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WORKING PAPER

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WORKING DOCUMENT

From:	General Secretariat of the Council
To:	Working Party on Transport - Intermodal Questions and Networks
N° Cion doc.:	ST 15114/21 + ADD 1
Subject:	Proposal for a Directive of the European Parliament and of the Council amending 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 - compare version

Delegations will please find attached a compare version relating to the above proposal; it shows new text from the proposal as modifications to the Directive currently in force.

This working document should facilitate the understanding of the proposal, but is neither an official version of the proposal, nor the basis for the proposal's examination in the working party. It was produced with high diligence. However, in case delegations spot an omission or error, they are kindly invited to inform the General Secretariat.

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

(Text with EEA relevance)

(OJ L 207, 6.8.2010, p. 1)

Consolidated version (EUR-LEX) excluding recitals, as amended by Decision (EU) 2017/2380 of the European Parliament and of the Council of 12 December 2017 (OJ L 3401, 20.12.2017)

Bold underline/~~strikethrough~~ show changes as proposed on 14.12.2021 (ST 15114/20+ADD1)

Article 1

Subject matter and scope

1. 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.
2. This Directive provides for the development of specifications for actions within the priority areas referred to in Article 2, as well as for the development, where appropriate, of necessary standards.

2a. This Directive provides for the availability of data and deployment of ITS services within the priority areas referred to in Article 2 with a specific geographical coverage as specified in Annexes III and IV.

3. This Directive shall apply to ITS applications and services in the field of road transport and to their interfaces with other modes of transport without prejudice to matters concerning national security or necessary in the interest of defence.

Article 2

Priority areas

4. For the purpose of this Directive, the following shall constitute priority areas for the development and use of specifications and standards:

(a) I. ~~Optimal use of road, traffic and travel data~~ Information and mobility ITS services;

(b) II. ~~Continuity of traffic and freight~~ Travel, transport and traffic management ITS services;

(c) III. ~~ITS Road safety and security applications~~ ITS services;

(d) IV. Linking the vehicle with the transport infrastructure Cooperative, connected and automated mobility services.

5. The scope of the priority areas is specified in Annex I.

Article 3

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:

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

Article 4

Definitions

For the purposes of this Directive, the following definitions shall apply:

- (1) ‘Intelligent Transport Systems’ or ‘ITS’ means systems in which information and communication technologies are applied in the field of road transport, including infrastructure, vehicles and users, and in traffic management and mobility management, as well as for interfaces with other modes of transport;
- (2) ‘interoperability’ means the capacity of systems and the underlying business processes to exchange data and to share information and knowledge;
- (3) ‘ITS application’ means an operational instrument for the application of ITS;
- (4) ‘ITS service’ means the provision of an ITS application through a well-defined organisational and operational framework with the aim of contributing to user safety, efficiency, comfort and/or to facilitate or support transport and travel operations;
- (5) ‘ITS service provider’ means any provider of an ITS service, whether public or private;
- (6) ‘ITS user’ means any user of ITS applications or services including travellers, vulnerable road users, road transport infrastructure users and operators, fleet managers and operators of emergency services;
- (7) ‘vulnerable road users’ means non-motorised road users, such as pedestrians and cyclists as well as motor-cyclists and persons with disabilities or reduced mobility and orientation;

(8) ‘nomadic device’ means a portable communication or information device that can be brought inside the vehicle to support the driving task and/or the transport operations;

(9) ‘platform’ means an on-board or off-board unit enabling the deployment, provision, exploitation and integration of ITS applications and services;

(10) ‘architecture’ means the conceptual design that defines the structure, behaviour and integration of a given system in its surrounding context;

(11) ‘interface’ means a facility between systems which provides the media through which they can connect and interact;

(12) ‘compatibility’ means the general ability of a device or system to work with another device or system without modification;

(13) ‘continuity of services’ means the ability to ensure seamless services on transport networks across the Union;

(14) ‘road data’ means data on road infrastructure characteristics, including fixed traffic signs or their regulatory safety attributes;

(15) ‘traffic data’ means historic and real-time data on road traffic characteristics;

(16) ‘travel data’ means basic data such as public transport timetables and tariffs, necessary to provide multi-modal travel information before and during the trip to facilitate travel planning, booking and adaptation;

(17) ‘specification’ means a binding measure laying down provisions containing requirements, procedures or any other relevant rules;

(18) ‘standard’ means standard as defined in Article **2(1) of Regulation (EU) No 1025/2012 of the European Parliament and of the Council*** ~~1(6) of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations (OJ L 204, 21.7.1998, p. 37).~~

*** Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).**

(19) **“cooperative intelligent transport systems” or “C-ITS” means intelligent transport systems that enable ITS users to cooperate by exchanging secured and trusted messages;**

(20) **“C-ITS service” means an ITS service provided through C- ITS;**

(21) **“availability of the data” means the existence of data in a digital machine-readable format;**

