

#	N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments, Questions, Proposals	Reply	Proposal for the correction or justification for the rejection
1	1	4.2.4.3 (3)	P	Alstom	"(3) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'brake pressure' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
2	2	4.2.4.4.1 (3)	P	Alstom	"(3) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'emergency brake command' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
3	3	4.2.4.4.2 (5)	P	Alstom	"(5) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'service brake command' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
4	4	4.2.4.4.4 (4)	P	Alstom	"(4) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'Special brake inhibition area – Trackside orders: regenerative brake' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS. The subsequent commands of inhibition of regenerative brake by the unit can be automatic or manual through intervention of the driver. The rolling stock configuration on automatic or manual command shall be recorded in the technical documentation described in clause 4.2.12.2 of this TSI."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
5	5	4.2.4.4.4 (5)	P	Alstom	"(5) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'Special brake inhibit – STM Orders: regenerative brake' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS. The subsequent commands of inhibition of regenerative brake by the unit can be automatic or manual through intervention of the driver. The rolling stock configuration on automatic or manual command shall be recorded in the technical documentation described in clause 4.2.12.2 of this TSI."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
6	6	4.2.4.8.2 (6)	P	Alstom	"(6) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'Special brake inhibition area – Trackside orders: magnetic track brake' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS. The subsequent commands of inhibition of magnetic track brake by the unit can be automatic or manual through intervention of the driver. The rolling stock configuration on automatic or manual command shall be recorded in the technical documentation described in clause 4.2.12.2 of this TSI."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
7	7	4.2.4.8.2 (7)	P	Alstom	"(7) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'Special brake inhibit – STM Orders: magnetic track brake' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS. The subsequent commands of inhibition of magnetic track brake by the unit can be automatic or manual through intervention of the driver. The rolling stock configuration on automatic or manual command shall be recorded in the technical documentation described in clause 4.2.12.2 of this TSI."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI

8	8	4.2.4.8.3 (9)		Alstom	"(9) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'Special brake inhibition area – Trackside orders: Eddy current track brake' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS. The subsequent commands of inhibition of eddy current track brake by the unit can be automatic or manual through intervention of the driver. The rolling stock configuration on automatic or manual command shall be recorded in the technical documentation described in clause 4.2.12.2 of this TSI."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
9	9	4.2.4.8.3 (10)		Alstom	"(10) Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'Special brake inhibit – STM Orders: eddy current track brake' when ETCS is installed are defined in <b>Appendix A, Table A.2</b> , Index 7 of TSI CCS. The subsequent commands of inhibition of eddy current track brake by the unit can be automatic or manual through intervention of the driver. The rolling stock configuration on automatic or manual command shall be recorded in the technical documentation described in clause 4.2.12.2 of this TSI."  Correct reference to the Appendix of TSI CCS	NWC	Existing reference in the LOC&PAS TSI allows to find index 7 in appendix A of CCS TSI
10	10	4.2.6.2.3, 6.2.3.15 and Annex J-1	G	Alstom	It was intended by the CEN WG 6 according to CR 46 and CR 47 submitted by CER to modify clauses 4.2.6.2.3, 6.2.3.15 and Annex J-1 to align the TSI with the new EN 14067-5:2021. These modifications are missing.	NWC	As mentioned in the TWG standardisation meeting n°14 (21/06/2022): EN 14067-5 : all organisation to nominate experts for a meeting to be scheduled early September. In between please comment the CER proposal EXTID-1246599445-798. When this will be clarified, it will be decided to add or not the EN 14067-5:2021 in the TSI LOC&PAS. Note. there is no CR 46 and 47 in CCM.
11	11	4.2.8.2.9.6 (3a)	U	Alstom	As explained in the past in Guide for application and EN 50367, the indents in the text would avoid any misunderstanding  Proposal :  "Rolling stock and pantographs fitted on rolling stock shall not exceed: the limit values for uplift S0 and either standard deviation Sigma_max or percentage of arcing as defined in clause 4.2.12 of the TSI Energy"	NWC	Following CR 169/170 agreement, TSI LOC&PAS master document is up to date, see extract below :  (3a) Rolling stock and pantographs fitted on rolling stock shall not exceed the limit values for uplift S0 and either standard deviation $\sigma_{max}$ or percentage of arcing as defined in clause 4.2.12 of the TSI Energy
12	12	4.2.8.2.9.7	G	Alstom	The acceptable distances between consecutive pantographs depends of speed and voltage according to EN 50367:2020 Table 9.  Proposal : "The distances between consecutive pantographs (at a defined speed and voltage system) for which the rolling stock has been verified shall be recorded in the technical documentation (see clause 4.2.12.2)"	R	Following CR 169/170 agreement, TSI LOC&PAS master document is up to date, see extract below :  "(4) The distances between consecutive pantographs for which the rolling stock has been verified shall be recorded in the technical documentation (see clause 4.2.12.2 of this TSI)."  Text of 4.2.8.2.9.7 (4) was reworded by the Task Force ENE-RST experts. Proposal done by Alstom not discussed in that forum. This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.

13	13	4.2.8.2.9.7 (3)	G	Alstom	"for the poorest performing pantograph (identified by simulations to be performed prior to that test)" was clear and helps to understand the test shall use the worst case in simulation.	NWC	Following CR 169/170 agreement, TSI LOC&PAS master document is up to date, see extract below :  "(3) Where the spacing of 2 consecutive pantographs in fixed or predefined formations of the assessed unit is less than the spacing shown in clause 4.2.13 of the TSI Energy for the selected OCL design distance type, or where more than 2 pantographs are simultaneously in contact with the overhead contact line equipment, it shall be demonstrated by testing that dynamic behaviour as defined in clause 4.2.8.2.9.6 above is met."
14	14	4.2.12.2 (16)	G	Alstom	In 4.2.8.2.9.7 (4), "The OCL design distance type (A, B or C as defined in the clause 4.2.13 of the TSI Energy) selected (and therefore used for the test)" has been removed. So the same should apply here also. Proposal : (16) <del>The number of pantographs simultaneously in contact with the overhead contact line equipment (OCL), their spacing and the OCL design distance type (A, B or C)</del> The distances between consecutive pantographs for which the rolling stock has been verified used for assessment tests, as required in clause 4.2.8.2.9.7	A/NWC	Following CR 169/170 agreement, TSI LOC&PAS master document is up to date, see extract below :  "(4) The distances between consecutive pantographs for which the rolling stock has been verified -shall be recorded in the technical documentation (see clause 4.2.12.2 of this TSI)."
15	15	5.3.10 (4)	G	Alstom	Number of wires should also be considered. 3 kV system is also concerned by 2 contact wires and material Proposal: "For DC-1,5 kV supply systems, the material <del>and number of the</del> contact wires shall be considered"	R	Following CR 169/170 agreement, TSI LOC&PAS master document is up to date, see extract below :  "For DC 1,5 kV supply systems, the material of the contact wire shall be considered."  Text of 5.3.10 (4) was reworded by the Task Force ENE-RST experts. Proposal done by Alstom not discussed in that forum. This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
16	16	6.1.2. Application of modules	P	Alstom	The table of § 6.1.2. shows the Modules which may be selected by the manufacturer in accordance with the Decision 2010/713/EU. Unless the TSI INFRA (Regulation (EU) 1299/2014) none of the others TSIs provide the timeframe validity of the ICs. Decision set forth that: " The manufacturer shall draw up a written EC declaration of conformity for the interoperability constituent and keep it together with the technical documentation at the disposal of the national authorities for the period defined in the relevant TSI and, where the TSI does not define this period, for 10 years after the last interoperability constituent has been manufactured". In order to avoid misunderstanding and arbitrary interpretation the validity of the ICs should be defined by the TSI itself. On the contrary, the time frame validity of ICs is currently provided by the NBRail RFU-STR 060 which does not reflect neither the philosophy of the 4th Railway Package nor the "legal basis". The ICs whose ICs Certificates expires every 2 years imply a burdensome of administrative and bureaucratic tasks when the fleets of vehicles, to be delivered, are significantly large and the delivery period significantly long. <b>Proposal:</b> Validity of ICs, regardless the module applied, complies with the provisions of Decision 2010/713/EU unless otherwise defined by the TSI itself.	NWC	Validity of EC type or design examination certificates for ICs are covered in clause 7.1.3.2 Interoperability constituents which indicates: "(1) This clause concerns an interoperability constituent which is subject to type or design examination (module CB) or to suitability for use (module CV). (2) Unless otherwise explicitly specified in the revision of this TSI or of the TSI Noise or the TSI PRM, <b>the type or design examination or suitability for use remains valid even if a revision of these TSIs enters into force.</b> "  An extension of the validity of SD/CD certificates would require a revision of Commission Decision 2010/713/EU, which is something we recommend in our Recommendation

