Commission Implementing Regulation (EU) 2018/868 of 13 June 2018 amending Regulation (EU) No 1301/2014 and Regulation (EU) No 1302/2014 as regards provisions on energy measuring system and data collecting system (Text with EEA relevance)

COMMISSION IMPLEMENTING REGULATION (EU) 2018/868

of 13 June 2018

amending Regulation (EU) No 1301/2014 and Regulation (EU) No 1302/2014 as regards provisions on energy measuring system and data collecting system

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union[(1)], and in particular Article 5(11) thereof,

Whereas:

(1) Article 19 of Regulation (EU) 2016/796 of the European Parliament and of the Council[(2)] requires the European Union Agency for Railways (the 'Agency') to address recommendations to the Commission on the technical specifications for interoperability ('TSIs') and their revision, in accordance with Article 5 of Directive (EU) 2016/797, and to ensure that TSIs are adapted to technical progress, market trends and social requirements.

(2) Article 3(5)(c) of Commission Delegated Decision (EU) 2017/1474[(3)] requires TSIs to be reviewed in order to close the remaining open points.

(3) On 22 September 2017, the Commission requested the Agency to issue recommendations pursuant to Article 5 paragraph 2 of Directive (EU) 2016/797 for the revision of the TSIs relating to the 'energy' subsystem of the rail system in the Union ('ENE TSI'), and the TSI relating to the 'rolling stock — locomotives and passenger rolling stock' subsystem of the rail system in the Union ('LOC&PAS TSI').

(4) The Annex to Commission Regulation (EU) No 1301/2014[(4)] should be amended in order to close the open point addressing the specification related to interface protocols between energy measuring system ('EMS') and data collecting system and to improve the clarity of the text.

(5) The Annex to Commission Regulation (EU) No 1302/2014[(5)] related to EMS should be amended in order to ensure coherence between the two TSIs.

(6) On 4 October 2017, the Agency issued a recommendation on the amendments to the Regulation (EU) No 1301/2014.

Changes to legislation: *Commission Implementing Regulation (EU) 2018/868 is up to date with all changes known to be in force on or before 15 December 2020. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

(7) On 14 November 2017, the Agency issued a recommendation on the amendments to the Regulation (EU) No 1302/2014, covering among others the provisions related to EMS.

(8) The measures provided for in this Regulation are in accordance with the opinion of the Committee established in accordance with Article 51(1) of Directive (EU) 2016/797,

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EU) No 1301/2014 is amended as follows:

(1) the last sentence in recital 6 is deleted;

(2) Article 3 is deleted;

(3) in Article 9, paragraph 4 is replaced by the following:

4. In addition to the implementation of the on-ground energy data collecting system (DCS) defined in point 7.2.4 of the Annex and without prejudice to provisions of point 4.2.8.2.8 of the Annex to Commission Regulation (EU) No 1302/2014[(6)], Member States shall ensure that an on-ground settlement system capable to receive data from a DCS and accept it for billing is implemented by 4 July 2020. The on-ground settlement system shall be able to exchange compiled energy billing data (CEBD) with other settlement systems, validate the CEBD and allocate the consumption data to the correct parties. This shall be done by taking into account the relevant legislation concerning the energy market.;

(4) the Annex to Regulation (EU) No 1301/2014 is amended in accordance with the Annex I to this Implementing Regulation.

Article 2

The Annex to Regulation (EU) No 1302/2014 is amended in accordance with Annex II to this Implementing Regulation.

Article 3

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

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

Done at Brussels, 13 June 2018.