(22) **“National Access Point” means a digital interface set up by a Member State that constitutes a single point of access to data, as defined in specifications adopted pursuant to Article 6;**

(23) **“accessibility of the data” means a possibility to request and obtain data in a digital machine-readable format via National Access Points;**

(24) **“multimodal digital mobility service” means a service providing information on traffic and travel data such as location of transport facilities, schedules, availability or fares for more than one transport mode, which may include features enabling the making of reservations, bookings or payments or the issuing of tickets.**

Article 5

Application of specification to the deployment of ITS

1. Member States shall take the necessary measures to ensure that the specifications adopted by the Commission in accordance with Article 6 are applied to ITS applications and services, ~~when these~~ **where those** are deployed, in accordance with the principles in Annex II. This is without prejudice to the right of each Member State to decide on its deployment of such applications and services on its territory. This right is without prejudice to ~~any legislative act adopted under the second subparagraph of Article 6(2)~~ **Articles 6a and 6b. Where relevant, Member States shall also cooperate on the enforcement of those specifications.**
2. Member States shall also ~~make efforts to~~ cooperate in respect of the priority areas, insofar as no specifications have been adopted **with regard to those priority areas.**
3. **Member States shall also cooperate, where necessary with relevant stakeholders, on operational aspects of the implementation of and compliance with the specifications adopted by the Commission, such as standards and EU harmonised profiles, common definitions, common metadata, common quality requirements and aspects related to the interoperability of National Access Points' architectures, common data exchange conditions, as well as common training and outreach activities.**

Article 6

Specifications

1. The Commission shall first adopt the specifications necessary to ensure the compatibility, interoperability and continuity for the deployment and operational use of ITS for the priority actions.

2. The Commission shall aim at adopting specifications for one or more of the priority actions by 27 February 2013.

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.

3. Once the necessary specifications for the priority actions have been adopted, the Commission shall adopt specifications ensuring compatibility, interoperability and continuity for the deployment and operational use of ITS for other actions in the priority areas.

4. Where relevant, and depending on the area covered by the specification, the specification shall include one or more of the following types of provisions:

- (a) functional provisions that describe the roles of the various stakeholders and the information flow between them;

- (b) technical provisions that provide for the technical means to fulfil the functional provisions;
- (c) organisational provisions that describe the procedural obligations of the various stakeholders;
- (d) service provisions that describe the various levels of services and their content for ITS applications and services.

5. Without prejudice to the procedures ~~under Directive 98/34/EC~~ **set out by Directive (EU) 2015/1535 of the European Parliament and of the Council***, the specifications shall, where appropriate, stipulate the conditions in which Member States may, after notification to the Commission, establish additional rules for the provision of ITS services on all or part of their territory, provided that those rules do not hinder interoperability.

6. The specifications shall, where appropriate, be based on any standards referred to in Article 8.

The specifications shall, as appropriate **and in particular where justified in the interest of safety and interoperability, include rules on** ~~provide for~~ conformity assessment **and market surveillance, including a safeguard clause,** in accordance with Decision No 768/2008/EC.

The specifications shall comply with the principles set out in Annex II.

7. The Commission shall conduct an impact assessment including a cost-benefit analysis prior to the adoption of the specifications.

*** Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17.9.2015, p. 1).**

Article 6a

Availability of data

Member States shall ensure that for each data type listed in Annex III, data is available for the geographical coverage relative to such data type as early as possible and no later than the respective date set out in that Annex.

Member States shall ensure the accessibility of that data on the National Access Points by the same date.

Article 6b

Deployment of ITS services

Member States shall ensure that the ITS services specified in Annex IV are deployed for the geographical coverage set out in that Annex by the date specified therein.

Article 7

Delegated acts

1. The Commission may adopt delegated acts in accordance with Article 290 of the TFEU as regards specifications. When adopting such delegated acts the Commission shall act in accordance with the relevant provisions of this Directive, in particular Article 6 and Annex II.

1a. Following a cost-benefit analysis and an impact assessment including appropriate consultations, the Commission is empowered to adopt delegated acts in accordance with Article 12 to amend the list of data types in Annex III, including the date of implementation and the geographical coverage for each data type. Those amendments shall be consistent with the data categories set out in the latest working programme adopted in accordance with Article 17(5).

1b. Following a cost-benefit analysis taking due account of market developments and technology evolution and an impact assessment including appropriate consultations, the Commission is empowered to adopt delegated acts in accordance with Article 12 to amend the list of ITS services in Annex IV, including the date of implementation and the geographical coverage for each ITS service. Those amendments shall be consistent with the list of ITS services set out in the latest working programme adopted in accordance with Article 17(5).

