



Brussels, 13.8.2019  
C(2019) 5960 final

**COMMISSION DELEGATED REGULATION (EU) .../...**

**of 13.8.2019**

**supplementing and amending Directive 2014/94/EU of the European Parliament and of the Council as regards recharging points for L-category motor vehicles, shore-side electricity supply for inland waterway vessels, hydrogen supply for road transport and natural gas supply for road and waterborne transport and repealing Delegated Regulation (EU) 2018/674**

(Text with EEA relevance)

## EXPLANATORY MEMORANDUM

### CONTEXT OF THE DELEGATED ACT

Directive 2014/94/EU empowers the Commission to:

- (a) adopt delegated acts in accordance with Article 8 to supplement or update Article 4 and points 1.3, 1.4, 1.5, 1.6, 1.7 and 1.8 of Annex II;
- (b) update the references to the standards referred to in the technical specifications set out in point 2 of Annex II;
- (c) supplement Article 6 and update the references to the standards referred to in the technical specifications set out — or to be set out — in point 3 of Annex II.

To implement the provisions of Directive 2014/94/EU, and pursuant to Article 10(1) of Regulation (EU) No 1025/2012<sup>1</sup>, the European Commission has given a mandate to the ESOs<sup>2</sup> to develop and adopt appropriate European standards (ENs), or to amend the existing ones. This mandate allows the ENs to establish technical specifications for interoperability with a single solution. The mandate says that these specifications should be based on existing international standards where possible.

Different Commission delegated regulations are to be adopted after the ESOs adopt the relevant standards. The delegated regulations are to provide for transitional periods of at least 24 months before the relevant technical specifications or their amended versions become binding on infrastructure to be deployed or renewed.

Commission Delegated Regulation (EU) 2018/674 of 17 November 2017 supplementing Directive 2014/94/EU of the European Parliament and of the Council as regards recharging points for L-category motor vehicles, shore-side electricity supply for inland waterway vessels and refuelling points for LNG for waterborne transport, and amending that Directive as regards connectors for motor vehicles for the refuelling of gaseous hydrogen, which is repealed by this Commission Delegated Regulation, was adopted by the Commission on 17 November 2017.

The present Commission Delegated Regulation reflects updates to the above-mentioned Commission Delegated Regulation made following requests by some Member States and the new developments generated by the European Committee for Standardization (CEN) on standards for natural gas and hydrogen supply.

## 2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT

The Member State experts of the Sustainable Transport Forum were consulted at different stages of the preparation of the Commission Delegated Regulation.

The European standardisation organisation CEN/CENELEC and the Central Commission for Navigation of the Rhine (CCNR) confirmed their agreement with the text proposed.

---

<sup>1</sup> OJ L 316, 14.11.2012, p. 12.

<sup>2</sup> M/533 Commission Implementing Decision C(2015) 1330 of 12.3.2015.

### **3. LEGAL ELEMENTS OF THE DELEGATED ACT**

This Commission Delegated Regulation repeals Commission Delegated Regulation (EU) 2018/674 of 17 November 2017, and supplements and amends Directive 2014/94/EU in accordance with Article 8 of this latter Directive.

A regulation is the most appropriate legal instrument for this delegated act as it amends the existing Regulation and does not call for national transposition measures, therefore ensuring a higher degree of harmonisation and swift entry into force.

COMMISSION DELEGATED REGULATION (EU) .../...

of 13.8.2019

**supplementing and amending Directive 2014/94/EU of the European Parliament and of the Council as regards recharging points for L-category motor vehicles, shore-side electricity supply for inland waterway vessels, hydrogen supply for road transport and natural gas supply for road and waterborne transport and repealing Delegated Regulation (EU) 2018/674**

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure<sup>3</sup>, and in particular Article 4(14), Article 5(3) and Article 6(11) thereof,

Whereas:

- (1) Commission standardisation work aims to ensure that technical specifications for the interoperability of recharging and refuelling points are specified in European or international standards by identifying the required technical specifications taking into account existing European standards and related international standardisation activities.
- (2) Pursuant to Article 10(1) of Regulation (EU) No 1025/2012 of the European Parliament and of the Council<sup>4</sup>, the Commission requested<sup>5</sup> the European Committee for Standardisation (CEN) and the European Committee for Electrotechnical Standardisation (CENELEC) to develop and adopt appropriate European standards, or to amend existing European standards, for electricity supply for road, maritime transport and inland navigation; hydrogen supply for road transport; natural gas, including biomethane supply for road, maritime transport and inland navigation.
- (3) The standards developed by CEN and CENELEC have been accepted by the European industry, in order to ensure Union-wide mobility with vehicles and vessels running on different fuels. CEN and CENELEC recommended to the Commission to include those standards into the Union legal framework. Technical specifications referred to in Annex II to Directive 2014/94/EU should be supplemented or amended accordingly.

