to establish a framework to accelerate and coordinate the deployment and use of Intelligent Transport Systems applied to road transport, including the interfaces with other transport modes (ITS) in order to support a more efficient and environmentally friendly, safer and more secure freight and passenger mobility in the EU.

Specific objectives include increasing system interoperability, ensuring seamless access, fostering continuity of services and setting up an efficient cooperation mechanism between all ITS stakeholders.

The proposed Directive provides a framework for the implementation of the ITS Action Plan. The obligations imposed on Member States would be supported by the Commission through the establishment, through comitology, of common specifications aimed at ensuring the EU-wide coordinated deployment of interoperable ITS. This work will be carried out by the Commission, assisted by a **European ITS Committee**. This also provides for a framework for the exchange of information with Member States.

Without prejudice to the role of the Committee, the Commission will establish an **ITS Advisory Group** composed of high level executives representing stakeholders from the most important areas (ITS service providers, associations of users, transport and facilities operators, manufacturing industry, social partners, professional associations). This group will advise the Commission on business and technical aspects of the deployment and use of ITS in the EU. This ITS Advisory Group will compile input from existing sources such as the eSafety Forum, ERTRAC etc.

FINANCIAL IMPLICATIONS: reimbursement of travel expenses (European ITS Committee and the Advisory Group 4 meetings a year each): EUR 122 200 00.

# Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 23/04/2009 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 529 votes to 42, with 16 abstentions, a legislative resolution amending, under the first reading of the codecision procedure, the proposal for a directive of the European Parliament and of the Council laying down the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other transport modes.

The main amendments are as follows:

Subject matter and scope: the Parliament wishes to clarify that the directive establishes a framework for the coordinated and coherent deployment and use of intelligent transport systems, including interoperable ITS, within the Community and the development of the specifications necessary for that purpose. MEPs also clarified that the directive shall apply to all intelligent transport systems for travellers, vehicles and infrastructure and their interaction in the field of road transport, including urban transport. It is essential to include also the vulnerable transport users under the scope of the directive.

MEPs have excluded from the scope of the Directive, requirements of the Member States related to public order and public security.

The resolution also stresses that it is important to define the minimum level of ITS applications and services that may be deployed, implemented and used by all the Member States.

**Deployment of ITS**: where possible, Member States shall ensure the backward compatibility of ITS applications and services within the Community. They shall apply ITS to all modes of transport and to the interfaces between them, ensuring a high level of integration between all transport modes. They shall also avoid creating geographical fragmentation and discontinuity.

Moreover, MEPs believe it is essential that Members States take the necessary measures for requiring the compliance with the basic principals set (effectiveness, cost-efficiency, geographical continuity, interoperability and degree of maturity) for the evaluation of needs. Member States shall also take account of the morphological particularities of geographically isolated regions and the distances that have to be covered to reach them, making an exception if need be to the cost-efficiency ratio principle.

**Specifications**: the Commission shall define, under the regulatory procedure with scrutiny, specifications for the obligatory deployment and use of the minimum level of ITS applications and services, in particular in the following areas:

- the provision of EU-wide real-time traffic and travel information services;
- data and procedures for the provision of free minimum universal traffic information services;
- the harmonised introduction of eCall throughout Europe;
- appropriate measures on secure parking places for trucks and commercial vehicles and on telematics-controlled parking and reservation systems.

The Commission shall also define specifications for the necessary deployment and use of ITS beyond the minimum level of ITS applications and services in the case of Community co-financed TERN construction or maintenance.

The specifications shall also determine the conditions under which Member States may, in conjunction with the Commission, impose additional rules for the provision of such services throughout or in part of their territory.

Before adopting the specifications, the Commission should conduct an impact assessment comprising a comprehensive cost-benefit analysis for the implementing measures provided in the directive. The impact assessment would address issues of additional economic costs to be borne by the economic actors and parameters related to the economic cycle of the ITS.

**Type-approval of equipment**: ITS equipment and software may be placed on the market and put into service only if, when properly installed and maintained and used for their intended purpose, they do not endanger the health and safety of persons and the environment, in accordance with relevant Community legislation, and, where appropriate, property.