2. A separate delegated act shall be adopted for each of the priority actions.

3. For the delegated acts referred to in this Article, the procedure set out in Articles ~~12, 13 and 14~~ shall apply.

Article 7a

Interim measures

In the event of an emergency situation having a severe direct impact on road safety, cyber security or the availability and integrity of ITS services, and which may compromise the safe and proper functioning of the Union transport system, in order to remedy that situation the Commission may adopt immediately applicable implementing acts suspending or establishing obligations within the scope of the priority areas set under Article 2. Those implementing acts shall be adopted in accordance with the procedure referred to in Article 15(3). They shall be strictly limited to addressing the causes and consequences of such emergency situations.

Article 8

Standards

1. The necessary standards to provide for interoperability, compatibility and continuity for the deployment and operational use of ITS shall be developed in the priority areas and for the priority actions. To that effect, the Commission, after having consulted the Committee referred to in Article 15, shall request the relevant standardisation bodies in accordance with the procedure laid down in Directive 98/34/EC **(EU) 2015/1535** to make every necessary effort to adopt these standards rapidly.

2. When issuing a mandate to the standardisation bodies, the principles set out in Annex II shall be observed as well as any functional provision included in a specification adopted in accordance with Article 6.

Article 9

Non-binding measures

The Commission may adopt guidelines and other non-binding measures to facilitate Member States' cooperation relating to the priority areas in accordance with the advisory procedure referred to in Article 15(2).

Article 10

Rules on data protection and privacy, security and re-use of information

~~1. 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.~~

~~2. In particular, Member States shall ensure that personal data are protected against misuse, including unlawful access, alteration or loss.~~

~~3. Without prejudice to paragraph 1, in order to ensure privacy, the use of anonymous data shall be encouraged, where appropriate, for the performance of the ITS applications and services.~~

~~Without prejudice to Directive 95/46/EC personal data shall only be processed insofar as such processing is necessary for the performance of ITS applications and services.~~

~~4. With regard to the application of Directive 95/46/EC and in particular where special categories of personal data are involved, Member States shall also ensure that the provisions on consent to the processing of such personal data are respected.~~

~~5. Directive 2003/98/EC shall apply.~~

Where specifications adopted pursuant to Article 6 concern the processing of traffic, travel or road data that are personal data as defined in Article 4, point (1) of Regulation (EU) 2016/679*, they shall lay down the categories of those data and provide for appropriate personal data protection safeguards pursuant to Regulation (EU) 2016/679 and Directive 2002/58/EC. Where appropriate, the use of anonymous data shall be encouraged.

*** Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).**

Article 10a

EU C-ITS security credential management system

The specifications for the priority area referred to in Article 2(1), point (d), to be adopted by the Commission in the exercise of its powers pursuant to Article 7(1), shall lay down the EU C-ITS security credential management system referred to in point 4.3 of Annex I. That system shall comprise the following roles:

(a) C-ITS certificate policy authority;

(b) C-ITS trust list manager;

(c) C-ITS point of contact.

The Commission shall be responsible for ensuring the execution of those roles.

Article 11

Rules on liability

Member States shall ensure that issues related to liability, concerning the deployment and use of ITS applications and services set out in specifications adopted in accordance with Article 6, are addressed in accordance with Union law, including in particular Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products (OJ L 210, 7.8.1985, p. 29) as well as relevant national legislation.

Article 12

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in Article 7 shall be conferred on the Commission for a period of five years from ~~27 August 2017~~ **[Publication Office: please insert the date of entry into force of this Directive = amending Directive]**. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.
3. The delegation of power referred to in Article 7 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to Article 7 shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 15

Committee procedure

1. The Commission shall be assisted by the European ITS Committee (EIC). **That committee shall be a committee within the meaning of Regulation (EU) No 182/2011 of the European Parliament and of the Council***.
2. Where reference is made to this paragraph, ~~Article 3 and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof~~ **Article 4 of Regulation (EU) No 182/2011 shall apply.**
3. **Where reference is made to this paragraph, Article 8 of Regulation (EU) No 182/2011, in conjunction with Article 5 thereof, shall apply. Implementing acts adopted pursuant to this paragraph shall remain in force until repealed. The Commission shall repeal those acts once the emergency situation has ended or the relevant delegated act supplementing this Directive is amended to remedy the situation, whichever comes first.**
4. **Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.**

Where the opinion of the committee is to be obtained by a written procedure, that procedure shall be terminated without result when, within the time-limit for delivery of the opinion, the chair of the committee so decides or a simple majority of committee members so request.

Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

*** Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).**

Article 16

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.

Article 17

Reporting and working programme

1. Member States shall submit to the Commission by ~~27 August 2011~~ **[Date of entry into force + 12 months]** a report **on the implementation of this Directive and of all delegated acts supplementing this Directive,** on their national activities and projects regarding the priority areas **and on the implementation of Articles 6a and 6b.**

~~2. 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 by the Member States~~ **The Commission shall, by means of implementing acts, lay down the template for the initial and progress reports including a list of key performance indicators to be provided in the reports. Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 15(2).**

3. Following the initial report, Member States shall report every three years on the progress made in the ~~deployment of the actions~~ **implementation of this Directive and of all delegated acts supplementing this Directive, as** referred to in paragraph 1.

