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REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

Implementation of 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)

{SWD(2019) 373 final}

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1. INTRODUCTION

This report is the second report on the progress made for the implementation of Directive 2010/40/EU[1] (the ITS Directive), providing for an analysis of the functioning and implementation of the Directive since the first progress report, in compliance with Article 17(4) of the Directive. The first report was adopted by the Commission on 21 October 2014[2] and was accompanied by two staff working documents on the implementation of the ITS Action Plan and on the analyses of Member States reports of 2011 and 2012[3].

The ITS Directive provides for a framework for the adoption by the Commission of common EU specifications for actions within four priority areas of the Directive, starting with six priority actions defined in Article 3 of the Directive. The status of the work on these six priority actions is described in Section 2.2.2. of this Report.

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.

This extension has been made through Decision (EU) 2017/2380 amending Directive 2010/40/EU as regards the period for adopting delegated acts[4]. Itextends the power conferred on the Commission to adopt delegated acts for a period of five years, tacitly renewable, from 27 August 2017. It also requests that the Commission updates the working programme related to the actions under Article 6(3) (i.e. actions beyond priority actions as listed in Annex I of the ITS Directive) by 10 January 2019 and before each subsequent five-year extension of the power to adopt delegated acts.

This Report is accompanied by a Commission staff working document on the analysis of the Member States progress reports of 2014 and 2017 submitted pursuant to Article 17(3) of the ITS Directive. The outcome of an ex-post evaluation of the ITS Directive is presented in the Commission staff working document on the evaluation of the ITS Directive.[5]

2. ANALYSIS OF THE IMPLEMENTATION OF DIRECTIVE 2010/40/EU

2.1. 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

1 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 mode of transport - OJ L 207 of 6.8.2010, p. 1.

2 COM (2014) 642 final

3 https://ec.europa.eu/transport/themes/its/road/action_plan/its_reports_en

4 OJ L 340 of 20.12.2018, p.1.

5 SWD(2019)368 and SWD(2019)369

Directive required an update to this working programme, as stipulated in Decision (EU) 2017/2380.

Commission Decision (2018) 8264, adopted on 11 December 2018 and covering the period 2018-2022, updates the working programme in relation to the actions under Article 6(3) of the ITS Directive, i.e. actions in the scope of the four priority areas of the Directive other than the six priority actions. It provides a description and indicative timeline for the new activities the Commission plans to undertake to implement these actions.

2.2. Delegated acts on specifications

2.2.1. Methodology

The specifications were developed in accordance with the Framework Agreement on relations between the European Parliament and the European Commission[6] and the Common Understanding of the European Parliament, Council and Commission on delegated acts[7] and with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making[8], when this Agreement became applicable.

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[9] and the European Data Protection Supervisor, information and invitation of Council and Parliament experts).

As emphasised in the initial report, 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[10] (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.

2.2.2. Achievement of the specifications for priority actions

The six priority actions for the development and use of specifications and standards set out in Article 3 of the ITS Directive and its Annex I have been fully addressed. As noted in the first progress report, the adoption of the three first specifications was fairly straightforward, due to their relatively narrow scope. 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

6 OJ L 304, 20.11.2010, p. 47.

7 http://ec.europa.eu/commission_2010-2014/sefcovic/documents/common_understating_on_delegated_acts.pdf

8 OJ L 123, 12.5.2016, p. 1.

9 http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=1941

10 https://ec.europa.eu/transport/themes/its/news/c-its-deployment-platform_en

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.

Specifications were adopted chronologically as follows[11]:

Priority action (d): on 26 November 2012, i.e. before the indicative target date of 27 February 2013, the Commission adopted Delegated Regulation (EU) No 305/2013 on the harmonised provision for an interoperable EU-wide eCall[12] (see first progress report).

Priority action (c): on 15 May 2013, the Commission adopted Delegated Regulation (EU) No 886/2013 supplementing the ITS Directive with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge to users[13] (see first progress report).

Priority action (e): on 15 May 2013, the Commission adopted Delegated Regulation (EU) No 885/2013 supplementing the ITS Directive with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles[14] (see first progress report).

Priority action (f): The Commission conducted several consultations with Member State experts and the key stakeholders on the provision of reservation services for safe and secure parking places for trucks and commercial vehicles. This led to the conclusion that there was no need for specifications and standards on reservation of parking areas (see first progress report). There is currently no indication that this situation has significantly changed.

