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Consultation on the revision of the TSI on safety in railway tunnels – CER response

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CER response on the “Consultation on the revision of the TSI on safety in railway tunnels”.

With this paper, CER contributes to the consultation addressed to associations and bodies representing users as well as social partners, regarding the draft recommendation for the proposal on the revision of the TSI on safety in railway tunnels. We provide comments on the overall impact of the recommendation as defined in Articles 6 and 7 of Regulation (EU) 2016/796 (Agency Regulation).

CER welcomes the last version of the text regarding the “Evolution from COMMISSION REGULATION (EU) No 1303/2014 concerning the TSI SRT to the proposal for a revised technical specification for interoperability relating to safety in railway tunnels of the Union rail system” and expresses its appreciation for the “Proposal for a revised technical specification for interoperability relating to safety in railway tunnels of the Union rail system - Version 1.0 of 16/07/2018 - Draft for the public consultation”.

Further to the contribution we already provided within the respective ERA Working Party on SRT, we provide here more indications, mainly regarding the corresponding parameters for meeting the essential requirements, and the request to take in due consideration the tunnel length as an element of relevance for some clauses.

In general CER welcomes the texts proposed in the framework of the consultation.

CER recognise that CER previous input has been comprehensively taken in account

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CER comments accompanied by questions and proposal

Conventions:

Type of Comment		Reply by requestor	
<i>G</i>	General	<i>R</i>	Rejected
<i>M</i>	Mistake	<i>A</i>	Accepted
<i>U</i>	Understanding	<i>D</i>	Discussion necessary
<i>P</i>	Proposal	<i>NWC</i>	Noted without need to change

CER comments list

<i>N°</i>	<i>Reference (e.g. Art, §)</i>	<i>Type</i>	<i>Reviewer</i>	<i>Reviewer's Comments</i>	<i>Questions, Proposals</i>
<i>1</i>	1.1 (f)	P	CER TSI SRT SG	Clarity of English.	Suggest amend to 'Member States.....particular risk situation. They shall be the result of a consultation with the Infrastructure Manager and the relevant authorities for emergency.....assessment.'
<i>2</i>	2.1 (a)	P	CER TSI SRT SG	Clarity of English.	Suggest 'The strategy for the promotion of safety.....'
<i>3</i>	2.1 (b)	P	CER TSI SRT SG	Clarity of English.	Suggest '.....area of prevention followed by mitigation, evacuation and rescue.'
<i>4</i>	2.1 (c)	P	CER TSI SRT SG	Clarity of English.	Suggest 'The layers of safety contributions combine to.....'

N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments	Questions, Proposals
5	2.3 (c)	P	CER TSI SRT SG	The UK Fire and Rescue Services consider the duty holder (Infrastructure Manager) to be responsible for the management of evacuations.	Consider the need for revision of the text in (1) and (2) to recognise this. Suggest including 'Support evacuation' in both cases (cold and hot incidents).
6	3.	P	CER TSI SRT SG	Consistency of requirements. Section 3.1(a) is an alternative to sections 4.2.1, 4.2.2 and 4.2.3 to meet essential requirements.	3. ESSENTIAL REQUIREMENTS (a) The following table indicates basic parameters of this TSI and their correspondence to the essential requirements as set out and numbered in Annex III to Directive (EU) 2016/797 . (b) For meeting the essential requirements, the corresponding parameters of sections 4.2.1, 4.2.2 and 4.2.3 or, alternatively, in section 3.1(a) below, shall apply.
7	3.1	G	CER TSI SRT SG	Consistency of references	Change table according to the following change requests.
8	3.1 (c)	G	CER TSI SRT SG	Fire reaction of building materials is listed twice in the table.	Remove one of the lines and put the correct references.
9	4.2.1.2	M	CER TSI SRT SG	According to Art. 4.4.2 For tunnel shorter than 1 km the emergency plan is not required.	4.2.1.2. Fire resistance of tunnel structures This specification applies to all tunnels. (a) In the event of fire, the integrity of the tunnel lining shall be maintained for a period of time that is sufficiently long to permit self-rescue, evacuation of passengers and staff and intervention of the emergency response services. For tunnel longer than 1 km , that period of time shall be in accordance with the evacuation scenarios considered and reported in the emergency plan.