17	17	6.1.3.7 (1)	G	Alstom	<p>In 3 kV, 1 wire contact wire length are limited to parking places or non-revenue service lines most of the time (driver can then apply a load shedding). Cross-section can be 100 or less in test Proposal : "the pantograph shall be in contact with 2 plain copper contact wires or 2 copper alloyed with silver contact wires with a cross section of 100 mm<sup>2</sup> or less each for a 1,5 kV supply system, the pantograph shall be in contact with 1 and 2 copper contact wires with a cross section of 100 mm<sup>2</sup> or less for a 3 kV supply system."</p>	R	Text of 6.1.3.7 (1) was reworded by the Task Force ENE-RST experts. Proposal done by Alstom not discussed in that forum. This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
18	18	6.2.2. Application of modules- Modules for the EC verification of subsystem	P	Alstom	<p>Should the Applicant select the modules SB+SD (but SH1 does not modify the picture) as far as the subsystem verification is concerned, in accordance with the Decision 2010/713/EU, the NoBo is requested to perform a "surveillance" pursuant § 7 of module SD. This "surveillance" is well described at § 7.3 and 7.4.: " 7.3. The notified body shall carry out periodic audits to make sure that the applicant maintains and applies the quality management system and shall provide the applicant with an audit report. The frequency of the periodic audits shall be at least once every 2 years. When the applicant operates a certified quality management system, the notified body shall take this into account during the periodic audits. 7.4. In addition, the notified body may pay unexpected visits to the applicant. During such visits the notified body may, if necessary, carry out subsystem tests, or have them carried out, in order to verify that the quality management system is functioning correctly. The notified body shall provide the applicant with a visit report and, if tests have been carried out, with a test report". Decision reads that the Notified Body issues a "report" which does not mean that the NoBo has to issue an updated Quality Management System Approval Certificate. As per the item above, the expiring of the QMSA Certificate every two years it leads to a burdensome of administrative and bureaucratic tasks when the fleets of vehicles, to be delivered, are significantly large and the delivery period significantly long. <b>Proposal:</b> Validity of QMSA Certificate, regardless the module applied (i.e. SB+SD or SH1) complies with the provisions of Decision 2010/713/EU unless otherwise defined by the TSI itself.</p>		<p>An extension of the validity of SD/CD certificates would require a revision of Commission Decision 2010/713/EU, which is something we recommend in our Recommendation: Recital n°9: Regarding transitions between successive revisions of TSIs applicable to mobile subsystems (priority #67), a transversal working group made a proposal that should have a significant positive impact on the application of TSIs, including TSI CCS. This proposal will bring visibility and stability for the sector, while ensuring a swift implementation of changes impacting safety or technical compatibility, or resulting from a policy objective. However, the positive impact of this evolution will remain limited until Commission Decision 2010/713/EU of 9 November 2010 is revised, with the objective to simplify and clarify the conditions of validity of certificates related to the quality management system approval.</p>
19	19	7.1.1.1. (2) General	U	Alstom	<p>We realized that compared to the proposals worked out by ERA and broadly discussed during the specific and dedicated meetings, some of them saw the participation of Commission's Officers, it supposed to be missing the case C1 which implied that the 'EC' Type [design] examination certificate has the illimitate validity. Appendix L which should have consisted of 3 cases it is, viceversa, limited to 2 cases. The proposal from ERA was: "Unless specified, conformity with the TSI LOC&amp;PAS 2014 (incl. all amendments) leads to conformity to the new TSI (C1 changes). NoBo issue EC type certificate without additional assessment". This means that new vehicles, conform to type already authorized, may rely on the 'EC' verification certificate issued by NoBo in conformity with the provisions set by Regulation (EU) 2019/776 and, as such, may be delivered for an unlimited time frame. On the other hand, we understood that projects in "design phase" (case C2) may conform with the previous TSI which can still apply for a duration of 7 years from the entry in to force of this TSI. We believe that the case C1 is missing and it is worth to highlight that the CTT case is vital for the manufacturers that rely on Product Platform. Customer are used to ask to enlarge their fleets or to create fleets based on authorized vehicles (proven products, reliable, etc.)</p>	R	<p>See clause 7.1.3.1.2 Rules related to the EC type or design examination certificate : " (1) The notified body shall issue the EC type or design examination certificate referring to the certification framework (2) When a revision of this TSI or of the TSI Noise or the TSI PRM comes into force during the design phase, the notified body shall issue the EC type or design examination certificate according to the following rules: <b>For changes in the TSIs that are not referenced in appendix L, conformity with the initial assessment framework leads to conformity to the certification framework. The Notified Body shall issue the EC type or design examination certificate referring to the certification framework without additional assessment. (...)"</b></p>

20	20	7.1.1.1. (2) General	U	Alstom	It needs to be clarified the application of transition phase on projects that are in phase A or phase B at the date of entry into force of this TSI. As a matter of fact, for projects that conform to LOC&PAS 2019 (i.e. Reg. (EU) 2019/776) the phase A can still commence before the entry into force of this TSI 2022 according to § 7.1.3.1. of Reg. (EU) 2019/776 (e.g. January 2023) and terminate on January 2030, whilst the phase B may start to run when the 'EC' Certificate of verification is released (i.e. 2030) and ending on 2037. It means that vehicle conform to the authorized type may be delivered until 2037. This is supposed to be the rational behind what set forth in § 7.1.1.1.(1).	R	<p>TSI LOC&amp;PAS in force today is : TSI LOC&amp;PAS 1302/2014 amended by regulation 2019/776, amended by regulation (EU) 2020/387 of 9 March 2020. The applicable TSI is the one in force when a phase A starts.</p> <p>7.1.3.1 of TSI LOC&amp;PAS 1302/2014 amended by reg 2019/776 is related to the existing regime : phase A, phase B, the clause 7.1.3.1 has been revised with new provisions.... impact on ongoing projects has been discussed in the TWG transition and is covered by clause 7.1.1.2 Application to ongoing projects</p> <p>" (1)A significant number of projects or contracts, which started before the date of application of this TSI, may lead to the production of rolling stock which does not fully comply with this TSI. For rolling stock concerned by those projects or contracts, and in accordance with point (f) of Article 4(3) of Directive (EU) 2016/797, the application of this TSI is not mandatory for projects that are in phase A or phase B (as defined by previous rolling stock TSIs[1]) at the date of entry into force of this TSI . "</p> <p>See also clause 7.1.2.2 (11).</p> <p>In other word, applicant for ongoing project may decide to apply previous transition regime (phase A+phase B) or switch to the new transition regime provided in 7.1.3.1 of the proposed TSI revision.</p>
21	21	7.1.1.1. (2) General	U	Alstom	Table 1 of Appendix L seems to provide "basic parameters" that should lead to a modification of vehicles to be manufactured after 7 years from the coming into force of the TSI 2022. Some of them are "basic design characteristics" and, as such, should be dealt with the same criteria applied as per table 17 a of Regulation (EU) 2019/776 in order to ensure consistency. As per table 17a, in case the mass remains within the given limit (i.e. ± 10%) then the authorisation of the vehicles in CTT should be released even beyond the 7 years provided that a version/variant is created. Moreover, should one of those TSI clause(s) be applied It does not imply to adopt all the clauses of Table 1.	R	<p>APPENDIX L relates to changes of requirements and transition regimes</p> <p>For TSI clauses listed in <b>table L.1</b>, conformity with the previous TSI does not lead systematically to conformity with this TSI. However, for projects already in design phase when this TSI enters into force, the requirement from the previous TSI can still apply for a duration of 7 years from the entry in to force of this TSI. Projects in production phase and rolling stock in operation are not affected by the TSI requirements listed in table L.1</p> <p>The appendix L relates to changes of requirements and associated regimes,provisions related to changes of design are covered in clause 7.1.2 of TSI LOC&amp;PAS. Applicant should also take into account regulation 2018/545 (see article 15, 16)</p>
22	22	7.1.1.2. (1) Application on ongoing projects	U	Alstom	The clause 7.1.1.2. (1) should be consistent with the Article 11, § 3 according to Regulation (EU) 2019/776 point 9). For the time being, It does not seem so.	A/NWC	<p>As discussed during TWG transition (see CR 236), ERA recommendation will include the following recommendations regarding enacting part</p> <p>The enacting part should be amended as follows:</p> <p>(...)</p> <p>c. In Article 11 (1), the terms “without prejudice to clauses 7.1.1.4 to 7.1.1.8 of the Annex” should be deleted, the clauses in reference being deleted from the Annex.</p> <p>d. Article 11 (1) (c) should be deleted, being in contradiction with the revised chapter 7 of the annex.</p> <p>e. Article 11 (3) should be deleted for the same reason.</p> <p>(...)</p>
23	23	7.1.1.2. (2) Application on ongoing projects	U	Alstom	Table 2 of Appendix L of the TSI, It seems to be still missing, at least, the relevant parameters/clauses and therefore no comments are worked out.	NWC	The recommendation should include table L2 providing TSI clauses requiring a specific transition regimes (as interface between ETCS and RST, interface between ATO and RST etc..)

24	24	7.1.1.2. (1)	U	Alstom	Although is still missing the legal basis (Regulation) it needs to be clarified the transition in accordance with the Article 4, point 9 of the Regulation (EU) 2019/776 which is stating that : " (9) the following paragraph 3 is added in Article 11: '3. Section 7.1.3.1 of the Annex to this Regulation shall not apply for vehicles placed on the market after 31 December 2028. Vehicles placed on the market after that date shall be conform to chapters 4, 5 and 6 of the Annex to the present Regulation." According to our understanding the date of 31 December 2028 should have been postponed until 31 December 2032 manly for vehicles which conform to the provisions of Regulation (EU) 1302/2014.	A/NWC	As discussed during TWG transition (see CR 236), ERA recommendation will include the following recommendations regarding enacting part The enacting part should be amended as follows: (...) c. In Article 11 (1), the terms "without prejudice to clauses 7.1.1.4 to 7.1.1.8 of the Annex" should be deleted, the clauses in reference being deleted from the Annex. d. Article 11 (1) (c) should be deleted, being in contradiction with the revised chapter 7 of the annex. e. Article 11 (3) should be deleted for the same reason. (...)
25	25	7.1.1.4a.Transitional measure for on-board energy measurement system requiremen	P	Alstom	As the transition period ended on January 1st 2022 for EMS, it would be clearer to delete this paragraph	NWC	Clause 7.1.1.4a is deleted following CR 521
26	26	7.1.3.1.1	P	Alstom	(2) Certification framework The certification framework is the set of TSIs (i.e. this TSI, the NOI TSI and the PRM TSI) applicable at the time of issuing the EC type or design examination certificate. It is the initial assessment framework amended with the revisions of TSIs that came into force during the design phase <b>with the associated transition periods</b> .	NWC	This is implicate, we may include something in the application guide if needed.
27	27	7.1.3.1.1	P	Alstom	Add a definition for the expression "transition regime", by pointing towards Appendix L proposal (6) Transition regime: "Regulations how to proceed in case of new TSI coming into force, as further described in appendix L"	NWC	Such proposal may be part of the application guide, further definitions are already provided in appendix L ...
28	28	7.1.3.1.3 (2)	P	Alstom	Add the condition: "resulting form a major safety issue" proposal :(2) Only the changes to the TSIs resulting from a major safety issue and with a specific transition regime can apply to Rolling Stock in production phase or to Rolling Stock in operation.	R	The proposal was already discussed during the TWG transition and in the Working party, the criteria defining C2, C3 requirements are available in the CCM procedure.
29	29	p. 246 List of Appendices	G	Alstom	references to appendices K and L are missing	A/NWC	Appendix L is referenced in the clauses: 7.1.1.1, 7.1.1.2 , 7.1.3.1.2 and appendixes Appendix K is referenced in the clause 4.2.4.8.2 and appendixes
30	30	Appendix J.2	P	Alstom	Add another entry in the table of Appendix J.2: "TSI change control management process (CCM)"  Proposal: <b>TECHNICAL SPECIFICATIONS REFERRED TO IN THIS TSI</b> <b>J.2 Technical documents (available o ERA website)</b> Index No: 2 Characterisitcs to be assessed: <u>TSI change control management process (CCM)</u> Point: <u>Appendix L</u> Mandatory ref Document No: <u>ERA, Application of Change Control Management and Workgroup Management to the revision of TSIs</u>	R	The proposal relates to CCM procedure, no need to provide such details in a regulation