Priority action (b): on 18 December 2014, the Commission adopted Delegated Regulation (EU) 2015/962 supplementing the ITS Directive with regard to the provision of EU-wide real-time traffic information services[15]. The specifications are intended to ensure the accessibility, exchange, re-use and update of road and traffic data by road authorities, road operators for the provision of EU-wide real-time traffic information services. As can be seen from this enumeration, the elements regulated are related to the "back office" more than to the services themselves.

Priority action (a): on 31 May 2017, the Commission adopted Delegated Regulation (EU) 2017/1926 supplementing the ITS Directive with regard to the provision of EU-wide multimodal travel information services[16]. Several initiatives were launched in preparing the specifications (1st Smart Mobility Challenge, studies, workshops and public consultations[17]). The Commission also initiated a discussion on a possible initiative on access to multimodal transport data in order to address the challenge of making transport data accessible, covering all modes of transport and mobility services. The first stage of this reflection led to the Commission staff working document 'Roadmap towards delivering EU-wide multimodal travel information, planning and ticketing services' in June 2014, the first step being the adoption of specifications under the ITS Directive. The adopted specifications address both

11 The letters referred to are those of the different points contained in Article 3 of the ITS Directive
12 OJ L 91, 3.4.2013, p. 1.
13 OJ L 247, 18.9.2013, p. 6.
14 OJ L 247, 18.9.2013, p. 1.
15 OJ L 157, 157, 3.6.2015, p.21.
16 OJ L 272, 21.10.2017, p.1.
17 http://ec.europa.eu/transport/themes/its/road/action_plan/promotion_multimodal_planners_en.htm

enabling conditions, such as accessibility of data, and services and provisions for linking travel information services.

2.2.3. Other actions

According to Article 6 of the ITS Directive, the Commission shall adopt specifications for other actions in priority areas, listed in Annex I to the ITS Directive, once the necessary specifications for the priority actions have been adopted.

Work has recently been completed on **C-ITS**. This work was initially based on research projects and many consultations with stakeholders, including the European ITS Committee and the European ITS Advisory Group. It was continued within the C-ITS platform, with the aim of supporting the emergence of a vision shared by all actors involved in the value chain. The two phases (November 2014 — January 2016 and July 2016 — September 2017) of the C-ITS platform[18] addressed the main features of the technical and legal framework necessary for deploying of C-ITS, and provided important stakeholder input for the work on specifications with Member States experts. In parallel, Member States and industry started important initiatives (pre-deployment C-Roads Platform[19] and projects, CAR 2 CAR Communication Consortium) which contributed to common European specifications for vehicle-to-vehicle and vehicle-to-infrastructure communication.

After 14 meetings with Member State experts and intense consultation with public and private stakeholders, the Delegated Regulation on common EU specifications for C-ITS has been adopted by the Commission on 13 March 2019[20]. Nevertheless, this Delegated Act has been rejected by the Council in July 2019.

Another domain for adoption of specifications is 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[21] and intense discussions between stakeholders during the first phase the C-ITS platform[22]. In its Communication [COM(2018)283 final][23] *On the road to automated mobility: An EU strategy for mobility of the future* published on 17 May 2018, 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[24]. This work should also make use of input from a new Commission expert group on business-to-government data sharing[25].

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18 Reports of the two phases available on https://ec.europa.eu/transport/themes/its/c-its_en

19 https://www.c-roads.eu

20 https://ec.europa.eu/transport/themes/its/news/2019-03-13-c-its_en

21 In particular https://ec.europa.eu/transport/sites/transport/files/2017-05-access-to-in-vehicle-data-and-resources.pdf, TRL, May 2017

22 See §8. Working Group 6 of the C-ITS platform report: https://ec.europa.eu/transport/sites/transport/files/themes/its/doc/c-its-platform-final-report-january-2016.pdf

23 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0283

24 In the Communication, the Commission announced also a Recommendation on a data governance framework to enable data sharing and that it would consider further options for a framework for vehicle data sharing to enable fair competition in the provision of services.

25 https://ec.europa.eu/digital-single-market/en/news/commission-appoints-expert-group-business-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.