---

<sup>3</sup> OJ L 307, 28.10.2014, p. 1.

<sup>4</sup> 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).

<sup>5</sup> M/533 Commission Implementing Decision C(2015) 1330 final of 12 March 2015 on a standardisation request addressed to the European standardisation organisations, in accordance with Regulation (EU) No 1025/2012 of the European Parliament and of the Council, to draft European standards for alternative fuels infrastructure.

- (4) Provisions for “interoperability” in the context of this Delegated Regulation strictly refer to the capacity of recharging and refuelling stations to supply energy that is compatible with all vehicle technologies in order to allow seamless EU-wide use of alternative fuels vehicles.
- (5) CEN and CENELEC informed the Commission of the standards recommended to be applied to recharging points for L-category motor vehicles. The standards EN 62196-2 ‘Plugs, socket-outlets, vehicle connectors and vehicle inlets. Conductive charging of electric vehicles. Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories’ and IEC 60884-1 ‘Plugs and socket-outlets for household and similar purposes – Part 1: General requirements’ should apply to those recharging points. Therefore, point 1.5 of Annex II to Directive 2014/94/EU should be supplemented accordingly.
- (6) CEN and CENELEC informed the Commission of the standards recommended to be applied to shore–side electricity supply for inland waterway vessels. The standards EN 15869-2 ‘Inland navigation vessels - Electrical shore connection, three phase current 400 V, up to 63 A, 50 Hz - Part 2: Onshore unit, safety requirements (in process of being amended to increase amperage from 63 to 125)’ and EN 16840 ‘Inland navigation vessels – Electrical shore connection, three phase current 400 V, at least 250 A, 50 Hz’ should apply to that electricity supply. Therefore, point 1.8 of Annex II to Directive 2014/94/EU should be supplemented accordingly.
- (7) CEN and CENELEC informed the Commission of the standards recommended to be applied to compressed natural gas (CNG) fuelling stations. The European standard EN ISO 16923 ‘Natural gas fuelling stations – CNG stations for fuelling vehicles’, covers the design, construction, operation, inspection and maintenance of stations for fuelling CNG to vehicles, including equipment, safety and control devices. This European standard also applies to portions of a refuelling station where natural gas is in a gaseous state and dispensing CNG derived from liquefied natural gas (L-CNG) according to EN ISO 16924. It also applies to biomethane, upgraded coal-bed methane (CBM) and gas supplies coming from LNG vaporization (on-site or off-site). The elements of the standard EN ISO 16923 ensuring the interoperability of the CNG refuelling stations and the vehicles should apply to CNG refuelling points. Therefore, point 3.4 of Annex II to Directive 2014/94/EU should be supplemented accordingly.
- (8) CEN and CENELEC informed the Commission of the standards recommended to be applied to liquefied natural gas (LNG) fuelling stations. The European standard EN ISO 16924 ‘Natural gas fuelling stations – LNG stations for fuelling vehicles’, in its current version, covers the design, construction, operation, maintenance and inspection of stations for fuelling liquefied natural gas (LNG) to vehicles, including equipment, safety and control devices. This European standard also specifies the design, construction, operation, maintenance and inspection of fuelling stations for using LNG as an onsite source for fuelling CNG to vehicles (L-CNG fuelling stations), including safety and control devices of the station and specific L-CNG fuelling station equipment. The European standard covers fuelling stations having the following characteristics: private access; public access (self-service or assisted); metered dispensing and non-metered dispensing; fuelling stations with fixed LNG storage; fuelling stations with mobile LNG. The European standard EN ISO 12617 ‘Road vehicles – Liquefied natural gas (LNG) refuelling connector – 3,1 MPa connector’ in its current version, specifies liquefied natural gas (LNG) refuelling nozzles and receptacles constructed entirely of new and unused parts and materials for road vehicles powered by LNG. An LNG refuelling connector consists of, as applicable, the

receptacle and its protective cap (mounted on the vehicle) and the nozzle. This European standard is applicable only to such devices designed for a maximum working pressure of 3.4 MPa (34 bar) to those using LNG as vehicle fuel and having standardized mating components. The elements of the standard EN ISO 16924 ensuring the interoperability of the LNG refuelling stations and the standard EN ISO 12617 defining the specifications for connectors should apply to LNG refuelling points. Therefore, point 3.2 of Annex II to Directive 2014/94/EU should be supplemented accordingly.