31	31	Appendix L	P	Alstom	<p>Add a reference link: "The changes of requirements have been allocated to different categories with either a generic or specific transition regime applying the established Change Control Management Process for controlling and managing the changes made to TSIs referenced in Appendix J-2, index 2."</p> <p>Proposal : APPENDIX L Changes of requirements and transition regimes The changes of requirements have been allocated to different categories with either a generic or specific transition regime applying the established Change Control Management Process for controlling and managing the changes made to TSIs referenced in Appendix J.2, index 2.</p>	R	CCM procedure is not subject to the consultation. Further details are available in the CCM procedure discussed during the working party
32	32	Appendix L	P	Alstom	<p>Not visible, how a change will be ranked into table 1 or 2 (Criteria C1, C2, C3). This shall be made clearer</p>	R	Definition of changes are available in the TSI text see clause 7.1.3.1.2, annex L . Further details are available in the CCM procedure discussed during the working party
33	33	4.2.9.1.7	P	Alstom	<p>In the current text (same in this new proposal) indicated in TSI Loc&amp;Pas: <b>4.2.9.1.7 Climate control and air quality</b> (2)At the seated driving position (as defined in the clause 4.2.9.1.3) of the driver's head and shoulders, there shall be no air flows caused by the ventilation system having an air velocity exceeding the limit value recognised to ensure a proper working environment.</p> <p>The issue is regarding the point (2): "the limit value recognised to ensure a proper working environment" is not fully clear. Indeed, we can consider that the value requested in the harmonized standard EN14813 is a solution. In this standard we have a graph that gives the limit (max and min) for this air speed in function of the temperature inside the cab. <b>&gt;&gt; Figure (see right side)&gt;&gt;</b> <b>I put in red the curve to respect for the cab of the train affected by the TSI.</b> The main issue is the maximum value especially when we have some tests with the temperature setpoint with the derogation switch put on 18°C (we have some tests with this position). In this case we need to be between 0.05 m/s and 0.1 m/s.</p> <p>But for the current version there is an application guide that is not well known in which ERA tries to correct this potential issue.</p> <p>For me it could be good if in the text we have the sentence "It is permitted to provide to the driver a means to adjust the air velocity and / or to direct the air flow for his own comfort; in that case, the acceptable limit should be reached for at least one position of the adjustment system for the normal position of the temperature setting".</p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
34	34	4.2.5.3.5	P	Alstom	<p>One major remark regarding a point of inconsistency of definitions and impact for the manufacturer Safety Analysis. This remark have been already raised at UNIFE level in SMG copy the SRG. Summary/example of clauses at stake on TSI PAS &amp; LOC: <b>"4.2.5.3.5 Safety requirements</b> <b>(1)For the scenario 'failure in the passenger alarm system leading to the impossibility for a passenger to initiate the activation of brake in order to stop the train when train departs from a platform', it shall be demonstrated that the risk is controlled to an acceptable level considering that the functional failure has typical credible potential to lead directly to 'single fatality and/or severe injury'."</b> <b>--&gt; UTILISATION OF DEFINITION OF CSM-RA</b> <b>&gt;&gt; Figure (see right side)&gt;&gt;</b> <b>UTILISATION OF DEFINITIONS OF RAILWAY SAFETY DIRECTIVE</b> <b>--&gt; It implies that in manufacturer safety studies 2 sets of definitions (not equivalent) need to be used. Need to clarify somewhere that SCC list issued by manufacturer is based on CSM-RA definition, then up to the RU/IM/ECM to update</b> <b>To be clearer on the inconsistency here attached the position paper (SCC)</b></p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.

35	35		G	Alstom	<p>Tolerancing language (ISO 8015 or ASME) not respected in TSI bringing ambiguity to declare a product CONFORM.</p> <p>Example: dimensional specification for wheels ! <b>&gt;&gt; Figure top&gt;&gt;</b> --&gt; all characteristic are expressed without considering tolerancing language meaning... (figure &amp; tolerance separated...some symbols are missing &amp; drawing only shows boundary dimensions + text definition)</p> <p>In order to be close to the function (of a wheel) , I propose to you a bearing standard (functions "close" to a wheel) <b>&gt;&gt; Figure bottom&gt;&gt;</b></p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
36	1	§4.2.3.2.1	U	ASSIFER	<p>In §4.2.3.2.1 is quoted that "(2a) For self-propelling thermal or electric passenger trains and for passenger coaches and other related cars, the EN line category shall always be documented, indicating the standard value of payload in standing areas in kg per m2, as defined in the specification referenced in Appendix J-1, index 18. "</p> <p>Appendix J-1, index 18 indicates that the reference standard is EN 15528:2021 which requires declaring the categories of lines according to two mandatory loading conditions for standing passengers:</p> <ol style="list-style-type: none"> <li>1. standard condition (standard value) with 320 kg / m2</li> <li>2. particular condition with load between 160 and 320 kg / m2.</li> </ol> <p>We kindly ask for amendment of the text in order to delete case referred at point 1. relevant the "standard value".</p> <p>In this case structural analysis (e.g.: the dimensioning of the bogie) should be conducted with a value that leads to an overdimensioning of the mechanical parts.</p>	R	The proposal was extensively discussed by a working group and approved by the Working Party.
37	2	6.1.2. Application of modules	P	ASSIFER	<p>The table of § 6.1.2. shows the Modules which may be selected by the manufacturer in accordance with the Decision 2010/713/EU. Unless the TSI INFRA (Regulation (EU) 1299/2014) none of the others TSIs provide the timeframe validity of the ICs. Decision set forth that: "<i>The manufacturer shall draw up a written EC declaration of conformity for the interoperability constituent and keep it together with the technical documentation at the disposal of the national authorities for the period defined in the relevant TSI and, where the TSI does not define this period, for 10 years after the last interoperability constituent has been manufactured</i>". In order to avoid misunderstanding and arbitrary interpretation the validity of the ICs should be defined by the TSI itself. On the contrary, the time frame validity of ICs is currently provided by the NBRail RFU-STR 060 which does not reflect neither the philosophy of the 4th Railway Package nor the "legal basis". The ICs whose ICs Certificates expires every 2 years imply a burdensome of administrative and bureaucratic tasks when the fleets of vehicles, to be delivered, are significantly large and the delivery period significantly long. <b>Proposal:</b> Validity of ICs, regardless the module applied, complies with the provisions of Decision 2010/713/EU unless otherwise defined by the TSI itself.</p>	R	The validity of IC type certificates is specified in clause 7.1.3.2 of the TSI. It is currently of 5 years and will be unlimited if the proposed revision is accepted. Additionally, it is required by Decision 2010/713/EU that the notified body shall carry out periodic audits (see for instance clause 4.3 for module CD) at least once every 2 years. That is the reason why certificates need to be renewed every 2 years. This frequency is defined in compliance with the Modules Decision

38	3	6.2.2. Application of modules- Modules for the EC verification of subsystem	P	ASSIFER	<p>Should the Applicant select the modules SB+SD (but SH1 does not modify the picture) as far as the subsystem verification is concerned, in accordance with the Decision 2010/713/EU, the NoBo is requested to perform a "surveillance" pursuant § 7 of module SD. This "surveillance" is well described at § 7.3 and 7.4.: " 7.3. <i>The notified body shall carry out periodic audits to make sure that the applicant maintains and applies the quality management system and shall provide the applicant with an audit report. The frequency of the periodic audits shall be at least once every 2 years.</i></p> <p><i>When the applicant operates a certified quality management system, the notified body shall take this into account during the periodic audits.</i></p> <p>7.4. <i>In addition, the notified body may pay unexpected visits to the applicant. During such visits the notified body may, if necessary, carry out subsystem tests, or have them carried out, in order to verify that the quality management system is functioning correctly. The notified body shall provide the applicant with a visit report and, if tests have been carried out, with a test report".</i> Decision reads that the Notified Body issues a "report" which does not mean that the NoBo has to issue an updated Quality Management System Approval Certificate. As per the item above, the expiring of the QMSA Certificate every two years it leads to a burdensome of administrative and bureaucratic tasks when the fleets of vehicles, to be delivered, are significantly large and the delivery period significantly long.</p> <p><b>Proposal:</b> Validity of QMSA Certificate, regardless the module applied (i.e. SB+SD or SH1) complies with the provisions of Decision 2010/713/EU unless otherwise defined by the TSI itself.</p>	D	<p>An extension of the validity of SD/CD certificates would require a revision of Commission Decision 2010/713/EU, which is something we recommend in our Recommendation: Recital n°9: Regarding transitions between successive revisions of TSIs applicable to mobile subsystems (priority #67), a transversal working group made a proposal that should have a significant positive impact on the application of TSIs, including TSI CCS. This proposal will bring visibility and stability for the sector, while ensuring a swift implementation of changes impacting safety or technical compatibility, or resulting from a policy objective. However, the positive impact of this evolution will remain limited until Commission Decision 2010/713/EU of 9 November 2010 is revised, with the objective to simplify and clarify the conditions of validity of certificates related to the quality management system approval.</p>
39	4	7.1.1.1. (2) General	U	ASSIFER	<p>We realized that compared to the proposals worked out by ERA and broadly discussed during the specific and dedicated meetings, some of them saw the participation of Commission's Officers, it supposed to be missing the case C1 which implied that the 'EC' Type [design] examination certificate has the illimitate validity. Appendix L which should have consisted of 3 cases it is, viceversa, limited to 2 cases. The proposal from ERA was: "<i>Unless specified, conformity with the TSI LOC&amp;PAS 2014 (incl. all amendments) leads to conformity to the new TSI (C1 changes). NoBo issue EC type certificate without additional assessment</i>". This means that new vehicles, conform to type already authorized, may rely on the 'EC' verification certificate issued by NoBo in conformity with the provisions set by Regulation (EU) 2019/776 and, as such, may be delivered for an unlimited time frame. On the other hand, we understood that projects in "design phase" (case C2) may conform with the previous TSI which can still apply for a duration of 7 years from the entry in to force of this TSI. We believe that the case C1 is missing and it is worth to highlight that the CTT case is vital for the manufacturers that rely on Product Platform. Customer are used to ask to enlarge their fleets or to create fleets based on authorized vehicles (proven products, reliable, etc.)</p>	NWC	<p>There seem to be a misunderstanding between the project phases and the TSI changes. TSI changes are categorised as follows: those with no transition regime (these changes aren't listed in the revised TSI because conformity is deemed OK when applying the previous version), changes with a generic transition regime (listed in table 1 of Appendix L), changes with a specific transition regime (listed in table 2). The terms C1, C2, C3 are only used internally and with the Working Party.</p> <p>The transition regime determines how the new TSI requirements apply to projects according to the phase of the project at the entry into force of the TSI: project not started, project in design phase, project in production phase.</p> <p>For projects that are already in design phase at the entry into force of a new TSI, the requirements in table 1 are not applicable during 7 years (giving enough time to get the type certificate for the subsystem covered by the project) and the requirements in table 2 are applicable according to their transition regime</p>
40	5	7.1.1.1. (2) General	U	ASSIFER	<p>It needs to be clarified the application of transition phase on projects that are in phase A or phase B at the date of entry into force of this TSI. As a matter of fact, for projects that conform to LOC&amp;PAS 2019 (i.e. Reg. (EU) 2019/776) the phase A can still commence before the entry into force of this TSI 2022 according to § 7.1.3.1. of Reg. (EU) 2019/776 (e.g. January 2023) and terminate on January 2030, whilst the phase B may start to run when the 'EC' Certificate of verification is released (i.e. 2030) and ending on 2037. It means that vehicle conform to the authorized type may be delivered until 2037. This is supposed to be the rational behind what set forth in § 7.1.1.1.(1).</p>	NWC	<p>A project starting in (for example) January 2022 would apply the TSIs in force in January 2022. When the revised TSIs enter into force (for example January 2023), the project can decide either to continue with the TSIs 2022 (and have a phase A of 7 years and a phase B of 7 years) or to apply the new TSIs (and have an unlimited design phase and unlimited production phase).</p> <p>If the project decides to apply the new TSIs, conformity will be deemed OK except for changes listed in Appendix L of the LOC&amp;PAS TSI, for which a transition period of 7 years (for table L.1) or n years (for table L.2) will be granted enabling the project to continue to apply the TSIs 2022 until the type certificate is delivered.</p>