Committee on technical standards and regulations: an amendment aims to enhance the standardisation of ITS and would provide the possibility of using the Standing Committee and the procedure referred to in Article 5 of Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services.

Rules on privacy: in order to ensure privacy, the use of anonymous data shall be encouraged, where appropriate, for the performance of the ITS application and/or service. Personal data shall only be processed insofar as processing is necessary for the performance of the ITS application and/or service.

Where special categories of data referred to in Directive 95/46/EC are involved, such data shall only be processed where the data subject has given his or her explicit consent to the processing of those data on an informed basis. Moreover, the data may not be used for purposes other than those referred to in the directive.

Consistency: the Commission shall prepare an annual work programme on the basis of the core elements set out in Annex II to this Directive and for the first time three months at the latest after the entry into force of this Directive. It shall, in close cooperation with the Member States, ensure general

consistency and complementarity of ITS deployment with other relevant Community policies, programmes and actions, thus enhancing synergies and the effectiveness of EC policies.

**Transparency**: the Commission should enhance adequate participation of ITS stakeholders in the European ITS Advisory Group. The work of the European ITS Advisory Group shall be carried out in a transparent manner.

The Commission shall report bi-annually to the European Parliament and to the Council on the status of funding, and, if necessary, shall make a proposal for the financial basis of the implementation of the minimum level of ITS applications and services.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 06/07/2010 - Text adopted by Parliament, 2nd reading

The European Parliament adopted a legislative resolution approving, unamended, the Council position at first reading with a view to the adoption of a directive of the European Parliament and of the Council on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.

It also adopted a joint statement by the European Parliament, the Council and the Commission on Article 290 TFEU (delegated acts).

Lastly, Parliament takes note of three Commission statements annexed to the resolution which concern the following: (i) the deployment of ITS priority actions; (ii) liability; (iii) the notification of delegated acts.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 08/10/2019 - Follow-up document

The Commission presented a report on the implementation of Directive 2010/40/EU of the European Parliament and of the Council on the framework for the deployment of Intelligent Transport Systems (ITS) in the field of road transport and for interfaces with other modes of transport.

This report is the second report on the progress made for the implementation of Directive 2010/40/EU (the ITS Directive), providing for an analysis of the functioning and implementation of the Directive since the first progress report.

#### Overall implementation of the report

#### An updated Commission working programme

The first working programme of the ITS Directive covered the period 2011-2015, and focused on the preparation of specifications related to the six priority actions. While the need to further progress on the specifications for these priority actions remained valid beyond this period, the need to address other actions from the Directive required an update to this working programme. Commission Decision (2018) 8264, adopted on 11 December 2018 and covering the period 2018-2022, updates the working programme.

#### Delegated acts on specifications

The power to adopt specifications with technical, functional, organisational and service provisions was conferred on the Commission until 27 August 2017. As stated in the first progress report, an extension of this deadline was needed to adopt specifications, for those actions listed in Annex I of the ITS Directive that are not priority actions. It shall extend the power conferred on the Commission to adopt delegated acts for a period of five years, tacitly renewable, from 27 August 2017.

As described in the first progress report, the development of the specifications was informed by a wide range of preparatory work (studies, workshops etc), analyses (cost-benefit, gap- requirements- and approaches analyses) and consultations (public consultations, consultations with experts nominated by Member States and the European Data Protection Supervisor, information and invitation of Council and Parliament experts).

A more comprehensive approach was deemed necessary in order to address the various issues (funding, standardisation, greater coordination of stakeholders, governance linked to deployment etc.) that go beyond the scope of mere specifications, in particular for Cooperative Intelligent Transport Systems (C-ITS).

A stakeholder platform (the C-ITS platform) was therefore created in November 2014 as a Commission expert group, gathering public and private stakeholders and representing all of the key stakeholders along the value chain including public authorities, vehicle manufacturers, suppliers, service providers, telecommunications companies etc. It brought them together to contribute towards a shared vision on the interoperable deployment of C-ITS in the EU and support the development of EU specifications.