4. The Commission shall submit, **18 months after each deadline for Member State reports,** a report ~~every three years~~ to the European Parliament and to the Council on the progress made ~~for~~ **in** 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, of Articles 5 to 11 and Article 16, and shall assess the need to amend this Directive, where appropriate.

~~5. In accordance with the advisory procedure referred to in Article 15(2),~~ **By [Date of entry into force + 12 months],** the Commission shall, **after consulting relevant stakeholders and by means of an implementing act,** adopt a working programme ~~by 27 February 2011. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 15(4).~~ The working programme shall include objectives and dates for its implementation every year ~~and if necessary shall propose the necessary adaptations, as well as the list of data categories and ITS services for which the Commission may adopt delegated acts pursuant to Article 7(1a) and (1b).~~

~~The Commission shall update the working programme related to the actions under Article 6(3) by 10 January 2019 and before each subsequent five year extension of the power to adopt delegated acts in accordance with Article 12(2).~~ **Before each subsequent five-year extension of the power to adopt delegated acts in accordance with Article 12(2), the Commission shall, by means of implementing acts, issue a new working programme. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 15(4).**

[Final provisions of the amending Directive:]

Article 2

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by [Date of entry into force + 18 months] at the latest. They shall forthwith communicate to the Commission the text of those provisions.
When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.
2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 3

Entry into force

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Article 4

Addressees

This Directive is addressed to the Member States.

Done at Strasbourg,

For the European Parliament

The President The President

For the Council

ANNEX I

PRIORITY AREAS AND ACTIONS

(as referred to in Articles 2 and 3)

1. ~~Optimal use of road, traffic and travel data~~ **Information and mobility ITS services**

The specifications and standards for ~~an optimal use of road, traffic and travel data~~ **information and mobility ITS services for passengers** shall include the following:

~~1. Specifications for priority action (a)~~

1.1. Specifications for EU-wide multimodal digital mobility services (including EU-wide multimodal travel information services)

The definition of the necessary requirements to make EU-wide multimodal ~~travel information services~~ **digital mobility services and similar services providing information, booking or purchasing features for more than one transport operator within the same mode of transport** accurate and available across borders to ITS users, based on:

1.1.1. the availability and accessibility of existing and accurate ~~road and real-time traffic multimodal traffic and travel data,~~ used for multimodal ~~travel information~~ **digital mobility services** to ITS service providers without prejudice to safety and transport management constraints;

1.1.2. the facilitation of the electronic data exchange between the relevant public authorities and stakeholders and the relevant ITS service providers, across borders, **in particular through standardised interfaces**;

1.1.3. the timely updating **by the relevant public authorities and stakeholders** of available ~~road and traffic multimodal traffic and travel data,~~ used for multimodal ~~travel information by the relevant public authorities and stakeholders~~ **digital mobility services**;

1.1.4. the timely updating of multimodal travel information, **including information related to booking and purchasing of transport services**, by the ITS service providers.

~~2. Specifications for priority action (b)~~

1.2. Specifications for EU-wide road traffic information and navigation services (including EU-wide real-time traffic information services)

The definition of the necessary requirements to make EU-wide ~~real-time traffic information services~~ **road traffic information and navigation services** accurate and available across borders to ITS users, based on:

1.2.1. the availability and accessibility of existing and accurate road and ~~real-time traffic data,~~ **including real-time traffic data,** used for real-time traffic information to ITS service providers **and other relevant stakeholders, and for use in digital maps,** without prejudice to safety and transport management constraints;

1.2.2. the facilitation of the electronic data exchange between the relevant public authorities, ~~and~~ stakeholders and the relevant ITS service providers, across borders, **including feedback on quality of data;**

1.2.3. the timely updating of available road and traffic data used for real-time traffic information by the relevant public authorities and stakeholders,

1.2.4. the timely updating of real-time traffic **information to road users and other relevant stakeholders** by the ITS service providers.

3. — Specifications for priority actions (a) and (b)

1.3. Specifications for EU-wide multimodal digital mobility services and road traffic information and navigation services

1.3.1 The definition of the necessary requirements for the collection by relevant public authorities and/or, where relevant, by the private sector of road and traffic data (i.e. traffic circulation plans, traffic regulations and recommended routes, notably for heavy goods vehicles) and for their provisioning to ITS service providers, based on:

1.3.1.1. the availability, to ITS service providers, of existing road and traffic data (i.e. traffic circulation plans, traffic regulations and recommended routes) collected by the relevant public authorities and/or the private sector;

1.3.1.2. the facilitation of the electronic data exchange between the relevant public authorities and the ITS service providers **and other relevant stakeholders;**

1.3.1.3. the timely updating, by the relevant public authorities and/or, where relevant, the private sector, of road and traffic data (i.e. traffic circulation plans, traffic regulations and recommended routes);

1.3.1.4. the timely updating, by the ITS service providers, of the ITS services and applications using these road and traffic data.