41	6	7.1.1.1. (2) General	U	ASSIFER	Table 1 of Appendix L seems to provide "basic parameters" that should lead to a modification of vehicles to be manufactured after 7 years from the coming into force of the TSI 2022. Some of them are "basic design characteristics" and, as such, should be dealt with the same criteria applied as per table 17 a of Regulation (EU) 2019/776 in order to ensure consistency. As per table 17a, in case the mass remains within the given limit (i.e. $\pm 10\%$ ) then the authorisation of the vehicles in CTT should be released even beyond the 7 years provided that a version/variant is created. Moreover, should one of those TSI clause(s) be applied It does not imply to adopt all the clauses of Table 1.	NWC	There will be no need to modify the vehicles because of table 1 after 7 years. The 7 years correspond to the time given to an ongoing project to get the type certificate before the TSI requirements of the table become applicable to the type. Tables 1 and 2 list TSI changes from one version to the next version. It is different from table 17a that lists basic design characteristics of a rolling stock. The authorisation of a vehicle in conformity to a type can always be done <b>when the type is valid</b> . With the proposal, the validity of a type is non-limited.
42	7	7.1.1.2. (1) Application on ongoing projects	U	ASSIFER	The clause 7.1.1.2. (1) should be consistent with the Article 11, § 3 according to Regulation (EU) 2019/776 point 9). For the time being, It does not seem so.	A	We will propose to delete Article 11 §3. Being an article it is a decision of the Commission
43	8	7.1.1.2. (2) Application on ongoing projects	U	ASSIFER	Table 2 of Appendix L of the TSI, It seems to be still missing, at least, the relevant parameters/clauses and therefore no comments are worked out.	NWC	At the time of the consultation no TSI change requiring a specific transition regime was identified. There will be in the final text.
44	9	7.1.1.2. (1)	U	ASSIFER	Although is still missing the legal basis (Regulation) it needs to be clarified the transition in accordance with the Article 4, point 9 of the Regulation (EU) 2019/776 which is stating that : " <i>(9) the following paragraph 3 is added in Article 11:</i> <i>'3. Section 7.1.3.1 of the Annex to this Regulation shall not apply for vehicles placed on the market after 31 December 2028. Vehicles placed on the market after that date shall be conform to chapters 4, 5 and 6 of the Annex to the present Regulation.'</i> " According to our understanding the date of 31 December 2028 should have been postponed until 31 December 2032 manly for vehicles which conform to the provisions of Regulation (EU) 1302/2014. Therefore, it needs to make sure the consistency between the Article 11, comma 3 of Regulation (UE) N.1302/2014 (as amended by point 9 article 4 of Regulation (EU) 2019/776), the paragraph 7.1.3.1. of Reg. (EU) 2019/776 (which amends the § 7.1.3.1 of Reg. N.1302/2014) that is still dealing with the Phase A and Phase B and, finally, the Appendix L of the TSI 2022. Indeed It is our opinion that, at least, the "legal section" of the TSI 2022 shall settle all those inconsistencies.	A	We will propose to delete Article 11 §3. Being an article it is a decision of the Commission
45	10	Appendix J - Table J.1 Index No 8 and 36	P	ASSIFER	We propose to update the present version of the norm with the latest one (EN 15227:2020)	A	
46	11	Appendix J - Table J.1 Index No 58 and 59	P	ASSIFER	We propose to update the present version of the norm with the latest one (EN 45545-2:2020)	A	
47	1	TSI-LOC&PAS 5.3.1 & 4.2.2.2.3	P	Banedanm ark	It is stipulated in section 4.2.2.2.3 that the type 10 latch system, at a fixed defined height above rail, must be used for rolling stock that has design speed, $V \geq 250$ km/h. However, no formal requirements have been defined for rolling stock $V < 250$ km/h, where center buffer couplers are used.  According to section 5.3.1, if the type 10 latch system is used, then it must comply with EN 16019. Other center buffer coupler designs that are used are not considered as IC.  In the cases where the type 10 latch system is chosen, the design shall follow EN16019, however this standard does not specify any requirements for the placement of the type 10 latch above the top of rail. Only when trains with a speed of $V \geq 250$ km/h, does the TSI specify that the type 10 latch system shall be used with a height of 1025 mm above the top of rail.  It is particularly important for buffer stops that the height of the automatic type 10 latch system buffer above TOR is clearly defined for all vehicle types. An interoperability issue arises with buffer stop impact plates, as it is not possible to design an impact plate on a buffer stop that is interoperable with trains with a type 10 latch as no formal requirements exists. It is particularly costly for infrastructure managers to adapt buffer stops for new vehicle types as they are introduced. Buffer stops that are not adapted to the end coupling design on the rolling stock, might not work correctly if they are impacted by a train.  A future version of TSI-LOC&PAS and/or TSI-INF must define the interface between rolling stock and buffer stops clearly.	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.

57	1	6.2.3.19a	P	INFRABEL	<p>The 2014 version of TSIs had an open point for the communication from EMS to DCS. This open point was closed in the 2018 version of TSI. In the mean time EN 50155 (electronic equipment on-board trains) was updated. The new EN 50463 of 2017 refers to this updated EN 50155. It should be possible to update the software of an EMS compliant to LOC&amp;PAS TSI 2014 to be able to communicate with the protocol added in LOC&amp;PAS TSI 2018 without replacing multiple other components of the EMS.</p> <p>Proposal to add extra sentences under (1):</p> <p>In cases where an EMS is upgraded, and where EMF remains unchanged, no conformity assessment shall take place on the EMF. Only the upgraded functions shall be assessed. E.g. In case of adjusting the communication protocol to the one required in clause 4.2.8.2.8.4, only this communication will be assessed.</p>	A	<p>The proposal expresses a general rule of the TSIs (at least for rolling stock) that in case of an renewal/upgrade, only the parts that are renewed/upgraded need to be assessed. See the TSI LOC&amp;PAS clause 7.1.2.2 that says: (1) Parts and basic parameters of the rolling stock that are not affected by the change(s) are exempt from conformity assessment against the provisions in this TSI.</p> <p>So we believe that it isn't necessary in the TSI. If required, it could be added as a comment in the application guide, saying for instance "As per clause 7.1.2.2 point (1) of the TSI, in cases where only a part of an EMS is upgraded, no conformity assessment is mandatory for the other parts, e.g. in case of upgrading the communication protocol of an EMS to the one required in clause 4.2.8.2.8.4, only this communication shall be assessed".</p>
58	2	6.2.3.19a	P	INFRABEL	<p>The draft version of LOC&amp;PAS TSI has a new clause 4.2.8.2.8.2 (6) added in order to facilitate adding EMS on existing trains. But the tests required in clause 6.2.3.19a are based on test methods based on new standards. The existing components having sufficient accuracy will have test reports based on other standards or on older versions of EN 50463.</p> <p>Proposal to add extra sentence under (1):</p> <p>In cases where part of the EMS are upgraded and where existing components are reused, conformity to clause 4.2.8.2.8.2 (6) may be verified based on other or older versions of standards.</p>	A	<p>We propose to add to point (1): In cases where point 4.2.8.2.8.2 (6) applies, the conformity of the existing components to that point may be assessed according to another standard than the specification referenced in Appendix J-1, index [56] (= EN 50463-2) or according to a previous version of that specification.</p>
67	1	6.2.3.5 (3)	U	NB-Rail	<p>To be reformulated as the NoBo is competent to assess the compliance of the product with all the requirements of the TSI that apply to it (including 4.2.3.4.2, 4.2.3.5.3, 4.2.4.2.2, 4.2.5.3.5, 4.2.5.5.8 and 4.2.5.5.9) and by applying the methodology(ies) defined by the TSI including the conformity assessment for safety requirements.</p> <p>In both cases /option in this clause the assessment shall be performed by the NoBo or shall take into account the assessment work performed by CSM-RA Assessment Body.</p>	R	<p>The current TSI text (which isn't modified by the ongoing revision) is in line with the regulation, i.e. the Interoperability Directive and with the Commission and the Agency position. ERA is surprised by this comment arriving during the consultation and not earlier in the process.</p>
68	2	4	U	NB-Rail	<p>The complete set of RFU has not been considered in its whole by ERA during the TSI revision process even if it was agreed during the kick-off of the TSI revision 2022 package to do so at level of ERA core Team via a 'Generic CR'.</p> <p>E.g. following RFUs were identified as quick-wins and does not have been considered RFU-RST-304 (in the framework of CR394) / RFU-RST-309 / RFU-RST-310 (in the framework of CR407) /RFU-RST-316.</p>	D	<p>Agreed, there's been a missed opportunity to convert some RFUs to TSI changes. However, based on ERA analysis, for most of them a TSI change wasn't necessary and a clarification in the guide will be sufficient.</p>
77	1	4.2.9. Driver's Cab and driver-machine interface	P	NIB BE	<p>On the LOC &amp; PAS TSI after clause 4.2.9.6 (Recording device) add the following:</p> <p><b>4.2.9.7. Front cameras:</b></p> <p>(1) Each driver's cab shall be equipped with an outward-facing train direction camera capable of framing the route. The unit shall be equipped with tools to record this information.</p> <p>(2) The functional requirements of the specification of Appendix J-1, index 57 must be met</p>	R	<p>This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.</p>
87	1	4.2.9. Driver's Cab and driver-machine interface	P	NIB FR	<p>On the LOC &amp; PAS TSI after clause 4.2.9.6 (Recording device) add the following:</p> <p><b>4.2.9.7. Front cameras:</b></p> <p>(1) Each driver's cab shall be equipped with an outward-facing train direction camera capable of framing the route. The unit shall be equipped with tools to record this information.</p> <p>(2) The functional requirements of the specification of Appendix J-1, index 57 must be met</p>	R	<p>This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.</p>
97	1	4.2.9. Driver's Cab and driver-machine interface	P	NIB IT	<p>On the LOC &amp; PAS TSI after clause 4.2.9.6 (Recording device) add the following:</p> <p><b>4.2.9.7. Front cameras:</b></p> <p>(1) Each driver's cab shall be equipped with an outward-facing train direction camera capable of framing the route. The unit shall be equipped with tools to record this information.</p> <p>(2) The functional requirements of the specification of Appendix J-1, index 57 must be met</p>	R	<p>This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.</p>