2.3. Proposals on deployment

2.3.1. The interoperable EU-wide eCall (priority action d)

The legal framework providing for the deployment of the interoperable EU-wide eCall is now in place.

Decision No 585/2014/EU[26], adopted on 3 June 2014, provided for the mandatory deployment, no later than 1 October 2017, of the necessary public safety answering points (PSAPs) infrastructure necessary to receive and handle 112 eCalls in the EU, in accordance with the specifications laid down by Delegated Regulation (EU) No 305/2013. According to the latest information received from the Member States, this deployment is complete, except for one issue (a lack of deployment in a small region).

Regulation (EU) 2015/758[27] establishes the general requirements for the EC type-approval of vehicles in respect of the 112-based eCall in-vehicle systems as well as of 112-based eCall in-vehicle systems, components and separate technical units. It provides for the mandatory fitting of a 112-based eCall in-vehicle system on all new types of M1 (passengers cars) and N1 (light commercial vehicles) vehicles from 31 March 2018 onward. It also acknowledges the vehicle owner's right to use a TPS eCall in-vehicle system providing a similar service, in addition to the 112-based eCall in-vehicle system. In the context of an evaluation report to be submitted by 31 March 2021, the Commission is required to investigate whether the scope of this Regulation should be extended to other categories of vehicles, such as heavy goods vehicles, buses and coaches, powered two-wheelers, and agricultural tractors. This Regulation was complemented by Commission Implementing Regulation (EU) 2017/78[28] and Commission Delegated Regulation (EU) 2017/79[29] which further detail administrative provisions and technical requirements.

[26] OJ L 164, 3.6.2014, p. 6.
[27] OJ L 123, 19.5.2015, p. 77.
[28] OJ L 12, 17.1.2017, p. 26.
[29] OJ L 12, 17.1.2017, p. 44.

2.3.2. Other actions

According to the analysis of the Member States' reports, most Member States have been very active in implementing the first specifications adopted [priority actions (c), (e) and (b)], in particular thanks to EU financial support through the Trans-European Transport Networks (TEN-T) and Connecting Europe Facility (CEF) calls.

Regarding specifications pertaining to priority actions referred to in points (b) and (c) of Article 3 of the ITS Directive[30], 17 Member States + Norway reported that they have set up their National Access Point (NAP), while 5 others are taking action to do so shortly. The deployment of NAPs for specifications (e) is more limited (13 Member States have set up a NAP and/or contributed to the European access point) as several Member States consider that the specifications do not apply on their territory due to the absence of safe and secure parking information services. Given these positive developments, it seems appropriate to continue supporting current Member States' efforts in this way, especially taking also into account that these specifications address primarily the enablers of services, i.e. the accessibility of data, more than the services themselves. A similar reasoning may be applied to specifications (a), which are still in early implementation.

However, beyond the accessibility of data, the question of the availability (i.e. the existence itself of the information in digital format) of data is posed, in particular for very important data types corresponding to the rules for the usage of the infrastructure such as traffic regulations, which are crucial for services such as Intelligent Speed Assistance (ISA) or automated driving, for the whole road transport network. This issue should be studied to assess the need for further action.

2.4. Standards

Several standardisation activities have been addressing the priority areas of the ITS Directive.

The eCall standards referred to in Delegated Regulation (EU) No 305/2013 have been adopted. A minor revision of these standards in order to integrate the outcome of the HeERO pilot projects[31] was finalised in 2015. CEN/TS 16454 on eCall end-to-end conformance testing was also finalised and published in 2015.

Several new eCall-related working items benefiting from EU support have been started by the CEN and/or ETSI and have been approved as new standards or technical specifications, in particular eCall via an ITS station, several technical specifications extending eCall to other categories of vehicle (HGVs and other commercial vehicles, coaches and busses, agricultural/forestry vehicles, powered two wheel vehicles) and eCall High Level Application Protocols (HLAP) using IMS packet switched networks.

Other needs have not yet been addressed, such as physical and operating requirements for aftermarket in-vehicle devices and guidelines on certification of (aftermarket) eCall systems.

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30 Specifications pertaining to the various points of Article 3 of the Directive will be referred to in shorthand hereafter as "specifications (a)", "specifications (b)" etc.