#### Achievement of the six priority actions

The six priority actions for the development and use of specifications and standards set out in the ITS Directive have been fully addressed. The report noted that the elaboration of the relevant specifications for the priority actions related to real-time traffic information and multimodal travel information

services was more challenging, due to the very broad scope of these specifications specified in Annex I to the ITS Directive, and the need to build a shared understanding on that scope with experts.

#### Other actions

Work has recently been completed on C-ITS. Another domain for adoption of specifications related to open access for ITS services (open in-vehicle platform) through access to in-vehicle data and resources. This domain has been the subject of several preparatory studies and intense discussions between stakeholders during the first phase the C-ITS platform.

The Commission announced that it would consider the need for specifications under the ITS Directive for access to (personal and/or non-personal) vehicle data for public authorities' needs, in particular traffic management. This work should also make use of input from a new Commission expert group on business-to-government data sharing.

This was confirmed in the updated working programme of the ITS Directive adopted on 11 December 2018, which lists also additional activities for 2018-2022. These may lead to new delegated acts under the ITS Directive covering:

- the possible geographical extension of existing specifications on EU-wide real-time traffic information services including possible additional data types (e.g. urban access restrictions, recharging/refuelling points);
- the possible extension of eCall to other vehicle categories (such as heavy goods vehicles, buses and coaches, powered two-wheelers, and agricultural tractors);
- interoperable multimodal payment / ticketing; and
- the continuity of traffic and freight management services. As stated in the updated working programme, these activities will start with a mapping exercise with Member States experts, to further clarify the scope of the activities.

#### Financial resources

Compared to the 2014 report, there is more information available on the financial resources used and needed, as all priority actions have been addressed and the deployment of services and of the national access point infrastructure has progressed significantly. It should be noted that costs related to implementing the specifications are very often difficult to isolate from the general costs of the deployment and operation of ITS services and of ITS physical infrastructures themselves, which may prove to be much higher.

#### Conclusion

The Commission report concluded that the six priority actions of the ITS Directive have been fully addressed. Most Member States are actively implementing the specifications which underpin the deployment of ITS services. National access points have been or are in the process of being deployed, with the concomitant development of operational tools supporting the accessibility of ITS data. This work would certainly benefit from better coordination, involving all Member States and covering all specifications, to federate all these efforts towards a harmonised ITS digital infrastructure across the EU.

New ITS themes and challenges are emerging, as expressed in the Member States reports on the implementation of the Directive, such as connected and automated mobility and Mobility as a Service (MaaS). Taking this evolution into account, the question of the availability of data on the whole road transport network may become more significant, in particular for key data types corresponding to the rules for the usage of the physical infrastructure. This issue should be further studied to assess the need for further action.

Taking also into account the findings of the evaluation of the ITS Directive, a possible future revision of the ITS Directive should include all these aspects in a comprehensive approach.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 08/10/2019 - Follow-up document

This Commission staff working document presents an analysis of the Member States progress reports of 2014 and 2017. The document accompanies the report from the Commission on the implementation of Directive 2010/40/EU on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.

This summary constitutes an overview of these national reports, based solely on their content and on the Commission's understanding of these reports. It includes examples and highlights on the implementation of the different specifications adopted under the ITS Directive.

#### Main findings

29 national progress reports were received (28 Member States and Norway). Overall, the national reports provided a good overview of the Member States' (best) practices. The analysis shows a general progress in all four priority areas set out in the ITS Directive. This positive evolution was supported by activities involving several Member States and benefitting from EU funding support, or where EU legislation mandated deployment and/or provided for legal and technical certainty through common specifications.

Many reports illustrated the positive impact of projects involving several Member States and funded under the Connecting Europe Facility on the effective and harmonised deployment of ITS services and on the harmonised implementation of the different Delegated Regulations (with still efforts needed for some late Member States), which calls for continued efforts in that respect. However, several Member States are still late or did not provide information regarding the deployment of their National Access Point, and there is still one issue regarding the deployment of the eCall infrastructure.