98	2				<p>Raccomandazione n. IT-10072-05 Si raccomanda all'Agenzia Nazionale per la Sicurezza delle Ferrovie e delle Infrastrutture Stradali e Autostradali di adoperarsi affinché le imprese ferroviarie possano equipaggiare i treni con videocamere rivolte verso l'avanti (smt) e con apparato di registrazione atto a documentare lo stato dei luoghi e le condizioni ambientali che si presentano lungo il tragitto. La presente raccomandazione viene estesa anche all'ERA, in previsione di eventuali modifiche alla STI LOC&amp;PAS finalizzate all'introduzione dei predetti dispositivi.</p> <p>Courtesy translation (EN)</p> <p>Recommendation No. EN-10072-05 It is recommended to the National Agency for the Safety of Railways and Road and Highway Infrastructure (ANSFISA) to ensure that railway companies can equip trains with cameras facing forward (smt) and with recording equipment to document the state of the places and the environmental conditions that occur along the way. This Recommendation is also extended to the ERA, in view of possible amendments to the LOC&amp;PAS TSI for the introduction of these devices.</p>		
107	1	4.2.9. Driver's Cab and driver-machine interface	P	NIB PT	<p>On the LOC &amp; PAS TSI after clause 4.2.9.6 (Recording device) add the following: <b>4.2.9.7. Front cameras:</b> (1) Each driver's cab shall be equipped with an outward-facing train direction camera capable of framing the route. The unit shall be equipped with tools to record this information. (2) The functional requirements of the specification of Appendix J-1, index 57 must be met.</p> <p><i>Reason: For the purpose of the improvement of safety through accident investigation, forward facing cameras are an essential tool to help determine the exact circumstances of an event, making the investigation process easier and faster, thus curtailing the time needed to complete the investigations. Also, the existence of video recordings will in many cases eliminate any doubts that may exist regarding the circumstances of an accident, therefore allowing for more objective safety recommendations and reducing differences of opinions with stakeholders during the consultation process.</i></p> <p><i>Furthermore, the implementation of these devices is presently very easy and have a low cost.</i></p> <p><i>Therefore, all reasons support making the use of forward facing cameras mandatory and not just a recommendation.</i></p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
117	1	LOC&PAS TSI	G	NSA CH	As FOT participates in the TSI WP (Linda Ay) there is only one additional comment in the framework of this public consultation.	NWC	
118	2	4.2.3.1	G	NSA CH	We agree with the draft TSI LOC&PAS (Status 18.03.2022), if the Swiss Permanent specific case CH-TSI LOC&PAS-017: Infrastructure gauge: general(LOC&PAS TSI reference Article 4.2.3.1) <i>included to Annex I of the Land Transport Agreement with Decision No 1/2021 of the Community/Switzerland Inland Transport Committee of 30 June 2021</i> is not compromised. Furthermore, 23 March 2022, Switzerland notified Permanent specific Case CH-TSI INF-001 also related to the specific case CH-TSI LOC&PAS-017, possibly for adoption at the next meeting of the Community/Switzerland Inland Transport Committee by the end of 2022.	NWC	The notification of Specific cases for Switzerland can be discussed after the recommendation
119	1	4.2.3.2.1(2a)	P	NSA ES	<p>It is proposed to improve the wording to clarify that EN line category is defined using the standard value of payload in standing areas.</p> <p><u>Proposal:</u></p> <p><i>For self-propelling thermal or electric passenger trains and for passenger coaches and other related cars, the EN line category shall always be documented using <del>indicating</del> the standard value of payload in standing areas in kg per m2, as defined in the specification referenced in Appendix J-1, index 18.</i></p>	D	Point discussed with the TWG EDIT

120	2	4.2.10.2.1	U	NSA ES	<p>For the material requirements in order to prevent fire, the requirement has evolved from asking for certificates to allow test reports to prove compliance of a material with the standard.</p> <p>Those test reports, which shall be issued immediately after testing of this material, shall be reviewed every 5 years.</p> <p>It is stated that: "<i>In case there is no change in the product characteristics and manufacturing process, and no change in the related requirements (TSI), it is not required to perform new testing of this material; expired test reports shall be accepted provided they are accompanied with a statement from the original equipment manufacturer that there has been no change in the product characteristics and in the manufacturing process, covering the complete supply chain involved, since the fire behavior properties of the product were tested. This statement shall be reviewed every 5 years.</i>"</p> <p>Further clarification regarding the content of such statement may be required. We propose to include some clarification in the application guide.</p>	A	There can be a clarification in the guide; guides will be discussed after the summer
121	3		P	NSA ES	<p>It is proposed a new parameter "<i>Compliance of vehicle design with the High Speed Load Model (HSLM)</i>" to allow the dynamic route compatibility checks. This proposed parameter is related with RINF Parameter 1.1.1.1.2.4.2 "<i>Compliance of structures with the High Speed Load Model (HSLM)</i>".</p> <p>This proposed parameter should also be included in Appendix D.1 of OPE TSI.</p>	R	Following CR 172/179, the clause 4.2.3.2.1 has been revised to require that RST is categorised against EN line category including the associated documentation related to the payload. In addition, other characteristics of the vehicle as unit length, design speed etc are to be provided. At route compatibility check, the dynamic compatibility checks for trains, when necessary in accordance with the information provided by the infrastructure manager, shall be performed according to the procedure(s) or relevant information provided by the infrastructure manager through RINF... Regarding HSLM in the LOC&PAS, this can be introduced as soon as classification method of the Rolling Stock with High Speed Load Model (HSLM) will be harmonised.
122	4	6.3 (1)	M / P	NSA ES	<p>The writing in point (1) of section 6.3 is not clear. It is proposed to reflect it as follows:</p> <p>For subsystems holding an EC certificate of verification an incorporating interoperability constituents not covered by an EC declaration of conformity or suitability for use, <b>may keep using</b> interoperability constituents which do not hold an EC declaration of conformity or suitability for use <b>and of the same type are permitted to be used</b> as components for maintenance related replacements (spare parts) for the subsystem, under the responsibility of the ECM.</p>	D	Point discussed with the TWG EDIT
130	1	3.1	G	NSA FR	We note that a revision of special vehicles description will be added later.	NWC	
131	2	4.2.2.2.3	G	NSA FR	We note that a paragraph will be added for automatic coupling dedicated to freight locomotives.	NWC	
132	3	4.2.4.4.1	G	NSA FR	<p>Although not part of target system, class B systems can also trigger an emergency braking. This should be taken into account in the text.</p> <p>Amendment proposal: Requirements applicable to units with regards to their interface with ETCS onboard and related to the train interface function 'emergency brake command' when ETCS is installed are defined in Annex A, Index 7 of TSI CCS. The activation of the emergency brake shall also be possible by class B systems, as defined in the TSI CCS.</p>	R	<p>The LOC&amp;PAS TSI refers to subset 34 that covers ETCS and STM, regarding class B TSI CCS indicates :</p> <p>clause 3.1 "<i>The requirements for Class B systems are the responsibility of the relevant Member State.</i>"</p> <p>clause 4.1.2 "Requirements for Class B systems and for STMs (which enable the Class A On-board system to operate on Class B infrastructure) are the responsibility of the appropriate Member State."</p> <p>Interface between RST and class B should be then covered by national rules on class B should already contains such type of requirements.</p>
133	4	4.2.8.2.9.8	G	NSA FR	<p>Although not part of target system, class B systems can also used for running through phase or system separation sections. This should be taken into account in the text.</p> <p>Amendment proposal: (7) Main power switch and pantograph may also be controlled through class B systems, in automatic mode or as a remedy.</p>	R	<p>The LOC&amp;PAS TSI refers to subset 34 that covers ETCS and STM, regarding class B . TSI CCS indicates :</p> <p>clause 3.1 The requirements for Class B systems are the responsibility of the relevant Member State.</p> <p>clause 4.1.2 Requirements for Class B systems and for STMs (which enable the Class A On-board system to operate on Class B infrastructure) are the responsibility of the appropriate Member State.</p> <p>Interface between RST and class B should be then covered by national rules on class B should already contains such type of requirements. Concerning automatic mode, the related National rule on class B should be aligned with the requirement in clause 4.2.8.2.9.8 (i.e automatic mode/speed of vehicle)</p>