31 www.heero-pilot.eu

In the framework of the standardisation mandate M/453, CEN (TC 278 WG16) and the European Telecommunications Standards Institute ETSI (TC ITS), as well as other standardisation organisations, have provided standards relevant for cooperative ITS. The ITS standardisation work also builds on cooperation between the EU, the USA and other partners working on global harmonisation of ITS standards. This cooperation accelerates standards definition and leads to quicker ITS deployment.

The DATEX II standard for exchanging (real-time) ITS-related information has also been developed and published, while a CEN technical specification (CEN/TS 17268) for the exchange of (static) ITS spatial data was finalised in 2018 in line with the TN-ITS project[32]. These activities are essential for the better exchange of ITS road transport data and for data required for digital maps.

In February 2016, the Commission launched the standardisation mandate M/546 requesting that the European Standardisation Organisations draft new European standards and European standardisation deliverables to support the implementation of Article 8 of the ITS Directive for multimodal information, traffic management and urban logistics in the urban ITS domain. This is expected to be completed in 2021.

Additional standardisation needs falling within the scope of the ITS Directive have been identified and added to the annual updates of the Commission Rolling Plan for ICT standardisation[33] in view of possible future standardisation activities. These include open in-vehicle platform architecture, safe integration and operation of nomadic devices, and a gap analysis with respect to the broad range of services for Cooperative, Connected and Automated Mobility (CCAM)..

2.5. Non-binding measures

2.5.1. Guidelines for reporting by the Member States

Having regard to the experiences gathered, in light of the analysis of the first Member States' ITS progress reports (2014), a common structure for reporting and a list of Key Performance Indicators (KPIs) has been drawn up in cooperation with Member States experts and proposed to Member States, to be used in their 2017 progress reports on a voluntary basis. These complement the guidelines for reporting by Member States under the ITS Directive[34] adopted on 13 July 2011. Detailed information on the usage of these structure and KPIs can be found in the Commission staff working document on the analysis of the Member States' progress reports of 2014 and 2017).

2.5.2. Urban ITS guidelines

As reported in the first progress report, urban ITS guidelines prepared as part of the ITS Action Plan provided input for the Commission staff working document on Mobilising Intelligent Transport Systems for EU cities[35]. Thiswas part of the EU

[32] https://tn-its.eu/

[33] http://ec.europa.eu/growth/industry/policy/ict-standardisation_en

[34] OJ L 193, 23.7.2011, p. 48

[35] https://ec.europa.eu/transport/sites/transport/files/themes/urban/doc/ump/swd(2013)527-communication.pdf

Urban Mobility Package adopted on 17 December 2013[36]. The Commission will carry out an evaluation of this package in 2019.

2.6. Rules on privacy, security and re-use of information

As reported in 2014, provisions related to privacy, data protection, security and re-use of information have been included in specifications where appropriate, clarifing that legislation on privacy and data protection must be complied with. In the same way, the European Data Protection Supervisor has been systematically invited to expert meetings and his opinion duly taken into account.

The protection of personal data was an important consideration when preparing the specifications on C-ITS, as several C-ITS services rely on the transmission of personal data. It was clarified that for C-ITS, the specifications cannot constitute legal basis for the lawful processing of data. This notwithstanding, the C-ITS specifications set requirements for the pseudonymisation of messages as well as considerations in the recitals that support the protection of personal data.

Another important aspect of the specifications on C-ITS, is security of communications. For many C-ITS services, it is essential to ensure the authenticity and integrity of C-ITS messages containing information such as position, velocity and heading. Therefore, through these specifications, one common European C-ITS trust model is established for all C-ITS stations regardless of the communication technologies used.

2.7. Rules on liability

As reported in 2014, provisions related to liability have been included in specifications as relevant, in accordance with Article 11 of the ITS Directive.

Liability being also an important element for C-ITS, due consideration has been given to reference provisions for Community harmonisation legislation for products set out in Annex I of Decision No 768/2008/EC[37] when preparing the specifications. These are not strictly related to liability but they detail the obligations and responsibilities of C-ITS station manufacturers.

2.8. Member State reporting

2.8.1. Report on national activities and projects regarding the priority areas

In accordance with Article 17(3) of the ITS Directive, Member States were required to submit reports to the Commission by 27 August 2014 and by 27 August 2017 on their national activities and projects in priority areas listed in Article 2 of the ITS Directive.