- (9) CEN and CENELEC informed the Commission of the standards recommended to be applied to refuelling points for inland waterway vessels or sea-going ships. The European standard EN ISO 20519 ‘Ships and marine technology – Specification for bunkering of liquefied natural gas fuelled vessels’ is differentiated for refuelling points for seagoing ships and inland navigation vessels. For seagoing ships, which are not covered by the International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), the refuelling points for LNG should comply with standard EN ISO 20519. However, for inland navigation vessels, the refuelling points for LNG should comply with standard EN- ISO 20519 (parts 5.3 to 5.7) for interoperability purposes only. The European standard EN ISO 20519 should apply for refuelling points for seagoing ships and the same European standard (parts 5.3 to 5.7) should apply for refuelling points for inland waterway vessels. Therefore, point 3.1 of Annex II to Directive 2014/94/EU should be supplemented accordingly.
- (10) CEN and CENELEC informed the Commission of the standard recommended to be applied to hydrogen refuelling points dispensing gaseous hydrogen and filling protocols. The European standard EN 17127 ‘Outdoor hydrogen refuelling points dispensing gaseous hydrogen and incorporating filling protocols’, in its current version, covers the interoperability of design, construction, operation, inspection and maintenance of stations for fuelling gaseous hydrogen to vehicles. The interoperability requirements described in standard EN 17127 should apply for hydrogen refuelling points as well as the same European standard should apply for the relevant filling protocols. Therefore, points 2.1 and 2.3 of Annex II to Directive 2014/94/EU should be amended accordingly.
- (11) CEN and CENELEC informed the Commission of the standard recommended to be applied to define the quality characteristics of hydrogen dispensed by hydrogen refuelling points for road vehicles. The European standard EN 17124 ‘Hydrogen fuel - Product specification and quality assurance - Proton exchange membrane (PEM) fuel cell applications for road vehicles’, in its current version, covers the quality characteristics of hydrogen fuel and the corresponding quality assurance in order to ensure uniformity of the hydrogen product as dispensed for utilization in proton exchange membrane (PEM) fuel cell road vehicle systems. The European standard EN 17124, defining the quality characteristics of hydrogen dispensed by hydrogen refuelling points, should apply. Therefore, point 2.2 of Annex II to Directive 2014/94/EU should be amended accordingly.
- (12) CEN and CENELEC informed the Commission that the European standard EN ISO 17268 ‘Gaseous hydrogen land vehicle refuelling connection devices’ was recommended to be applied to connectors for motor vehicles for the refuelling of gaseous hydrogen. It is hence important to conclude the process of the certification of connectors for the refuelling of motor vehicles with gaseous hydrogen according to standard EN ISO 17268. When this process is concluded, connectors for motor vehicles for the refuelling of gaseous hydrogen should comply with standard EN ISO

17268. Therefore, point 2.4 of Annex II to Directive 2014/94/EU should be amended accordingly.

- (13) CEN and CENELEC informed the Commission that the European standard EN ISO 14469 ‘Road vehicles – Compressed natural gas (CNG) refuelling connector’ should apply to CNG connectors/receptacles. Therefore, point 3.3 of Annex II to Directive 2014/94/EU should be amended accordingly.
- (14) The ‘Expert Group Sustainable Transport Forum’ and the Central Commission for Navigation of the Rhine (CCNR) were consulted and provided their advice on the European standards that are the subject of this Commission Delegated Regulation.
- (15) The Commission should supplement and amend Directive 2014/94/EU accordingly with the references to the European standards developed by CEN and CENELEC.
- (16) When new technical specifications identified in Annex II to Directive 2014/94/EU are to be established, updated or supplemented through Commission Delegated Regulations, a transition period of 24 months is to apply.
- (17) This Regulation should incorporate updates made following requests by some Member States as regards recharging points for L-category motor vehicles, shore-side electricity supply for inland waterway vessels and refuelling points for LNG for waterborne transport, and the new developments generated by CEN and CENELEC on standards for natural gas and hydrogen's supply. Commission Delegated Regulation (EU) 2018/674 should therefore be repealed,

HAS ADOPTED THIS REGULATION:

#### *Article 1*

##### *Recharging points for L-category motor vehicles*

For recharging points for L-category motor vehicles, referred to in point 1.5 of Annex II to Directive 2014/94/EU, the following technical specifications shall apply:

- 1. The publicly accessible alternating current (a.c.) recharging points reserved for L-category electric vehicles up to 3.7 kVA shall be equipped, for interoperability purposes, with at least one of the following:
  - a) Socket-outlets or vehicle connectors of Type 3A as described in standard EN 62196-2 (for Mode 3 charging);
  - b) Socket-outlets compliant with IEC 60884-1 (for Mode 1 or Mode 2 charging).
- 2. The publicly accessible alternating current (a.c.) recharging points reserved for L-category electric vehicles above 3.7 kVA shall be equipped, for interoperability purposes, with at least socket-outlets or vehicle connectors of Type 2 as described in standard EN 62196-2.