134	5	4.2.9.3.7	G	NSA FR	This paragraph is not mature yet. The way the signal from wagons is transmitted and received by the locomotive is not defined yet. It could be linked to the electrical part of the freight automatic coupler.	NWC	The link with the electrical part of the DAC is agreed and the draft TSIs included such link removed after the postponement of the DAC specification. However, the postponement of DAC shouldn't prevent the introduction of this clause.
135	6	4.2.9.4	G	NSA FR	Amendment proposal (to be added at the following): "If national rules require additional equipment, adequate storage shall be foreseen."	R	There is no change request linked to the proposal and It is to reminded that clause 4.2.9.4 of LOC&PAS requires the availability of space in or near the driver's cab for the tools and portable equipment. Concerning national rules for vehicle authorisation, such national rules is not to be verified at vehicle authorisation but are more related to operation and should be covered through SMS of Railway undertaking within interface procedure with IM .
136	7	4.2.12.2 (24)	G	NSA FR	Amendment proposal: This information shall be made available upon request when ETCS or similar functions triggered by class B systems is installed.	R	Such requirement should be covered by class B national rule
137	8	4.3.4	G	NSA FR	When appropriate, class B systems should also be mentioned.	R	See above
138	9	7.3.2	G	NSA FR	The Agency shall decide if UK specific cases have to maintained (as here) or removed (as in CCS TSI).	A	UK specific cases will be removed UK Northern Ireland are kept
139	10	7.3.2.8 a	G	NSA FR	The specific case shall be permanent and not temporary. The exact list of Member States has to be confirmed (no etc.).	R	It was agreed in the WP to have T0, see extract CR 351 discussions : MoM of WP13 of 26 Jan 2022 : " NSA FR: if a specific case, it should be a 'P' or at least a 'T0' change" MoM of WP14 of 10 Mar 2022 : "ERA answers that T0 is a temporary specific case with undefined limitation,(...)".
140	11	7.5.3.2	G	NSA FR	Precise if and how possible national rules related to places for bicycles are notified.	D	Being identified as a parameter out of the scope of the TSIs, there shall be no national rules on bicycles in the context of the Interoperability Directive. The passenger rights regulation specifies in its article 6 (4): " When initiating procurement procedures for new rolling stock, or when performing a major upgrade of existing rolling stock resulting in the need for a new vehicle authorisation for placing on the market pursuant to Article 21(12) of Directive (EU) 2016/797 of the European Parliament and of the Council (12), railway undertakings shall ensure that train compositions, in which that rolling stock is used, are equipped with an adequate number of places for bicycles. This subparagraph shall not apply in relation to restaurant cars, sleeping cars or couchette cars. Railway undertakings shall determine an adequate number of places for bicycles taking into consideration the size of train composition, the type of service and the demand for transport of bicycles. The adequate number of places for bicycles shall be defined in plans referred to in paragraph 5. Where there are no such plans or the plans do not determine such a number, each train composition shall have at least four places for bicycles. Member States may set a number higher than four as the minimum adequate number for certain types of services, in which case that number shall apply instead of the number identified in accordance with the second subparagraph." Accordingly, it is normally a task of the railway undertakings to determine contractually the required number of bicycle spaces, provided it is in line with a plan it has established (or the competent authorities, as defined in point (b) of Article 2 of Regulation (EC) No

141	1	4.2.8.2.9.1.1 Height of interaction with contact wires (RST level) The installation of a pantograph on an Electric unit shall allow mechanical contact from at least one of the contact wires at heights between: ... (5) 3920 mm and 5700 mm above rail level for electric units designed to be operated on the 1500 V DC system in accordance with the IRL gauge (track gauge)	M	NSA IE	It is proposed to amend this clause (4.2.8.2.9.1.1 (5)) by changing the minimum contact wire height from 3 920mm to 4 190mm, so that it reads as follows: "4 190 mm and 5 700 mm above rail level for electric units designed to be operated on the 1 500 V DC system in accordance with the IRL gauge (track gauge system 1 600 mm)."	D	In relation to specific case 7.3.2.2 Ireland should have a national rule notified regarding the reference profile in Ireland. The proposed amendment may be accepted after bilateral between ERA and IE.
151	1	3.1	G / M / P	NSA IT	In the table at point 3.1. it seems that for some points it needs to add reference to essential safety requirements. The list below is an example of issues; please consider that other points could require attention and modification. Why is not 4.2.4.3 related to safety and availability? Why is not 4.2.4.4.1 related to availability? (command of emergency brake) Why is not 4.2.4.4.2 related to safety and availability? (command of service brake) Why is not 4.2.4.4.5 related to safety? Why is not 4.2.4.8.3 related to health, due to Lorentz and ECM? Why is not 4.2.5.7 related to availability? Sometimes the button does not work Why is not 4.2.8.2.10 related to availability? Why is not 4.2.4.4.5 related to health, related to current on the human beings? Why is not 4.2.9.3.4 related to availability? The commands and indicators should be available Why is not 4.2.9.6 related to safety? The registration of event is linked to safety and accidents Why is not 4.2.10.2 related to availability? The prevention of fire must be available, above all for specific category of vehicles.	NWC	The proposal is covered by change request 250 that is postponed after TSI 2022
152	2	4.2.6.2 (3)	P	NSA IT	In the point 4.2.6.2. (3) it needs to add the yaw moment in addition to the roll motion due to combination of wind velocity, train speed and wake	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
153	3	4.2.9.4 (1)	P	NSA IT	It is considered essential highlight the fact that the space envisaged by the Loc & Pas TSI, in the event that it is not placed at the head of the vehicle, must be accessible from both sides of the vehicle; this for obvious security reasons. "A space shall be available in or near the driver's cab to store the following equipment, in case they are needed by the driver in emergency situation: <b>If the space above mentioned is not located in the driver's cab of the vehicle and it is positioned in a fairing close to the head, the emergency recovery equipments following shall be available from both sides of the vehicle:</b> "	R	The comment relates to change request 531 and is linked to a national rule negatively assessed by ERA. In relation to cleaning up of national rules and technical opinion 2021-6 sent to Italy... the related national rule negatively assessed should be first discussed between EC and Italy, the change request 531 can be processed for a future TSI revision if EC agrees with IT national rule negatively assessed. In case EC don't agree with your analysis, then the CRs will be changed to 'Rejected'.
154	4	4.2.12.2 (14)	M	NSA IT	Incomplete sentence	A/NWC	TSI LOC&PAS master document has been corrected

155	5	4.2.12.2., 4.2.3.5.2 and Appendix J-1	P	NSA IT	<p>The standard EN 15313, where the EWT protocol on the European traceability of wheelsets has been implemented, is not present in the LOC &amp; PAS TSI (just in the application guidelines) but of fundamental importance as regards the maintenance of wheelsets in operation and out of work. In fact, following the Viareggio accident, it was necessary to allow the ECM to carry out a timely tracking of the maintenance of the wheelsets. To ensure the traceability of in-service vehicle axles, it is necessary that the wheelset manufacturer provide all the data required by the standar EN 15313 (4.2.4.2, 4.2.4.3.3 and Annex B) already during the vehicle authorization phase and these must be part of the vehicle Technical file.</p> <p>Change the text of the Loc &amp; Pas TSI clause 4.2.12.2., 4.2.3.5.2 and Appendix J-1 as follows (in RED the new text proposed):</p> <p>4.2.12.2 (24) the data necessary to ensure the traceability of in-service vehicle wheelsets complying with the specification referenced in Appendix J-1, index 65bis.</p> <p>4.2.3.5.2 (3) In order to ensure traceability, in-service boxed wheelsets shall have marks complying with the specification referenced in Appendix J-1, index 21bis.</p> <p>In the Appendix J-1 to add for the paragraph 4.2.3.5.2 the index 21bis Document n. EN 13260 Point 3.2.8, EN 13261 point 3.10 and EN 13262 point 3.10 and for the paragraph 4.2.12.2 the index 65bis Document n. EN 15313:2016 points 4.2.4.2, 4.2.4.3.3 and Annex B.</p>	R	<p>The comment relates to change request 528 and is linked to a national rule negatively assessed by ERA.</p> <p>In relation to cleaning up of national rules and technical opinion 2021-6 sent to Italy... the related national rule negatively assessed should be first discussed between EC and Italy, the change request 528 can be processed for a future TSI revision if EC agrees with IT national rule negatively assessed. In case EC don't agree with your analysis, then the CRs will be changed to 'Rejected'.</p>
156	6	4.2.2.4 (8) and Appendix J-1	P	NSA IT	<p>All welding joining carried out on the vehicle body should be made according to harmonized procedures in compliance with at least the only and best standard currently in use in the railway sector, namely the series of standards EN 15085.</p> <p>If the manufacturer can demonstrate through experience and risk assessment that it has more effective procedures at the production phase than the EN Standards 15085, it should better introduce these in its quality system and to give evidence to the NoBo.</p> <p>It should be possible to write this in the Application guide of TSI loc&amp;Pas but important is to establish as mandatory at the minimum the EN standard 15085.</p> <p>Therefore, it is necessary to modify the current requirement reported in the TSI In Italy we had many cases of breaking body structure of vehicles due to welding processa carried out not well and in all casess happende not compliant to the EN 15085 standard.</p> <p>Change the text of the Loc &amp; Pas TSI clause 4.2.2.4 (8) and Appendix J-1 as follows (in RED the new text proposed):</p> <p>(8) Joining techniques are covered by the above requirements. A verification procedure shall exist to ensure at the production phase that defects that may decrease the mechanical characteristics of the structure are controlled.</p> <p>In case of welding processes the existence of an above procedure may be demonstrated through compliance with the specification referenced in Appendix J-1, index 7bis. In the Appendix J-1 to add for the point 4.2.2.4 the index 7bis Document n. EN 15085- 1:2014, EN 15085-2:2020, EN 15085-3:2008, EN 15085-4:2008, EN 15085-5:2008 and EN 15085-6:2020.</p>	R	<p>The comment relates to change requests 487,488 and is linked to a national rule negatively assessed by ERA.</p> <p>In relation to cleaning up of national rules and technical opinion 2021-6 sent to Italy... the related national rule negatively assessed should be first discussed between EC and Italy, the change requests 487,488 can be processed for a future TSI revision if EC agrees with IT national rule negatively assessed. In case EC don't agree with your analysis, then the CRs will be changed to 'Rejected'.</p>
157	7	4.2.3.5.1. and Appendix J-1	P	NSA IT	<p>In the Chapter 4.2.3.5.1. "Structural design of bogie frame" there is no reference to joining techniques. This is a serious lack in the TSI Loc&amp;Pas, so the text it should at least the same of the text in the chapter 4.2.2.4 (8) concerning "Strength of vehicle structure". All welding joining carried out on the bogie frame should be made too according to harmonized procedures in compliance with at least the only and best standard currently in use in the railway sector, namely the series of standards EN 15085.</p> <p>If the manufacturer can demonstrate through experience and risk assessment that it has more effective procedures at the production phase than the EN Standards 15085, it should better introduce these in its quality system and to give evidence to the NoBo.</p> <p>It should be possible to write this in the Application guide of TSI loc&amp;Pas but important is to establish as mandatory at the minimum the EN standard 15085.</p> <p>Therefore, it is necessary to modify the current requirement reported in the TSI loc &amp; Pas in point 4.2.3.5.1.</p> <p>In Italy we had many cases of breaking bogie frame of vehicles due to welding processa carried out not well and in all casess happende not compliant to the EN 15085 standard.</p> <p>Change the text of the Loc &amp; Pas TSI clause 4.2.3.5.1. and Appendix J-1 as follows (in RED the new text proposed):</p> <p>(4) Joining techniques are covered by the above requirements. A verification procedure shall exist to ensure at the production phase that defects that may decrease the mechanical characteristics of the structure are controlled.</p> <p>In case of welding processes the existence of an above procedure may be demonstrated through compliance with the specification referenced in Appendix J-1, index 21bis.</p> <p>In the Appendix J-1 to add for the point 4.2.3.5.1 the index 21bis Document n. EN 15085- 1:2014, EN 15085-2:2020, EN 15085-3:2008, EN 15085-4:2008, EN 15085-5:2008 and EN 15085-6:2020.</p>	R	<p>The comment relates to change requests 487,488 and is linked to a national rule negatively assessed by ERA.</p> <p>In relation to cleaning up of national rules and technical opinion 2021-6 sent to Italy... the related national rule negatively assessed should be first discussed between EC and Italy, the change requests 487,488 can be processed for a future TSI revision if EC agrees with IT national rule negatively assessed. In case EC don't agree with your analysis, then the CRs will be changed to 'Rejected'.</p>