1.3.2. The definition of the necessary requirements to make road, traffic and ~~transport services~~ **relevant travel and multimodal infrastructure** data used for digital maps accurate and available, where possible, to digital map producers and service providers, based on:

1.3.2.1. the availability of existing road, ~~and traffic~~ **and relevant travel and multimodal infrastructure** data, **including identified access nodes,** used for digital maps to digital map producers and service providers;

1.3.2.2. the facilitation of the electronic data exchange between the relevant public authorities and stakeholders and the private digital map producers and service providers;

1.3.2.3. the timely updating of road and traffic data for digital maps by the relevant public authorities and stakeholders;

1.3.2.4. the timely updating of the digital maps by the digital map producers and service providers.

~~4. — Specifications for priority action (c)~~

~~The definition of minimum requirements, for road safety related ‘universal traffic information’ provided, where possible, free of charge to all users, as well as their minimum content, based on:~~

~~— the identification and use of a standardised list of safety related traffic events (‘universal traffic messages’) which should be communicated to ITS users free of charge,~~

~~— The compatibility and the integration of ‘universal traffic messages’ into ITS services for real time traffic and multimodal travel information.~~

2. **Priority area II: ~~Continuity of traffic and freight~~ Travel, transport and traffic management ITS services**

The specifications and standards for the continuity and interoperability of traffic and freight management services, in particular on the TEN-T network, **travel, transport and traffic management ITS services** shall include the following:

2.1 Specifications for enhanced traffic and incident management services

The definition of the necessary requirements to support and harmonise enhanced traffic and incident management services, based on:

2.1.1. the availability and accessibility of existing and accurate road and traffic data and data on accidents and incidents needed for traffic and incident management services;

2.1.2. the facilitation of electronic data exchange, including freight data, between traffic management centres, traffic information centres, stakeholders and the relevant ITS service providers, across borders, in particular through standardised interfaces;

2.1.3. the timely updating of available road and traffic data and data on accidents and incidents needed for enhanced traffic and incident management services by the relevant stakeholders;

2.1.4. the availability of data and synergies with other initiatives aimed at harmonising and facilitating data sharing¹, as well as supporting multimodality, integration of modes and optimising the modal balance on the European transport network.

2.2. Specifications for mobility management services

The definition of the necessary requirements to support the development of accurate mobility management services by public transport authorities, based on:

2.2.1. the availability and accessibility of existing and accurate road and multimodal travel and traffic data needed for mobility management, to the relevant public authorities without prejudice to data protection requirements;

¹ **Such as Regulation (EU) 2020/1056 of the European Parliament and of the Council of 15 July 2020 on electronic freight transport information (OJ L 249, 31.7.2020, p. 33), and the work pursued by the Digital Transport and Logistics Forum (DTLF).**

2.2.2. the facilitation of electronic data exchange between the relevant public authorities and stakeholders and the relevant ITS service providers, across borders;

2.2.3. the timely updating of available road and multimodal travel and traffic data needed for mobility management by the relevant public authorities and stakeholders.

2.3. EU ITS framework architecture

~~1.~~— Specifications for other actions

~~1.1~~ The definition of the necessary measures to develop an EU ITS framework architecture, addressing specifically ITS-related interoperability, continuity of services and multimodality aspects, ~~including for example multimodal interoperable ticketing, within which Member States and their competent authorities in cooperation with the private sector can develop their own ITS architecture for mobility at national, regional or local level.~~

~~1.2~~ The definition of the minimum necessary requirements for the continuity of ITS services, in particular for cross-border services, for the management of passenger transport across different modes of transport, based on:

— the facilitation of the electronic exchange for traffic data and information across borders, and where appropriate, regions, or between urban and inter-urban areas between the relevant traffic information/control centres and different stakeholders;

— the use of standardised information flows or traffic interfaces between the relevant traffic information/control centres and different stakeholders;

~~1.3.~~ The definition of the minimum necessary requirements for the continuity of ITS services for the management of freight along transport corridors and across different modes of transport, based on:

— the facilitation of the electronic exchange for traffic data and information across borders, and where appropriate, regions, or between urban and inter-urban areas between the relevant traffic information/control centres and different stakeholders;

— the use of standardised information flows or traffic interfaces between the relevant traffic information/control centres and different stakeholders;

2.4. ITS applications and freight transport logistics

~~1.4~~ The definition of the necessary measures in **requirements to support** the realisation of ITS applications **for freight transport logistics, in particular** (notably the tracking and tracing of freight along its journey and across modes of transport) **and other visibility services along its journey and across modes of transport** for freight transport logistics (eFreight), based on:

2.4.1. the availability of relevant ITS technologies to and their use by ITS application developers;

2.4.2. the availability of cargo related data, accessible through other specific data sharing frameworks²;

2.4.3. the integration of positioning results in the traffic management tools and centres.