These 2014 and 2017 reports have been analysed in the Commission staff working document 'Analysis of Member States' reports' that accompanies this report.

2.8.2. Main lessons - current trends

Most Member States are actively pursuing work in priority area I (Optimal use of road, traffic and travel data), including EU-funded projects involving many Member

[36] http://europa.eu/rapid/press-release_IP-13-1255_en.htm

[37] Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products.

States (such as Crocodile 2). Many countries also reported that they are developing national journey planners and improving their data collection infrastructure and variable message signs. However, the private sector has initially shown limited willingness to cooperate on access to road safety-related data[38] (specifications (c)).

Member States have also developed a wide range of activities in priority area II (Continuity of traffic and freight management ITS services). These include improving their traffic management systems and continuing cross border-deployment of traffic management services, linking up road and rail transport more effectively, developing multimodal smart/e-ticketing for public transport, or developing innovative tools and online systems for road freight information and management. Almost all Member States were involved in one or more EU-funded projects in this area, such as NEXT-ITS 2, Ursa Major 2, MedTIS2 or Arc Atlantique 2.

Apart from the deployment of the eCall infrastructure and the implementation of specifications (e) on safe and secure truck parking information services, which was also supported by CEF-funded projects, fewer activities have been reported for priority area III (ITS road safety and security applications).Several key large-scale EU-funded ITS projects along CEF corridors (such as Ursa Major 2 or NEXT-ITS 2) relate at least partly to priority area III, however, as they aim in particular to improve the safety of passenger and freight traffic. It should also be noted that many of the cooperative ITS projects reported in priority area IV have a strong focus on safety.

Many new activities have been reported in priority area IV, mainly focused on cooperative ITS, bringing this area more into line with other priority areas in many Member States. CEF-funded projects such as the C-Roads Platform (and associated C-Roads national projects), InterCor and NordicWay brought together many Member States and have helped build cross-border interoperability and standards.

As already underlined in the 2014 report, interoperability and continuity of services has been underpinned by the EU specifications adopted under the ITS Directive.

Many Member States have also set up the NAPs related to the different specifications of the ITS Directive. The following table shows the level of deployment of NAPs at the time of writing of this report. The red colour highlights a lack of information and/or a lack of deployment of the NAPs in several Member States. An up-to-date and detailed list of the NAPs is also available on the Commission's website[39].

Colour code for National Access Points



38 Regarding data generated by vehicles, several Member States initiated in 2017 a Data Task Force involving several public and private stakeholders. On 3 June 2019, a Memorandum of Understanding was signed to work on a Proof of Concept to share road safety related traffic data generated by vehicles. https://www.roundtable-dtf.eu/data-task-force/

39 https://ec.europa.eu/transport/themes/its/road/action_plan/nap_en

Country name	MMTIS National Access Point	RTTI National Access Point	SRTI National Access Point	SSTP National Access Point	SSTP EU Access Point
	Delegated Regulation 1926/2017	Delegated Regulation 962/2015	Delegated Regulation 886/2013	Delegated Regulation 885/2013	Delegated Regulation 885/2013
	(action 'a')	(action 'b')	(action 'c')	(action 'e')	(static data - action 'e')
Austria					
Belgium					
Bulgaria					
Croatia					
Cyprus					
Czech Republic					
Denmark					
Estonia					
Finland					
France					
Germany					
Greece					
Hungary					
Ireland					
Italy					
Latvia					
Lithuania					
Luxembourg					
Malta					
Netherlands					
Norway					
Poland					
Portugal					
Romania					
Slovakia					
Slovenia					
Spain					
Sweden					
United Kingdom					

Many Member States also worked together on common tools related to the accessibility of data and provision of services (e.g. DATEX II profiles, TN-ITS specifications, metadata catalogue, quality framework, self-declaration templates etc.), through CEF-funded projects/programme support actions, or on a voluntary basis. This cooperation should be encouraged and extended in order to support the harmonisation of the digital ITS infrastructure, whose backbone is formed by all the NAPs.

New types of activities have also been reported, such as the use of drones for traffic monitoring, and many Member States reported activities related to self-driving vehicles/autonomous driving. These emerging new ITS themes merit sustained attention, in particular in light of the possible revision of the ITS Directive.