Several active Member States took also the initiative to develop together technical documents (e.g. metadata catalogue, quality framework) to support the implementation of the specifications and shared these documents with the other Member States. This proved to be beneficial to support a harmonised implementation of the specifications. This cooperation brings positive results and should be encouraged and extended, and may benefit from a more formal recognition of the National Access Points forming the backbone of a digital ITS infrastructure.

#### Future progress reports

In the light of the analysis of the 2017 national progress reports, the following remarks can be made:

- further efforts are needed to streamline the reporting for the ITS Directive and the Delegated Regulations in order to facilitate the reporting and the analysis. This may be taken into account when revising the Directive and/or the Delegated Regulations and when adopting new delegated acts. A revision of the Directive may also be an opportunity to possibly establish improved reporting requirements;
- on the basis of the received information, evaluation and knowledge-sharing activities could be organised to further guide Member States on data collection and calculation of key performance indicators, beyond the already provided guidance, also taking into account the need for stability of the definition of these key performance indicators to be able to assess their long-term evolution.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 09/10/2019 - Follow-up document

This Commission staff working document contains the executive summary of the ex post evaluation of the Intelligent Transport Systems (ITS) Directive 2010/40/EU.

Considering that the first working programme has been completed and given the significant developments in the sector, it is important to take stock and verify the adequacy of the current EU legislative framework for ITS.

The ex-post evaluation takes into account:

- the implementation of the Directive;
- the delegated acts adopted under its terms;
- the working programmes adopted by the Commission;
- the Commission's guidelines for reporting, and the activities of committees and experts.

It also considers relevant aspects of the ITS action plan and standards and non-binding measures aimed at facilitating the deployment of ITS in road transport. It assesses the implementation of the Directive in all 28 Member States between 2008 and 2017.

#### Main findings

The evaluation concludes that the as the use of ITS is increasing, the Directive remains a relevant tool. The delegated acts adopted under the Directive also remain relevant, while some stakeholders consider some delegated acts could be extended to increase their relevance.

In general, the Directive has had a positive impact on the deployment of ITS across the EU. However, given that the deployment of ITS and the implementation of the delegated regulations are still at an early stage, there is not a lot of evidence to determine whether this already significantly helps to improve the continuity of ITS services across the EU, and in turn to reduce the negative externalities (accidents, congestion, pollution) of road transport.

Considering the cost-effectiveness of reporting obligations, the most significant remaining issue is the lack of comparability between Member State reports.

In general, the Directive and its delegated acts are internally coherent. A point of attention is the frequency and timing of reporting obligations under the various pieces of legislation, and also the consistency of terminology used in the different pieces of legislation.

The Directive is expected to become even more interdependent with other legislation, in particular on aspects related to vehicles, telecommunications, cybersecurity, liability and the processing and flow of data. Specific attention should therefore be paid to ensure coherence between different instruments, while avoiding unnecessary administrative burden.

It is concluded that the EU level is considered the most relevant to provide a framework for the coordinated and coherent deployment of ITS. Action at national level — even if promoted through non-binding action at EU level — could not be expected to address the key problem of incoherent, inconsistent and fragmented development of ITS across the EU. Likewise, while at international level there are mechanisms and structures in place, they cannot be considered sufficient to ensure a comprehensive EU-wide approach as currently provided by the Directive.

Lastly, the Commission stresses that it does not seem justified to repeal the Directive, as such repeal would most likely lead to a slowing down of ITS deployment and increase the risk of divergence and fragmentation. In addition, if the Directive were repealed, specifications would remain unchanged without a clear way to evolve, and may thus become outdated in the fast evolving domain of ITS.

## Road transport: framework for the deployment of intelligent transport systems and for interfaces with other transport modes

2008/0263(COD) - 09/10/2019 - Follow-up document

The Commission presents its staff working document on the ex post evaluation of the Intelligent Transport Systems (ITS) Directive 2010/40/EU.