² **Such as Regulation (EU) 2020/1056.**

~~1.5 The definition of the necessary interfaces to ensure interoperability and compatibility between the urban ITS architecture and the European ITS architecture based on:~~

~~——the availability of public transport, travel planning, transport demand, traffic data and parking data to urban control centres and service providers,~~

~~——the facilitation of the electronic data exchange between the different urban control centres and service providers for public or private transport and through all possible modes of transport,~~

~~——the integration of all relevant data and information in a single architecture.~~

3. **Priority area III: ITS Road safety and security applications ITS services**

The specifications and standards for ITS-road safety and security applications **ITS services** shall include the following:

~~1.——Specifications for priority action (d)~~

3.1. Specifications for the interoperable EU-wide eCall

The definition of the necessary measures for the harmonised provision of an interoperable EU-wide eCall, including:

3.1.1. the availability of the required in-vehicle ITS data to be exchanged;

3.1.2. the availability of the necessary equipment in the emergency call response centres receiving the data emitted from the vehicles,

3.1.3. the facilitation of the electronic data exchange between the vehicles and the emergency call response centres.

~~2.——Specifications for priority action (e)~~

3.2. Specifications for information and reservation services for safe and secure parking places for trucks and commercial vehicles

The definition of the necessary measures to provide ITS based information **and reservation** services for safe and secure parking places for trucks and commercial vehicles, in particular in service and rest areas on roads, based on:

3.2.1. the availability of the road parking information to users,

3.2.2. the facilitation of the electronic data exchange between road parking sites **and spaces**, centres and vehicles;-

~~3.——Specifications for priority action (f)~~

~~The definition of the necessary measures to provide ITS based reservation services for safe and secure parking places for trucks and commercial vehicles based on:~~

~~——the availability of the road parking information to users,~~

~~the facilitation of the electronic data exchange between road parking sites, centres and vehicles,~~

3.2.3. the integration of relevant ITS technologies in both vehicles and road parking facilities to update the information on available parking space for reservation purposes.

3.3. Specifications for road safety related minimum universal traffic information*

The definition of minimum requirements, for road safety related ‘universal traffic information’ provided, where possible, free of charge to all users, as well as their minimum content, based on:

3.3.1. the availability and accessibility of accurate data on safety-related events needed for safety-related traffic information and incident management services;

3.3.2. the deployment or use of the means to detect or identify safety-related conditions;

3.3.3. the identification and use of a standardised list of safety related traffic events (‘universal traffic messages’) which should be communicated to ITS users free of charge;

3.3.4. the compatibility and the integration of ‘universal traffic messages’ into ITS services for real-time traffic and multimodal travel information.

4-3.4. Specifications for other actions

3.4.1. The definition of the necessary measures to support the safety of road users with respect to their on-board Human-Machine-Interface and the use of nomadic devices to support the driving task and/or the transport operation, as well as the security of the in-vehicle communications **which fall outside the scope of Regulation (EU) 2018/858 of the European Parliament and of the Council³, Regulation (EU) No 167/2013 of the European Parliament and of the Council⁴ and Regulation (EU) No 168/2013 of the European Parliament and of the Council⁵.**

3.4.2. The definition of the necessary measures to improve the safety and comfort of vulnerable road users for all relevant ITS applications **which fall outside the scope of Regulation (EU) 2018/858 of the European Parliament and of the Council, Regulation (EU) No 167/2013 of the European Parliament and of the Council and Regulation (EU) No 168/2013 of the European Parliament and of the Council.**

3.4.3. The definition of necessary measures to integrate advanced driver support information systems into vehicles and road infrastructure which fall outside the scope of Directives 2007/46/EC, 2002/24/EC and 2003/37/EC **Regulation (EU) 2018/858 of the European Parliament and of the Council, Regulation (EU) No 167/2013 of the European Parliament and of the Council and Regulation (EU) No 168/2013 of the European Parliament and of the Council.**

*NOTE: this was previously priority action c) under priority area I

³ **Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151, 14.6.2018, p. 1).**

⁴ **Regulation (EU) No 167/2013 of the European Parliament and of the Council of 5 February 2013 on the approval and market surveillance of agricultural and forestry vehicles (OJ L 60, 2.3.2013, p. 1).**

⁵ **Regulation (EU) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles (OJ L 60, 2.3.2013, p. 52).**

3.4.4. The definition of the necessary measures to facilitate the exchange of information between services providers of security ITS applications, such as support to recover stolen vehicles or goods, and relevant public authorities, taking due account of other existing and emerging frameworks aimed at facilitating data sharing in mobility and transport which fall outside the scope of Regulation (EU) 2018/858 of the European Parliament and of the Council, Regulation (EU) No 167/2013 of the European Parliament and of the Council and Regulation (EU) No 168/2013 of the European Parliament and of the Council.