2.9. European ITS Advisory Group

As already reported in 2014, the Commission has systematically asked members of the European ITS Advisory Group for their written opinions on the business and technical aspects of the draft specifications The group has provided valuable comments, which helped draw up final versions of the specifications. Ten physical meetings were organised between March 2012 and September 2018, including

'Friends of ITS' meetings which allowed a more integrated discussion between the Commission, the Member States, industry and other stakeholders.

3. EFFICIENCY AND APPROPRIATENESS OF DIRECTIVE 2010/40/EU AND THE DELEGATION OF POWER

3.1. Efficiency and appropriateness

An extensive evaluation of the effectiveness, efficiency, relevance, coherence and EU added value of Directive 2010/40/EU can be found in the Commission staff working document on the evaluation of the ITS Directive that accompanies this report.

3.2. Exercise of the delegation

Political endorsement

The 2014 report highlighted the difference between the opinions expressed by national experts during the work conducted on the eCall specifications and the positions of the Member States during the political control by the Council. Subsequently adopted specifications for priority actions went more smoothly from that point of view, with general agreement at Council and Parliament level. This may have facilitated the 5-year extension of the power conferred on the Commission to adopt delegated acts and the dialogue with Member States on the development of the updated working programme. On the contrary, the Delegated Regulation supplementing the ITS Directive with regard to the deployment and operational use of C-ITS, adopted by the Commission on 13 March 2019 after extensive and fruitful work with Member State experts, has been rejected by the Council in July 2019.

Questioning the scope of the delegation of power

On 18 December 2013, a Member State referred two delegated Regulations (EU) No 885/2013 (truck parking information services) and (EU) No 886/2013 (road safety-related minimum universal traffic information services) to the General Court of the European Union. It asked for these two delegated regulations to be annulled, arguing that they exceed the limits of the delegation under Directive 2010/40/EU and therefore infringe Article 290 of TFEU, as the delegated acts were introducing obligations that must be fulfilled by all Member States, contrary to the aim of the ITS Directive.

The General Court dismissed this action in October 2015[40], stating that the Commission had not exceeded its power when adopting these delegated acts. It also confirmed the Commission's position with regard to setting up a supervisory body competent to assess compliance through one of the delegated acts.

The Member State lodged an appeal against this Judgment, claiming, in essence, that:

1. the General Court wrongly held that the contested regulations do not require Member States to deploy ITS applications and services in their territory,;

[40] Judgment of the General Court of 8 October 2015 in Cases T-659/13 and T-660/13, Czech Republic v Commission, EU:T:2015:771

2. the General Court had not correctly interpreted the delegation of power in Article 7 of Directive 2010/40/EU as authorising the Commission to require the Member States to establish a supervisory body; and

3. the General Court was wrong to hold that the supervisory body was not an essential element of the matter in question and that it could be the subject of a delegation of power.

On 26 July 2017, the European Court of Justice dismissed the appeal as unfounded[41], thus confirming the Judgment of the General Court and the Commission's position.

The Court thus held that setting up the supervisory body is not an 'essential element' of the matter in question and could therefore be subject of a delegation of power.

3.3. Follow-up of specifications

As already mentioned in the 2014 report, assistance in implementing the specifications was provided through the Connecting Europe Facility (projects such as I_HeERO, Crocodile 2 or C-Roads and programme support actions such as TN-ITS GO[42], DATEX II, MMTIS[43]) and Horizon 2020 funding and by a series of stakeholders initiatives and platforms (EeIP[44], TISA[45], EU-EIP[46], TN-ITS etc).

In order to structure the implementation of specifications in Member States, the Commission organised also several follow-up expert meetings[47] and workshops to discuss implementation issues for all specifications (a), (b), (c), (d) and (e), in particular issues related to setting up the NAPs.

As mentioned in Section 2.8.2., many Member States worked together, on a voluntary basis and/or within EU-funded projects, on the different tools needed to implement the specifications, in particular in relation to quality requirements, metadata, profiling of standards etc.

This work was necessary to complement the specifications with operational elements and was sometimes launched by a small number of Member States, in the absence of any formalised framework. The work would certainly benefit from a better coordination, involving all Member States and covering all specifications, to make best use of this work towards a harmonised ITS digital infrastructure.