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N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments	Questions, Proposals
10	4.2.1.3 (a)	P	CER TSI SRT SG	Only exposed cable need to fulfil this requirement.	Change the sentence as follows: This specification applies to construction products and building elements inside tunnels, including exposed cables.
11	4.2.1.3 (a) (3)	U	CER TSI SRT SG	It is not possible to assess the requirements written. We propose either to remove it, or provide minimum limit values.	Remove or specify minimum values for the following clause: (3) Exposed cables shall have the characteristics of low flammability, low fire spread, low toxicity and low smoke density.
12	4.2.1.4	P	CER TSI SRT SG	Clarity of English.	Change fires to fire. Delete “.. in case of fire ..” because of adding “fire in” technical rooms .. at the beginning of the sentence.
13	4.2.1.5.4 and 4.2.1.10	P	CER TSI SRT SG	Article 4.2.1.5.4 “Emergency lighting” applies to all tunnels longer than 0,5 km, on the contrary Art. 4.2.1.10 applies to all tunnels longer than 1 km length. Referring to reliability and redundancy the two articles are not consistent.	Modify the Art. 4.2.1.5.4 (c) as follows: Autonomy and reliability for tunnels longer than 1 km ...
14	4.2.1.7 (a) (2)	P	CER TSI SRT SG	Clarity of English.	Suggest ‘ The open air area.....between tunnels allows passengers.....safe space. The open air area shall contain all passengers compatible with the maximum capacity of the trains intended to be operated on the line.’
15	4.2.1.7 (c) (1)	P	CER TSI SRT SG	Clarity of English.	Suggest ‘.....water supply (800 l/min during a 2 hour period) close to.....’
16	4.2.1.9	P	CER TSI SRT SG	Consistency of wording.	Change “electricity power distribution system” to “electricity supply system” according to IEV ref 601-01-01.
17	4.2.1.10	P	CER TSI SRT SG	Consistency of wording.	Change title „Reliability of electrical installations” to „Reliability of electrical systems”.

N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments	Questions, Proposals
18	4.2.1.10 (a)	P	CER TSI SRT SG	Consistency of wording.	Change „electrical installations“ to „electrical systems“.
19	4.2.1.10 (a)	U	CER TSI SRT SG	Need for clarification.	This requirement is unclear. It is not specified what kind of mechanical impact, heat or fire shall be used for the design of the electrical system (installation). Because of the great impact on investment costs of such specifications this specifications shall be justified by a cost benefit analysis. Furthermore no assessment procedure is described in clause 6.2.7.6 according to this requirements. We wait for the new wording of ERA.
20	4.2.1.10 (b)	P	CER TSI SRT SG	Consistency of wording.	Instead of “distribution systems” change the sentence to: The electricity supply system shall be redundant.
21	All relevant clauses	P	CER TSI SRT SG	Consistency of wording.	According to clause 3.12. of EN 50119: 2009 (referred to in TSI ENE:2014) or EN 50119: 2014 (latest version) contact line is a conductor system for supplying traction units with electrical energy via current-collection equipment. Contact line includes overhead contact line and all kinds of conductor rail. In order not to exclude any type of contact line , use the term contact line throughout the TSI SRT.
22	4.2.2.1	P	CER TSI SRT SG	Consistency of wording.	According to the definition of contact line system in TSI Energy 2014, 2.1. (d). Change title to “Sectioning of contact line”
23	4.2.2.1 (a)	P	CER TSI SRT SG	Consistency of wording.	Change to: The traction powers supply system in tunnels may be divided into sections.
24	4.2.2.1 (b)	P	CER TSI SRT SG	Consistency of wording.	Change to: In the case the sectioning of the contact line is planned it shall be possible to switch off each section of the contact line either locally or remotely.

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N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments	Questions, Proposals
25	4.2.2.2	P	CER TSI SRT SG	Consistency of wording.	Change title to "Contact line earthing"
26	4.2.2.2 (a)	P	CER TSI SRT SG	Consistency of wording.	Change the clause to: „Earthing devices shall be available. These shall be either portable devices or manually or remotely controlled fixed installations.”
27	4.2.2.2. (b)	P	CER TSI SRT SG	Clarity of English.	Delete "operations" and change to "...necessary for earthing shall be provided." Confusing and no added value in the specification.
28	4.2.3.3.4	M	CER TSI SRT SG	According to the current requirements LOC&PAS Linked to EN 50553 (6.5.3.1) running capability in the purpose of the SRT TSI (2.2.1) cannot be fulfilled. Must be corrected in LOC&PAS TSI <u>We suggest starting the discussion asap, because this remains in contradiction to the new version of the TSI SRT.</u>	Must be corrected in LOC&PAS TSI
29	4.4.4	P	CER TSI SRT SG	Consistency of wording.	Improve electrotechnical wording and change title to "Switching off and earthing procedures"
30	4.4.4 (a)	P	CER TSI SRT SG	Consistency of wording.	Improve electrotechnical wording and change to "In the case it is required to switch off the the traction power supply system the infrastructure manager shall make sure that relevant sections of the contact line system have been switched off, and inform the emergency response services before they enter the tunnel or a section of the tunnel."