158	8	6.2.3.7 and Appendix J-1	P	NSA IT	<p>In the TSI Loc&amp;Pas there are no requirements on brake discs, it is considered essential to insert requirements for these components and refer to compliance with the standards used at today by all manufacturers for the construction of brake discs, namely the EN 14535-1 standards and EN 14535-2. We can understand the decision don't reference to the standard for design and production of Brake disc but for ITaly it is necessary to refer to the standard for the demonstration for mechanical and thermal characteristics of brake disc (EN 14535-3) as there are reference for axle wheel, axle bearing and and axle boxes.</p> <p>Requirement 6.2.3.7 should therefore be amended to introduce requirements for demonstrating compliance of brake discs as well as requirements for axle bearings/axle boxes.</p> <p>Change the text of the Loc &amp; Pas TSI clause 6.2.3.7 and Appendix J-1 as follows (in RED the new text proposed). after Axle boxes/bearings and in particular after comma (6) to add new section:</p> <p><b>Brake discs</b></p> <p><b>(6bis) The demonstration of compliance for mechanical resistance and thermal characteristics of the brake discs shall be in accordance with the specification referenced in Appendix J-1, index 90bis.</b></p> <p><b>In the Appendix J-1 to add for the point 6.2.3.7 the index 90bis Document n. EN 14535-3:2016.</b></p>	R	<p>The comment relates to change request 489 and is linked to a national rule negatively assessed by ERA.</p> <p>In relation to cleaning up of national rules and technical opinion 2021-6 sent to Italy... the related national rule negatively assessed should be first discussed between EC and Italy, the change requests 489 can be processed for a future TSI revision if EC agrees with IT national rule negatively assessed. In case EC don't agree with your analysis, then the CRs will be changed to 'Rejected'.</p>
159	9	4.2.4	P	NSA IT	<p>In the TSI loc&amp;Pas there are no functional requirements concerning brake application as for example requirement concerning the brake block holder/brake lining holder and the brake lining. It should very important to write a functional requirement to avoid the loss of brake block or brake lining between the rail during the running. It should be necessary also to define the admitted braking lining, with the difference if the componet is compliant or not with the UIC standard fiche UIC 541-3.</p> <p>To add in some part (to evaluate the best place) of Chapter 4.2.4 "Braking" the following functional requirements concerning concerning the brake block holder/brake lining holder and the brake lining (text in red):</p> <p><b>The brake block holder / brake lining holder shall be equipped with special devices to avoid the loss along the railway line of the brake block and/or brake lining.</b></p> <p><b>The brake lining shall be comply with fiche UIC 541-3 for the categories foreseen in this. For categories of brake lining not provided for, the tests shall be conducted according to the principles of the fiche UIC 541-3 with load conditions provided for the specific application.</b></p>	R	<p>The comment relates to change request 490 and is linked to a national rule negatively assessed by ERA.</p> <p>In relation to cleaning up of national rules and technical opinion 2021-6 sent to Italy... the related national rule negatively assessed should be first discussed between EC and Italy, the change requests 490 can be processed for a future TSI revision if EC agrees with IT national rule negatively assessed. In case EC don't agree with your analysis, then the CRs will be changed to 'Rejected'.</p>
160	10	4.2.4.3	P	NSA IT	<p>It is necessary to introduce an important safety requirement for the locomotive in "general operation" fitted with a brake system with a brake pipe compatible with the UIC brake system.</p> <p>In case of pressure reduction in the main brake pipe to values lower than 3.5 bar the cut-off of all tractive effort it is necessary.</p> <p>To add in the Chapter 4.2.4.3 "Type of brake system" the following functional requirement (text in RED):</p> <p><b>(1bis) Thermal or electric traction units, Self-propelling thermal or electric passenger trains, fitted with a brake system with a brake pipe compatible with the UIC brake system, shall be equipped with a traction cut-off device in case of pressure reduction in the main brake pipe to values lower than 3.5 bar</b></p>	A/NWC	<p>The proposal is linked to an Italian national rule accepted as a recommendation until TSI LOC&amp;PAS application guide clarify that the case where there is no traction cut off following an unintentional braking should be covered by risk scenarii 2 and 3 of clause 4.2.4.4.2 of LOC &amp; PAS TSI.</p> <p>This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.</p>

161	11	4.2.9.3.1	P	NSA IT	<p>The driver's activity control function, as well as the braking system, ensures compliance with the essential requirement Safety (tab 1.3.1 TSI LOC&amp;Pas).</p> <p>To date, while the safety requirements and risk scenarios to be taken into account are made explicit for the braking system (Table 3 in section 4.2.4.2.2), the same cannot be said for the driver's activity control function, also considering that some risk scenarios are of comparable magnitude to those defined for the braking system.</p> <p>These scenarios, as well as those already contemplated for the braking system, are essential in order to identify hazards and define mitigations (redundancies, periodic checks, etc.) to ensure the safety of the complete vehicle.</p> <p>TEXT CR (proposed changes in red): Amends Section 4.2.9.3.1 by adding a new subsection (4a) as follows.</p> <p>[...]</p> <p><b>(4a) Safety requirements.</b> The functional requirements in the previous points help to ensure the safe operation of the driver activity control function; however, a risk analysis is required to evaluate the performance of the driver activity control function, since multiple components are involved. For the risk scenarios considered, the corresponding safety requirements to be met are listed in Table 5a below. Where the table specifies cases with serious consequences, it is necessary to demonstrate that the corresponding risks are kept under control at an acceptable level, taking into account functional failures that are likely to directly cause the serious consequences shown in the table.</p> <p style="text-align: center;"><b>Table 5a</b> <b>Driver activity control function - Safety requirements</b></p> <p>No.   Functional failure with its hazardous scenario   Safety requirement to be met/Associated severity/Consequence to be prevented 1  The driver's activity control function is not entered when the train stopped condition is lost.   Fatalities 2  Missed/Delayed activation of the speed-dependent driver activity control function.   Fatalities 3  Degradation at the interface with the braking system.   Fatalities 4  Degradation to the components that perform the function   Fatalities 5  Improper interruption of emergency brake control.   Fatalities</p>	R	<p>This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.</p>
162	12	4.2.4.2.2	P	NSA IT	<p>To date there is no explicit requirement in the TSIs that the command generated by the on-board CCS subsystem is actually transferred to the braking system. In fact, the table in section 4.2.4.2.2 (safety requirement 1, Table 3) of the Loc&amp;Pas TSI does not include this risk scenario.</p> <p>This scenario, as well as those already covered by the aforementioned table, are essential in order to identify the hazards and define the mitigations (redundancies, periodic checks, etc.) to ensure the safety of the complete vehicle.</p> <p>Modify Table 3 paragraph 4.2.4.2.2 of the Loc&amp;Pas TSI by adding an additional risk scenario:</p> <p>No 5.  Applies to all units   After the activation of an emergency breaking command coming from the on bord CCS subsystems, no deceleration of the train due to a failure of the interface device between the on bord CCS subsystem and the breaking system   Fatalities  2 (no single failure is accepted)</p>	R	<p>Table 3 already cover the scenario proposed see scenario n° 1 : After activation of an emergency brake command no deceleration of the train due to failure in the brake system (complete and permanent loss of the brake force). <b>Note: activation by the driver or by the CCS system to be considered. Activation by passengers (alarm) not relevant for the present scenario.</b></p>