4. FINANCIAL RESOURCES USED AND NEEDED

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 NAPs 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

41 Judgment of the Court of 26 July 2017 in Case C-696/15 Czech Republic v Commission, ECLI:EU:C:2017:595.

42 https://tn-its.eu/tn-its-go

43 Multimodal Travel Information Services – grants were allocated to 17 Member States

44 http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2481

45 http://tisa.org/

46 https://eip.its-platform.eu/

47 http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=1941

services and of ITS physical infrastructures themselves, which may prove to be much higher.

Costs linked to the implementation of the ITS Directive are extensively detailed in the 'Support study for the ex-post evaluation of the ITS Directive 2010/40/EU' (Ricardo-TEPR, July 2018) and further discussed in the Commission staff working document on the evaluation of the ITS Directive that accompanies this report.

In addition to the transposition costs borne by the Member States and the costs for the Commission and the Member States arising from meetings of the European ITS Committee (25 meetings by the end of 2018), the European Advisory Group (10 meetings), Member State expert groups (58 meetings to prepare the specifications or follow-up meetings) and the C-ITS platform (8 plenary meetings and ~160 working group meetings), costs related to the implementation of the Directive can be summarised as follows:

- **Creation and operation of NAPs**: average creation costs for NAPs, based on the input of 30% of Member States, range from €249,000 for specifications (b) to €352,000 for specifications (c). Average annual operation costs range from €29,000 for specifications (c) to €46,000 for specifications (b). Regarding specifications (a), only 3 Member States provided data, which shows an average creation cost of € 195,000 and €22,000 for annual operation cost. These costs are only average values, and the individual values for each Member State vary considerably, depending in particular on the implementation choices the Member State has made (re-use of existing access points, common access points for several specifications etc), on the technical solutions chosen (e.g. data warehouse, marketplace, repository) and whether or not dynamic data has been included.
- **Development of standards**: the Commission allocated €2.8 million for 2011-2017 to develop standards for eCall and the two mandates M/453 (C-ITS) and M/546 (Urban ITS). Additional funding has been allocated for standards related to specifications (e.g. technical specifications for the exchange of spatial ITS data) and for the profiling of standards through CEF projects or Programme Support Actions. This work on standardisation will continue, in particular under the Commission Rolling Plan for ICT standardisation.
- **Programme Support Actions (PSAs) from the CEF**: several CEF PSAs for a total of €15.5 million were launched to support the implementation of the specifications. These cover procedures and standards for the exchange of data (TN-ITS GO for ITS spatial data, DATEX II for traffic data, NeTEx for public transport, MMTIS) and a security architecture for C-ITS, allowing many Member States to develop common implementation tools.
- Regarding **eCall**, in addition to previous pre-deployment pilot projects, €39 million were invested in two CEF-funded projects (€18,7 million of which were EU funds) involving 18 Member States. These costs go beyond the creation or upgrade of the PSAPs infrastructure necessary to receive and handle eCalls, and also include forward-looking activities related for example to the extension to cover additional types of vehicles.

Additional costs to note are consultancy studies for the Commission (€2.1 million for 2010-2017), the organisation of events around ITS (€1.6 million for 2010-2017), and costs for monitoring and enforcement for the Commission and the Member States.

As reported in the 'Support study for the ex-post evaluation of the ITS Directive 2010/40/EU' (Ricardo-TEPR, July 2018), investments in R&D (FP7 and Horizon 2020) and deployment (TEN-T and CEF, ESIF) are much higher than these implementation costs, in a ratio of around 100 to 1. As one of the main objectives of the specifications developed under the ITS Directive is to facilitate and harmonise access to data to be re-used to develop ITS services, costs related to implementing the Directive seem to be reasonable, as do those related to the harmonised provision of services themselves, e.g. for eCall and C-ITS. These costs-benefits issues are discussed in more detail in the Commission staff working document on the evaluation of the ITS Directive that accompanies this report.

5. CONCLUSION

The six priority actions of the ITS Directive have been fully addressed. New activities under the ITS Directive have begun, the right to adopt delegated acts has been extended in time and the adoption on 11 December 2018 of the updated working programme of the ITS Directive will guide future work for the coming years.

Most Member States are actively implementing the specifications which underpin the deployment of ITS services. NAPs 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.