For the Commission

The President

Jean-Claude JUNCKER

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ANNEX I

The Annex to Regulation (EU) No 1301/2014 is amended as follows:

(1) point 2.1(3) is replaced by the following:

(3) In accordance with Annex II, Section 2.2 of Directive 2008/57/EC, the trackside of the electricity consumption measuring system, referred to in this TSI as on-ground energy data collecting system, is set out in point 4.2.17 of this TSI.;

(2) the title of point 4.2.5 replaced by the following:
4.2.5.*Current at standstill (DC systems only);*

(3) the first paragraph of point 4.2.13 is replaced by the following:

The overhead contact line shall be designed for a minimum of two pantographs operating adjacently. The design spacing of the two adjacent pantograph heads, centre line to centre line, shall be equal or lower than values set out in one column "A", "B", or "C" selected from Table 4.2.13:;

(4) in point 4.2.13, Table 4.2.13, first row, the word 'Minimum' in the titles of columns is deleted;

(5) point 4.2.17 is replaced by the following:

4.2.17. *On-ground energy data collecting system*

(1) Point 4.2.8.2.8 of LOC & PAS TSI contains the requirements for on-board Energy Measurement Systems (EMS) intended to produce and transmit the Compiled Energy Billing Data (CEBD) to an on-ground energy data collecting system.

(2) The on-ground energy data collecting system (DCS) shall receive, store and export CEBD without corrupting it, in accordance with the requirements quoted in clause 4.12 of EN 50463-3:2017.

(3) The on-ground energy DCS shall support all the data exchange requirements as defined in point 4.2.8.2.8.4 of the LOC&PAS TSI and requirements set out in clauses 4.3.6 and 4.3.7 of EN 50463-4:2017.;

(6) the title of point 5.2.1.6 is replaced by the following:
5.2.1.6.*Current at standstill (DC systems only);*

(7) the title of point 6.1.4.2 is replaced by the following:
6.1.4.2.*Assessment of current at standstill (DC systems only);*

(8) point 6.1.5(c) is replaced by the following:

(c) continuous current rating;;

(9) point 7.2.4 is replaced by the following:

7.2.4. By 1 January 2022, Member States shall ensure that an on-ground energy data collecting system capable to exchange compiled energy billing data in accordance with point 4.2.17 of this TSI is implemented.;

(10) point 7.3.1(d) is replaced by the following:

(d) An existing subsystem may allow the circulation of TSI-compliant vehicles whilst meeting the essential requirements of Directive 2008/57/EC. The procedure to

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be used for the demonstration of the level of compliance with the basic parameters of the TSI shall be in accordance with Commission Recommendation 2014/881/EU[7]

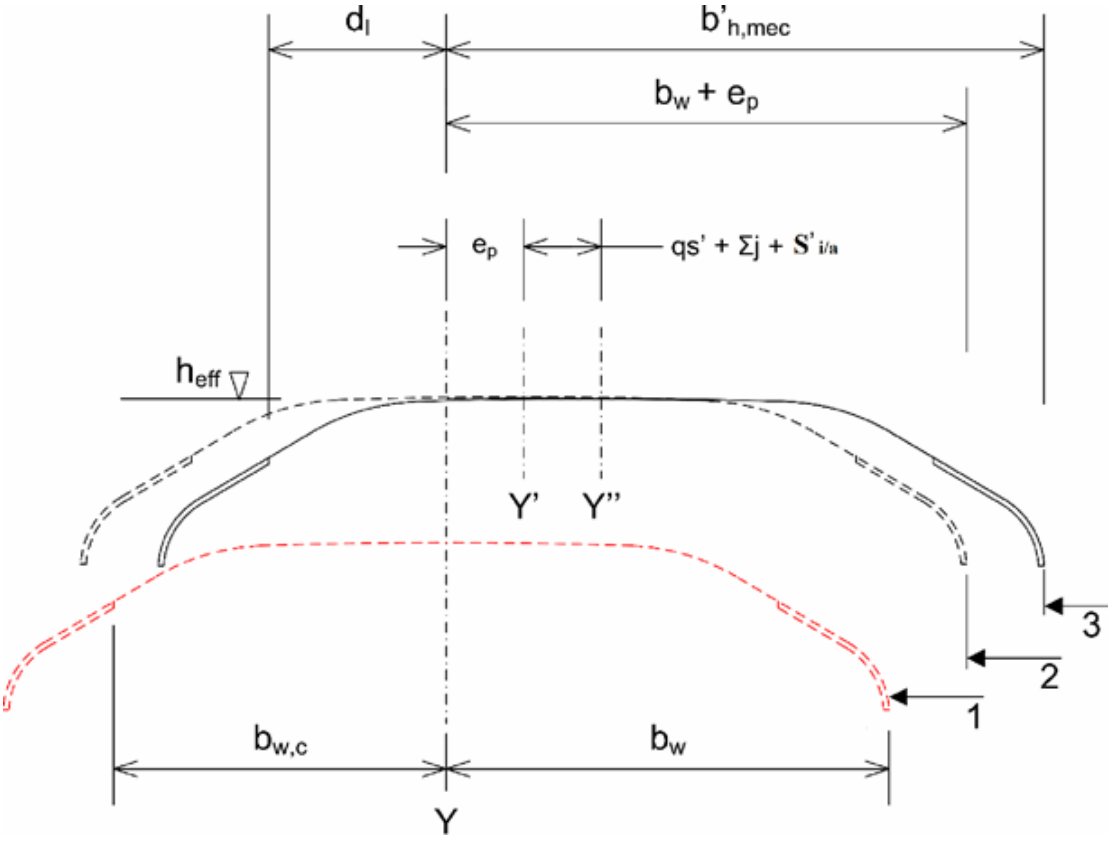
(11) point 7.3.4 is replaced by the following:

7.3.4. The procedure to be used for the demonstration of the level of compliance of existing lines with the basic parameters of this TSI shall be in accordance with Recommendation 2014/881/EU.;

(12) point 7.4.2.11 is deleted;

(13) in Appendix D, point D.1.1.4, Figure D.1 is replaced by the following figure:

Figure D.1 **Pantograph mechanical gauges**



(14) in Table E.1 of Appendix E, rows 9 and 10 are added:

9	EN 50463-3	Railway application — Energy measurement on board trains — Part 3: Data handling	2017	On-ground energy data collecting system (4.2.17)
10	EN 50463-4	Railway application —	2017	On-ground energy data

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		Energy measurement on board trains — Part 4: Communication		collecting system (4.2.17)

(15) the text of Appendix F is replaced by ‘Intentionally deleted’;

(16) in Table G.1, Glossary, of Appendix G, the row ‘Neutral section insulator’ is deleted.

ANNEX II

The Annex to Regulation (EU) No 1302/2014 is amended as follows:

(1) in Chapter 4 ‘Characteristics of the rolling stock subsystem’, clause 4.2.8.2.8 ‘On-board energy measurement system’ is replaced by the following clause:

4.2.8.2.8 On-board energy measurement system

4.2.8.2.8.1 General

(1) The on-board energy measurement system (EMS) is the system for measurement of all active and reactive electric energy taken from or returned (during regenerative braking) to the overhead contact line (OCL) by the electric unit.

(2) The EMS shall include at least the following functions: Energy measurement function (EMF) as set out in clause 4.2.8.2.8.2, data handling system (DHS) as set out in clause 4.2.8.2.8.3.

(3) A suitable communication system will send the compiled energy billing data sets (CEBD) to an on-ground data collecting system (DCS). The interface protocols and transferred data format between EMS and DCS shall fulfil the requirements set out in point 4.2.8.2.8.4.

(4) This system is suitable for billing purposes; the data sets defined in point 4.2.8.2.8.3(4) provided by this system shall be accepted for billing in all Member States.

(5) The EMS rated current and voltage shall be matched to the electric unit rated current and voltage; it shall continue to function correctly when changing between several traction energy supply systems.

(6) Data stored in the EMS shall be protected against loss of the power supply and the EMS shall be protected from non-authorised access.

(7) An on-board location function providing location data originated from an external source to the DHS shall be provided in networks where such function is necessary for billing purposes only. In any case, the EMS system shall be able to accommodate a compatible location function. If the location function is provided, it shall fulfil the requirements set out in specification referenced in Appendix J-1, index 116.

(8) The fitment of an EMS, its on-board location function, the description of on-board to ground communication and the metrological control including the accuracy