As a reminder, the evaluation assesses the implementation of the ITS Directive in all 28 Member States between 2008 and 2017. This covers the period from the adoption of the ITS action plan and the original Commission proposal for the ITS Directive, and includes the 2017 reporting cycle by Member States and the Commission on the deployment of ITS and the implementation of the ITS Directive and its delegated regulations.

This staff working document sets out an extensive evaluation of the relevance, effectiveness, efficiency, coherence and EU added value of Directive 2010/40/EU.

#### Relevance

The ITS Directive remains a relevant tool to address the issues of: (i) lack of coordination in ITS deployment across the EU and (ii) slow, risky and not-cost effective ITS deployment, as the use of ITS is increasing but is still not contributing fully to improvement of the road transport system. This is also due to the nature of ITS deployment, which despite improvements still often remains restricted to a limited geographical scope and is not continuous. Thus, there remains a clear need for further action on interoperability, cooperation mechanisms and data sharing to enable seamless, continuous ITS services across the EU.

The scope of the ITS Directive is also still relevant today, with the identified priority areas still covering the relevant topics, services and data.

The delegated acts adopted under the ITS Directive also remain relevant, while some stakeholders consider that the scope of some delegated acts could be extended to increase their relevance, for instance extending eCall to other vehicle types, adding requirements for information on alternative fuels infrastructure, low emission zones and vehicle sharing to support sustainable mobility, and the extension of geographical coverage for some data included in the current specifications. This has been reflected in the updated working programme of the Directive, drawn up in coordination with Member State experts and adopted on 11 December 2018.

#### Effectiveness

In general, the ITS Directive has had a positive impact on the deployment of ITS across the EU. However, given that the deployment of ITS and the implementation of the delegated regulations are still at an early stage, there is not enough evidence to determine if this already makes a significant contribution to improving the continuity of ITS services across the EU, and in turn to reducing the negative externalities (accidents, congestion, pollution) of road transport.

The impacts of the ITS Directive cannot be easily discerned from that of numerous other EU, national and local policies that have been put in place that also address the negative externalities of transport.

However, most stakeholders believe that the ITS Directive and its delegated acts have made a positive contribution in this regard, and the benefits have been demonstrated in specific deployments.

Specifications have been adopted as planned for 5 out of 6 priority actions (through delegated regulations), and other relevant standards have also been adopted (e.g. DATEX II for the exchange of data).

National access points have been established in many Member States since the adoption of the delegated regulations, and although implementation is not yet complete, compared to the baseline scenario (where it was envisaged that only some countries would have set up NAPs), the developments represent significant progress in setting up an EU backbone infrastructure for ITS data.

#### Efficiency

The most significant costs for the EU are related to the funding made available for ITS. This covers deployment funding under CEF as well as research funding under Horizon 2020 and Structural Funds under ESIF. Other significant costs to the EU, although these are two orders of magnitude below deployment and research funding, cover standardisation activities and the costs of preparation and support studies for the delegated acts.

Considering that the benefits of ITS cannot yet be quantified, it is not possible to assess the cost-benefit ratio of the implementation of the ITS Directive. However, stakeholder input did not suggest that the costs associated with the Directive are disproportionally high, and no unexpected costs were highlighted.

The most significant remaining issue is the lack of comparability between Member State reports.

#### Coherence

In general, the ITS Directive and its delegated acts are internally coherent. A point of attention is the frequency and timing of reporting obligations, which are currently not aligned. Also, in a fast developing field such as ITS, the consistency of terminology used in the different pieces of legislation needs continuous attention.

Another point of attention is whether the ITS Directive will continue to be focused on those services that are mature, sufficiently interoperable and able to create a catalytic effect across Europe.

#### EU added value

Lastly, the ITS Directive, with the resulting deployment of interoperable ITS services, is considered to have led to EU-wide positive results. The opinion of most stakeholders validate the notion that action at EU level had clear benefits when it came to addressing the key problems and needs identified at the time of the legislation's adoption.

The EU level is considered the most relevant for providing such a framework. Action at national level would likely not address the key problem of incoherent, inconsistent and fragmented development of ITS across the EU.

Likewise, it does not seem justified to repeal the ITS Directive.