4. Priority area IV: Linking the vehicle with the transport infrastructure ~~Cooperative,~~ connected and automated mobility services

The specifications and standards for linking vehicles with the transport infrastructure, **raising awareness and enabling highly automated mobility services,** shall include the following, **without prejudice to specifications and standards in Regulation (EU) 2018/858 of the European Parliament and of the Council, Regulation (EU) No 167/2013 of the European Parliament and of the Council and Regulation (EU) No 168/2013 of the European Parliament and of the Council:**

~~1. — Specifications for other actions~~

~~1.1 — The definition of necessary measures to integrate different ITS applications on an open in-vehicle platform, based on:~~

~~— the identification of functional requirements of existing or planned ITS applications,~~

~~— the definition of an open-system architecture which defines the functionalities and interfaces necessary for the interoperability/interconnection with infrastructure systems and facilities,~~

~~— the integration of future new or upgraded ITS applications in a ‘plug and play’ manner into an open in-vehicle platform,~~

~~— the use of a standardisation process for the adoption of the architecture, and the open in-vehicle specifications.~~

4.1. The definition of necessary measures to further progress the development and implementation of cooperative (vehicle-vehicle, vehicle-infrastructure, infrastructure-infrastructure) **intelligent transport** systems, based on:

4.1.1. the facilitation of the exchange of data or information between vehicles, **between** infrastructures and between vehicles and infrastructures,

4.1.2. the availability of the relevant data or information to be exchanged to the respective vehicle or road infrastructure parties,

4.1.3. the use of a standardised message format for the exchange of data or information between the vehicle and the infrastructure,

4.1.4. the definition of a communication infrastructure for data or information exchange between vehicles, **between** infrastructures and between vehicles and infrastructures,

4.1.5. the use of standardisation processes to adopt the respective architectures.

4.2. Specifications for services

4.2.1. C-ITS information and warning services based on status data that increase the awareness of transport users of upcoming traffic situations;

4.2.2. C-ITS information and warning services based on observations that further increase the awareness of transport users on upcoming traffic situations, including non-connected transport users;

4.2.3. C-ITS services based on intentions that allow vehicles to deal with complex traffic scenarios and enable highly automated driving;

4.2.4. C-ITS infrastructure services to support automated driving.

4.3. Specifications for the EU C-ITS security credential management system

4.3.1. certificate policy for the management of public key certificates for C-ITS services;

4.3.2. laying down the role of the C-ITS certificate policy authority, the C-ITS trust list manager and the C-ITS point of contact;

4.3.3. security policy for the management of information security in C-ITS.

ANNEX II ^{*})

PRINCIPLES FOR SPECIFICATIONS AND DEPLOYMENT OF ITS

(as referred to in Articles 5, 6, 7 and 8)

The adoption of specifications, the issuing of mandates for standards and the selection and deployment of ITS applications and services shall be based upon an evaluation of needs involving all relevant stakeholders, and shall comply with the following principles. These measures shall:

- (a) **be effective** – make a tangible contribution towards solving the key challenges affecting road transportation in Europe (e.g. reducing congestion, lowering of emissions, improving energy efficiency, attaining higher levels of safety and security including vulnerable road users);
- (b) **be cost-efficient** – optimise the ratio of costs in relation to output with regard to meeting objectives;
- (c) **be proportionate** – provide, where appropriate, for different levels of achievable service quality and deployment, taking into account the local, regional, national and European specificities;
- (d) **support continuity of services** – ensure seamless services across the Union, in particular on the trans-European network, and where possible at its external borders, when ITS services are deployed. Continuity of services should be ensured at a level adapted to the characteristics of the transport networks linking countries with countries, and where appropriate, regions with regions and cities with rural areas;
- (e) **deliver interoperability** – ensure that systems and the underlying business processes have the capacity to exchange data and to share information and knowledge to enable effective ITS service delivery;
- (f) **support backward compatibility** – ensure, where appropriate, the capability for ITS systems to work with existing systems that share a common purpose, without hindering the development of new technologies and while supporting, where relevant, the complementarity with or transition to new technologies;
- (g) **respect existing national infrastructure and network characteristics** – take into account the inherent differences in the transport network characteristics, in particular in the sizes of the traffic volumes and in road weather conditions;
- (h) **promote equality of access** – do not impede or discriminate against access to ITS applications and services by vulnerable road users. Where relevant, be accessible for persons with disabilities in line with the accessibility requirements of Annex I of Directive 2019/882 when the ITS applications and services are meant to interface or provide information to ITS users with disabilities;
- (i) **support maturity** – demonstrate, after appropriate risk assessment, the robustness of innovative ITS systems, through a sufficient level of technical development and operational exploitation;

^{*}) NOTE: the proposal of 14 December 2021 contains a different presentation of this Annex (table form)