#### *Article 2*

##### *Shore-side electricity supply for inland waterway vessels*

For shore-side electricity for inland waterway vessels, referred to in point 1.8 of Annex II to Directive 2014/94/EU, the following technical specification shall apply:

The shore-side electricity supply for inland waterway vessels shall comply with standard EN 15869-2 or standard EN 16840 depending on energy requirements.

### *Article 3*

#### *Compressed natural gas (CNG) refuelling points for motor vehicles*

For compressed natural gas (CNG) refuelling points, referred to in point 3.4 of Annex II to Directive 2014/94/EU, the following technical specifications shall apply:

The fuelling pressure (service pressure) shall be 20, 0 MPa gauge (200 bar) at 15 °C. A maximum fuelling pressure of 26, 0 MPa with ‘temperature compensation’ is allowed as addressed in standard EN ISO 16923, ‘Natural gas fuelling stations – CNG stations for fuelling vehicles’.

### *Article 4*

#### *Liquefied natural gas (LNG) refuelling points for motor vehicles*

For liquefied natural gas (LNG) refuelling points for motor vehicles, referred to in point 3.2. of Annex II to Directive 2014/94/EU, the following technical specifications shall apply:

The fuelling pressure shall be lower than the maximum allowable working pressure of the vehicle tank as addressed in EN ISO 16924, ‘Natural gas fuelling stations – LNG stations for fuelling vehicles’.

The connector profile shall apply standard EN ISO 12617 ‘Road vehicles – Liquefied natural gas (LNG) refuelling connector – 3,1 MPa connector’.

### *Article 5*

#### *Refuelling points for inland waterway vessels or sea-going ships*

For refuelling points for inland waterway vessels or sea-going ships, referred to in point 3.1 of Annex II to Directive 2014/94/EU, the following technical specifications shall apply:

For seagoing ships, which are not covered by the International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), the refuelling points for LNG shall comply with standard EN ISO 20519.

For inland navigation vessels, the refuelling points for LNG shall comply with standard EN ISO 20519 (parts 5.3 to 5.7) for interoperability purposes only.

### *Article 6*

Annex II to Directive 2014/94/EU is amended as follows:

point 2.1 is replaced by the following:

‘2. 1. Outdoor hydrogen refuelling points dispensing gaseous hydrogen used as fuel on board motor vehicles shall comply with the interoperability requirements described in standard EN 17127 “Outdoor hydrogen refuelling points dispensing gaseous hydrogen and incorporating filling protocols”.’;

point 2.2 is replaced by the following:

‘2.2. The quality characteristics of hydrogen dispensed by hydrogen refuelling points for motor vehicles shall comply with the requirements described in standard EN 17124, “Hydrogen fuel - Product specification and quality assurance - Proton exchange



membrane (PEM) fuel cell applications for road vehicles”, the methods to ensure that the hydrogen quality is met are also described in the standard.’;

point 2.3 is replaced by the following:

‘2.3. The fuelling algorithm shall comply with the requirements of standard EN 17127, “Outdoor hydrogen refuelling points dispensing gaseous hydrogen and incorporating filling protocols”.’;

point 2.4 is replaced by the following:

‘2.4. Once concluded the processes of certification of standard EN ISO 17268 connectors, connectors for motor vehicles for the refuelling of gaseous hydrogen shall comply with standard EN ISO 17268 “Gaseous hydrogen land vehicle refuelling connection devices”.’;

point 3.3 is replaced by the following:

‘3.3. The connector profile shall comply with the requirements in standard EN ISO 14469 “Road vehicles - Compressed natural gas (CNG) refuelling connector”.’.

#### *Article 7*

Commission Delegated Regulation (EU) 2018/674 is repealed.

#### *Article 8*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*. It shall apply from [OP: Please insert the date 24 months after the date of entry into force].

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 13.8.2019

*On behalf of the President*  
*The President*  
*Jean-Claude JUNCKER*