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N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments	Questions, Proposals
31	4.4.4 (b)	P	CER TSI SRT SG	Consistency of wording.	Improve electrotechnical wording and change sentence to "The infrastructure manager is responsibility for switching off the traction power supply system."
32	4.4.4 (c)	P	CER TSI SRT SG	Consistency of wording.	Improve electrotechnical wording and change to "Procedures and responsibilities for earthing of the contact line system shall be defined between the Infrastructure Manager and the emergency response services and reported in the emergency plan. Provision shall be made for switching off the sections in which the incident has taken place."
33	6.2.4 (b)	M	CER TSI SRT SG	The reference to '...the European Union shall apply the procedure in Article 8' is potentially unclear as it is not obvious what document Article 8 is included in.	Please add a reference to the document in which Article 8 is included.
34	6.2.7.3 (a)	M	CER TSI SRT SG	Due to the amendments in 4.2.1.3, the clause now incorrectly references '4.2.1.3 (c)'.	Please amend to 'For the assessment of 4.2.1.3 (b).....'
35	6.2.7.4 (b)	M	CER TSI SRT SG	This clause refers to clauses 4.2.1.2 (b) and 6.2.7.2 (2), both of which have been removed from this version of the TSI.	This clause should be deleted.
36	6.2.7.6	P	CER TSI SRT SG	Consistency of wording.	Change title „Reliability of electrical installations" to „Reliability of electrical systems".
37	6.2.7.6	P	CER TSI SRT SG	Consistency of references.	Change reference to 4.2.1.10.
38	6.2.8.1 (a)	P	CER TSI SRT SG	Clarity of English.	Suggest amend to 'The requirements for conformity assessment are described in the specifications.....'

<i>N°</i>	<i>Reference (e.g. Art, §)</i>	<i>Type</i>	<i>Reviewer</i>	<i>Reviewer's Comments</i>	<i>Questions, Proposals</i>
39	7.2.2.1	P	CER TSI SRT SG	It is important to define the length of the tunnel to which these requirements apply.	We propose either to add the reference length of the tunnel as follows: 7.2.2.1. Renewal or upgrading of a tunnel This article applies to tunnels longer than 1km. Or modify clause (c) as follows: (c) ... works are carried out, the following parameters apply if they are in the scope of work, according to the tunnel length specified in each requirement: (..)
40	7.2.2.1 (b) and (c)	P	CER TSI SRT SG	It is noted that in both clauses the order in which 'upgrade' and 'renewal' appears is different to that in the title of the section i.e. 'Renewal or upgrading'	To be consistent with the title change the text into: (b) ...a particular renewal or upgrading programm (c) When renewing or upgrading
41	7.2.2.2	G	CER TSI SRT SG	Consistency of references	General revision of the references according to the suggested modification.

N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments	Questions, Proposals
42	7.2.2.2	P	CER TSI SRT SG	In case of extension of existing tunnels it should not be mandatory to apply any of the requirements specified in this clause to the existing part. The definition of extension shall be clarified (e.g. minimum length of the extension against existing tunnel length, minimal total length of the tunnel after extension).	We propose to specify that the requirements apply only to the extension and not to the existing tunnel. Furthermore, we propose to remove from point (b) all the requirements that apply to the entire tunnel (i.e. include the existing portion), as follows: 4.2.1.1. Prevent unauthorised access to emergency exits and technical rooms 4.2.1.2. Fire resistance of tunnel structures 4.2.1.3. Fire reaction of building material 4.2.1.4. Fire detection in technical rooms 4.2.1.5.4 Emergency lighting 4.2.1.5.5 Escape signage 4.2.1.6. Escape walkways 4.2.1.8. Emergency communication 4.2.1.9. Power supply for emergency response services 4.2.1.11. Reliability of electrical installations 4.2.2.1. Segmentation of overhead line or conductor rails 4.2.2.2. Overhead line or conductor rail earthing
43	7.2.2.2 Clause (c)	P	CER TSI SRT SG	All modifications have to be evaluated according to Regulation 402/2013. It is not correct to impose a particular application of that regulation only for this requirement	We propose to delete this clause c) The CSM on risk assessment shall be implemented as described in point 6.2.6 for defining the relevance of applying other measures.
44	7.3.1 (a)	P	CER TSI SRT SG	Clarity of English	Suggest amend to 'The specific cases, as listed in clause 7.3.2, describe special.....'
45	Appendix B	G	CER TSI SRT SG	Consistency of references	Change Appendix B accordingly to this change request.

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46	Appendix B, Table	P	CER TSI SRT SG	It is noted that the 2nd sentence of the introductory paragraph, refers to 'different phases of design'.	For consistency in the table suggest 'Step of the project' be amended to 'Phase of the project'
47	Annexe B	G	CER TSI SRT SG	The table should be revised	4.2.1.2 Fire resistance of tunnel structures --> this requirement is senseless at phase Assembly before putting into service 4.2.1.5., 4.2.1.6., 4.2.1.7, 4.2.2.3. and 4.2.2.5. concerning the check at phase Assembly before putting into service a foot note must be added "As-built drawings shall be provided or a site inspection shall be carried out when the realization differs from the design rules or drawings that were examined"