(j) ~~deliver quality of timing and positioning – use of satellite based infrastructures, or any technology providing equivalent levels of precision for the purposes of ITS applications and services that require global, continuous, accurate and guaranteed timing and positioning services~~ **ensure the compatibility of ITS applications and services, which rely on timing or positioning, with at least the navigation services provided by the Galileo, including Open Service navigation Message Authentication, when such service becomes available, and the European Geostationary Navigation Overlay Service (‘EGNOS’) systems.**

Where appropriate, ensure that ITS applications and services relying on Earth observation data use Copernicus data, information or services. Other data and services may additionally be used in addition to Copernicus data;

(k) **facilitate inter-modality** – take into account the coordination of various modes of transport, where appropriate, when deploying ITS;

(l) **respect coherence** – take into account existing Union rules, policies and activities which are relevant in the field of ITS, in particular in the field of standardization;

(m) **deliver transparency and trust – ensure transparency of ranking when proposing mobility options to the customers.**

ANNEX III

List of data types

<u>Data type</u>	<u>Geographical coverage</u>	<u>Date</u>
<u>Types of data on regulations and restrictions (as referred to in Commission Delegated Regulation (EU) 2015/962⁶):</u>		
<u>Static and dynamic traffic regulations, where applicable, including:</u> - <u>access conditions for tunnels</u> - <u>access conditions for bridges</u> - <u>speed limits</u> - <u>freight delivery regulations</u> - <u>overtaking bans on heavy goods vehicles</u> - <u>direction of travel on reversible lanes</u>	<u>The trans-European network for roads, other motorways not included in that network and primary roads</u>	<u>31 December 2025</u>
	<u>The entire road network of the EU that is publicly accessible to motorised traffic, with the exception of private roads</u>	<u>31 December 2028</u>
- <u>traffic circulations plans</u>	<u>The entire road network that is publicly accessible to motorised traffic</u>	<u>31 December 2025</u>
- <u>permanent access restrictions</u>	<u>The entire road network that is publicly accessible to motorised traffic</u>	<u>31 December 2025</u>
<u>Types of data on the state of the network (as referred to in Commission Delegated Regulation (EU) 2015/962):</u>		
- <u>road closures</u> - <u>lane closures</u> - <u>roadworks</u> - <u>temporary traffic management measures</u>	<u>The trans-European network for roads, other motorways not included in that network and primary roads</u>	<u>31 December 2025</u>
	<u>The entire road network of the EU that is publicly accessible to motorised traffic, with the exception of private roads</u>	<u>31 December 2028</u>
<u>Types of data on safe and secure parking places for trucks and commercial vehicles (as referred to in Commission Delegated Regulation (EU) No 885/2013⁷):</u>		

⁶ Commission Delegated Regulation (EU) 2015/962 of 18 December 2014 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide real-time traffic information services (OJ L 157, 23.6.2015, p. 21).

⁷ Commission Delegated Regulation (EU) No 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

- <u>static data related to the parking areas</u> - <u>information on safety and equipment of the parking area</u> - <u>dynamic data on availability of parking places including whether a parking is: full, closed or number of free places available.</u>	<u>The trans-European network for roads and other motorways not included in that network</u>	<u>31 December 2025</u>
<u>Data on detected road safety-related events or conditions (as referred to in Commission Delegated Regulation (EU) No 886/2013⁸):</u>		
- <u>temporary slippery road</u> - <u>animal, people, obstacles, debris on the road</u> - <u>unprotected accident area</u> - <u>short-term road works</u> - <u>reduced visibility</u> - <u>wrong-way driver</u> - <u>unmanaged blockage of a road</u> - <u>exceptional weather conditions</u>	<u>The trans-European network for roads and other motorways not included in that network</u>	<u>31 December 2026</u>
<u>Types of multimodal static travel data (as referred to in Commission Delegated Regulation (EU) 2017/1926⁹):</u>		
<u>Location of identified access nodes for all scheduled modes, including information on accessibility of access nodes and paths within an interchange (such as existence of lifts, escalators)</u>	<u>The entire transport network of the EU</u>	<u>31 December 2026</u>

information services for safe and secure parking places for trucks and commercial vehicles (OJ L 247, 18.9.2013, p. 1).

⁸ Commission Delegated Regulation (EU) No 886/2013 of 15 May 2013 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge to users (OJ L 247, 18.9.2013, p. 6).

⁹ Commission Delegated Regulation (EU) 2017/1926 of 31 May 2017 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide multimodal travel information services (OJ L 272, 21.10.2017, p. 1).

ANNEX IV

List of ITS services

<u>Service</u>	<u>Geographical coverage</u>	<u>Date</u>
<u>Road safety-related minimum universal traffic information (SRTI) service (as referred to in Commission Delegated Regulation (EU) No 886/2013)</u>	<u>The trans-European network for roads and other motorways not included in that network</u>	<u>31 December 2026</u>