OPINION

ERA/OPI/2017-3

OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

for

European Commission

regarding

a potential deficiency of the ENE TSI

Disclaimer:

The present document is a non-legally binding opinion of the European Union Agency for Railways. It does not represent the view of other EU institutions and bodies, and is without prejudice to the decision-making processes foreseen by the applicable EU legislation. Furthermore, a binding interpretation of EU law is the sole competence of the Court of Justice of the European Union.

1. General Context

1. In its letter referenced as Ares(2017)3625832 and dated on 18 July 2017 addressed to the European Union Agency for Railways, the European Commission requested the Agency to prepare a technical opinion on a possible deficiency of Commission Regulation (EU) No 1301/2014 of 18 November 2014 on the technical specifications for interoperability relating to the 'energy' subsystem of the Union's rail system ("ENE TSI")[1], identified by the Eisenbahn Bundesamt (EBA), Germany.

2. The requests from the Commission and EBA are presented in Annex 1 to this opinion.

3. EBA considers that the current method for the assessment of the pantograph sway and the contact wire position and the corresponding calculation method are deficient. They are unnecessarily complicated and lead to an increase in the investment costs for the concerned projects by approximately 10%.

2. Legal Background

1. Article 19 of *Regulation (EU) 2016/796 of the European Parliament and of the Council of 11 May 2016 on the European Union Agency for Railways and repealing Regulation (EC) No 881/2004 (Agency Regulation)*[2], states that "*The Agency shall: [...] (d) issue opinions which constitute acceptable means of compliance concerning deficiencies in TSIs, in accordance with Article 6(4) of Directive (EU) 2016/797, and provide those opinions to the Commission;*" and Article 8 states that "The Agency shall conduct an impact assessment of its recommendations and opinions"

2. According to Article 6 of 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[3], if it appears that a TSI has a deficiency, the Commission may require the Agency to issue opinions in this respect. At the request of the Commission, "*the Agency's opinion shall constitute acceptable means of compliance and may therefore be used for the assessment of projects, pending the adoption of a revised TSI.*" (Article 6(3) of Directive 2016/797)

3. Analysis

1. The request for technical opinion addresses two basic parameters:
   4.2.9.2 – Maximum lateral deviation
   4.2.10 – Pantograph gauge.

   Both basic parameters use, as a basis, the pantograph gauge calculation method, defined in the Appendix D. This method derives from the kinematic gauge methodology, thoroughly elaborated in the CEN standard EN 15273.

2. Though both parameters are based on the same formulas and assumptions, the outcomes of the calculation lead to different results:
   - in case of the pantograph gauge – definition of the envelope to allow free passage of the pantograph in relation to infrastructure;
   - in case of lateral deviation – definition of the limits of the position of contact point (between contact wire and pantograph) on the pantograph head.
3. The calculation method, set out in the Appendix D of TSI, has been criticised to be too detailed and strict and therefore created problems with its implementation. For this reason in 2015, ERA submitted to CENELEC the Requirement for a Standard (RfS 051 - see Annex 2) to revise quickly EN 50367, which is a reference standard on technical criteria for the interaction between pantograph and overhead line. The main aim of that RfS was to provide a simple methodology for the calculation (regarding the application

[1] *OJ L 356, 12.12.2014*
[2] *OJ L 138, 26.5.2016, p. 1–43*
[3] *OJ L 138, 26.5.2016, p. 44–101*

rules for pantograph gauge envelope and permissible contact wire position) to facilitate the assessment of the acceptance of pantograph heads in relation to overhead contact lines.

4. On the 12/07/2017, at the subcommittee SC9XC of CENELEC meeting, it has been reported that *WG09 – Fixed installations and Rolling Stock - Current collection systems – Technical criteria for the interaction between pantograph and overhead contact line* completed the drafting of prEN 50367 (64727). The subcommittee SC9XC endorsed the document and submitted it to CENELEC Enquiry by the decision 53/02 as follows:

   Decision 53/02
   Noting the proposal of WG09 Convenor, SC9XC endorses the draft of prEN 50367 (64727) – Railway Applications - Current collection systems - Technical criteria for the interaction between pantograph and overhead line (to achieve free access). SC9XC asks WG09 convenor and Sec to consider editorial comments from CENELEC consultant and then send this revised draft in CENELEC Enquiry.
5. The new method defined in clause 5.2.5 of the draft prEN 50367 has no negative impact on interoperability, and it will be discussed in the future revision of ENE TSI.
6. The request for technical opinion asks for a possibility to use the method defined in clause 5.2.5 of the draft of prEN 50367 in the current electrification projects.

4. The opinion

- The requirements set out in points 4.2.9.2 and 4.2.10 of the ENE TSI are based on the published versions of standards EN 15273 and EN 50367.
- Following the RfS 51, CENELEC has revised the EN 50367, and in particular its clause 5.2.5. However, the standard is still in the draft stage, before the CENELEC enquiry. Therefore, at this phase of development, it cannot be considered as a final document.
- According to the TSI development procedure, any change in the requirements (chapter 4) or assessment methods (chapter 6) - following the final adoption of the revised standard by CENELEC - has to be discussed and accepted by the ENE Working Party (WP), and is subject to public consultation, and finally submitted for opinion to RISC.
- Taking into account:
  a. the reported increase of the electrification projects costs to ensure compliance with the existing TSI ENE,
  b. the alignment of the method defined in clause 5.2.5 of the draft prEN 50367 with the Agency strategy on future ENE TSI revision, in order to create stable legal framework in providing the necessary freedom to designers of OCLs to ensure interoperability and manage the dewirement risk,
  c. the relatively lengthy process for the revision of TSIs,
  d. the national technical experience in using this method in Germany ,

  The Agency is of the opinion that the method defined in clause 5.2.5 of the draft prEN 50367 can be considered as an acceptable means of compliance until the appropriate amendment and final adoption of the future revised ENE TSI.

Valenciennes, 13.03.2017

Josef DOPPELBAUER
Executive Director