163	13	4.2.9.3.1 and 3.1	P	NSA IT	<p>The question of the ergonomics of the "Driver's activity control function" device and the effects on the health of the worker should instead be posed at a European level, providing for the use of less invasive and repetitive devices than those currently in use.</p> <p>Pending the activation, at European level, of research and development programs aimed at identifying alternative solutions that allow for the integration / modification of the mandatory requirements contained in the TSI Loc &amp; Pass standard, Italy proposes a modification of the driver's activity control function, defined by point 4.2.9.3.1. of the TSI Loc &amp; Pas, so that this is designed, built and used in compliance with the principles of the Council Directive, of 12 June 1989, relating to the introduction of measures aimed at promoting the improvement of the safety and health of workers at work (89/391 / EEC), and,</p> <p>therefore, in relation to the degree of technical evolution, the designers, manufacturers and employers of railway undertakings, each for their own competence, must seek and implement ergonomically suitable solutions to reduce monotonous and repetitive work and the related risks.</p> <p>Change the text of the Loc &amp; Pas TSI clause 4.2.9.3.1., adding after the paragraph 1 the following paragraph 1.bis:</p> <p><b>4.2.9.3.1(1bis) The driver's activity control function must be designed, implemented and used in compliance with the principles of the Council Directive of 12 June 1989 concerning the introduction of measures aimed at promoting the improvement of the safety and health of workers at work. (89/391 / EEC), as implemented by each Member State and, therefore, in relation to the degree of technical evolution, the designers, manufacturers and employers of the railway undertakings, each for their own competence, must research and implement ergonomically suitable solutions to reduce monotonous and repetitive work and the related risks to reduce the effects on the health of workers.</b></p> <p><b>Furthermore, it is necessary to modify the table of point 3.1 "Elements of the" rolling stock "subsystem corresponding to the essential requirements" of the TSI Loc &amp; Pas, marking, in correspondence with point 4.2.9.3.1, the impact on the essential requirement "health" ( to date, only essential "Safety" and "technical compatibility" requirements have been marked)</b></p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
164	14	6.2.2	P	NSA IT	<p>Add in the section 6.2.2 the timing for the release of the certification. The correct timing is necessary to design and produce correctly the vehicle.</p> <p>Therefore, another comma should be added in order to fix the procedure of the certification. The new proposed comma is reported below:</p> <p><b>(5) The SD certification must be released after that the Conformity assessment body has evaluated and certified the design/project/type SB at the end of the phase A (7.1.3.1). The audit in the production line must be made during the production/assembly of the vehicle with a fixed configuration certified by SB. Appropriate reasonable proofs could be given in case the audit is lead in the production line of similar and interchangeable projects with explicit exportability report of NoBo/DeBo and declaration of applicant.</b></p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision. The proposal relates to application of module decision 2010/713
165	15	6.2.2	P	NSA IT	<p>Add in the section 6.2.2 the timing for the release of the certification. The correct timing is necessary to design and produce correctly the vehicle.</p> <p>It has happened that SB and SD certifications had been released after 2 years that dynamic behaviour tests of the vehicle was performed. Moreover, if SB is released after production, this means that the vehicle/prototype has designed like an experiment by changing reference rules and basis when some of them had been difficult to apply or not convenient or expensive.</p> <p>Finally it is noticed that the reference rules to design and project should be defined and fixed in the requirements capture.</p> <p>Therefore, another comma should be added in order to fix the procedure of the certification.</p> <p>The new proposed comma is reported below:</p> <p><b>(6) SB certificates should be released before that the production of the project/design/type is performed, otherwise there is a risk to produce and assembly vehicle without a fixed and defined project. This mode of practice is justified in that SB certification is the result of the verification of a configuration in the sense of 545/2018 and according to 7.1.3.1 (2) basis.</b></p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision. The proposal relates to application of module decision 2010/713

166	16	6.2.2	P	NSA IT	<p>Add in the section 6.2.2 the timing for the release of the certification. The correct timing is necessary to design and produce correctly the vehicle. Therefore, another comma should be added in order to fix the procedure of the certification. The new proposed comma is reported below:</p> <p><b>(7) The requirements capture for a type/project/design should be finished before that the SB has been released, otherwise the validity of the certification is damaged by continuous adjustments of requirements and vehicle design aspects and basis according to 7.1.3.1 (2) and 7.1.3.1 (4). The release of requirements capture assures that the project is fixed and production of the project could start with a determined configuration according to 545/2018.</b></p>	R	<p>Requirements capture process is defined in the regulation 2018/545 and its application guide.... TSI is a part of requirements capture, other requirements (e.g from other EU legislation, national rules etc) should be taken by the applicant. Regarding module SB, decision 2010/713 has clear requirement on conditions to obtain an SB type certificate, it is possible only if the subsystem is compliant with TSI requirements ( including conditions for use if any). Provisions on changes on a subsystem are covered by regulation 2018/545 and by clause 7.1.2 of LOC&amp;PAS, there impact to NoBo certificates has to be considered by the applicant.</p>
167	17	TSI and line to take relationship	U / M	NSA IT	<p>Please consider that the same information on the TSI must be coherent with the explanations in the TSI application guide. It has happened that for one sentence in the line to take, the requirement of one point of the TSI has gone down.</p> <p>For instance, this happened in the application of the TSI LOC &amp; PAS of inspection vehicles. Inside the TSI 7.1.1.3 (1), it was written that the application of LOC&amp;PAS is not mandatory for OTM, without specific citation to inspection vehicle. Therefore, logically It was understood that TSI LOC&amp;PAS was mandatory for inspection vehicles. Then an applicant has found a prase inside the line to take of the TSI LOC&amp;PAS, where the possibility to not apply TSI LOC&amp;PAS is extended to inspection vehicles.</p>	A/NWC	<p>TSI LOC&amp;PAS Application guide will provide further explanation on special vehicles including inspection vehicles, the understanding of clause 7.1.1.3 will be made available</p>
168	18	Annex J	U / P	NSA IT	<p>In the Annex J are listed the harmonized rules (EN). New EN revisions are released, so it could be better to specify that the manufacturer should be designed and produced t the vehicle with the released EN at the time of design and production, then the test on the vehicle should be performed with the latest newer harmonized rule</p>	NWC	<p>the EN release are examined by the topical working group standardisation (TWG STA) and standard updates are proposed to the working party. during this process, the changes in the standard are assessed during this process. The changes in the standard are assessed and the transition regime is defined (C1, C2 or C3 depending on the change)</p>
169	19	7.1.2.2 (6)	P	NSA IT	<p>Integration of the text of the clause with a reference to Paragraph 2.3.1 "types of rolling stock", along with the following criterion: if the proposed change leads to change in rolling stock type as defined in Paragraph 2.3.1, then it is also considered as a change of type in the sense of Dir. 2016/797, art. 2 (26), thus, a change of category (d). The use of the same word - "type" - i nthe two instances shows a strong relationship between the two apparently different concepts. A case of this nature is, for example, the trasnformation of a luggage van (Paragraph 2.3.1: "passenger coach and other related cars") into OTM (vehicle for diagnostic) (Paragraph 2.3.1: "special vehicles, such as On-Track Machines"). A detailed text proposal for the key sentences of (6) could be:</p> <p><b>"Based on these tables, ON THE ROLLING STOCK TYPES DEFINED IN CLAUSE 2.3.1 OF THIS TSI, and on the safety judgement mandated in Article 21(12) (b) of Directive (EU) 2016/797..."; "unless the safety judgement mandated in Article 21 (12) (b) of Directive (EU) 2016/797 OR THE CHANGE OF TYPES A S DEFINED IN CLASUE 2.3.1 OF THIS TSI requires to categorise them as 15 (1) (d)...."</b></p>	R	<p>This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.</p>
170	1	Section 2.3.1 of the Annex	P/U	Ministry (LT)	<p><i>In section 2.3.1 of the Annex it is proposed to set that road-rail vehicles are out of the scope of this TSI. In our view, road-rail vehicles should be in the scope of the TSI, especially when they are used as shunting locomotives, in train formation or run on open/public lines, i.e. they perform the tasks of the rolling stock. The requirements, related to the safe performance of such operations, should apply. Otherwise, it is not clear if and what requirements for road-rail vehicles are applicable and do these vehicles need authorization by ERA/NSA. Please, clarify.</i></p>	NWC	<p>Rail-road vehicles are not in the scope of the TSIs, therefore they are authorized according to national rules by NSAs.</p>
171	2	Section 4.2.2.2.5 of the Annex	P	Ministry (LT)	<p>We propose amending section 4.2.2.2.5 of the Annex by inserting the requirement which goes like this "The uncoupling lever of the SA-3 type coupling must be installed in such a way that, in the event of uncoupling, the worker does not have to enter the space between the coupled rolling stock." <i>in order to ensure the safety of the workers. This rule is relevant for 1 520 mm track gauge vehicles and more detailed requirements are set in GOST 33434-2015, therefore, they should be regulated by national technical rules.</i></p>	D	<p>To be discussed bilaterally</p>
172	3	Section 4.2.3.5.2.2 of the Annex, Appendix I	P	Ministry (LT)	<p><i>For 1 520 mm track gauge vehicles wheel profile requirements are set in GOST 11018-2011. We propose to enable national technical rules to be laid down in this regard by amending section 4.2.3.5.2.2 or Appendix I.</i></p>	D	<p>To be discussed bilaterally</p>
173	4	Section 4.2.3.5.2.2 pont 2 of the Annex	U	Ministry (LT)	<p><i>In section 4.2.3.5.2.2 point 2 of the Annex it is proposed that "The geometrical dimensions of the wheels (as defined in Figure 2) shall be compliant with limit values specified in Table 2. These limit values shall be taken as design values (new wheel) and <u>as in-service limit values (to be used for maintenance purposes;</u>". The question is, if these values shall be taken also as in-service limit values, then why they do not match the ones, set in ERA/ERTMS/033281 document? Please, clarify. <i>We have the same comment towards the first designation, set in the table 20, section 7.3.2.6 of the Annex.</i></i></p>	A	<p>The discrepancy will be examined</p>

174	5	Section 4.2.3.6 of the Annex	M	Ministry (LT)	We propose amending section 4.2.3.6 of the Annex by inserting separate requirement for 1 520 mm track gauge vehicles, since the minimum curve radius in the 1520 mm network is 80 m.	D	To be discussed bilaterally
175	6	Section 4.2.4.3 of the Annex, Appendix I	P	Ministry (LT)	<i>The braking system used on the 1520 mm network should be compatible with the system described in GOST 33724.1-2016. We propose to enable national technical rules to be laid down in this regard by amending section 4.2.4.3 or Appendix I.</i>	D	To be discussed bilaterally
176	7	Section 4.2.7.1.3 point 1 of the Annex	M	Ministry (LT)	<i>Section 4.2.7.1.3 point 1 of the Annex sets that "Two red tail lamps shall be provided at the rear end of units intended to be operated at the rear end of the train in order to make the train visible." while section 4.2.2.1.3 of Annex of OPE TSI allows reflective plates. These discrepancies between TSIs create confusion, therefore, we suggest either amending both TSIs constantly at the same time or erasing the provisions from OPE TSI and giving reference to amended provisions of LOC&amp;PAS. Also, we would like to note that the requirements of section 4.2.1.3 of the Annex of LOC&amp;PAS and section 4.2.2.1.3 of the Annex of OPE TSI only apply to trains and do not apply to special rolling stock, single locomotives as well as freight trains under non-standard conditions, e.g. driving on an irregular railway track, pushing a group of wagons, and so on. We suggest specifying all variants for the marking of trains, including other rolling stock, also, running them under non-standard running conditions (please see our proposals to OPE TSI as well). Lastly, we would like to ask to set a new specific case in LOC&amp;PAS or OPE TSI. We kindly ask you to let us know if the separate form for this request should be filled. During the cleaning up process of national safety rules one rule indicating rear end of the train was found to be unacceptable. The rule is applicable for a long time up to today in the 1 520 mm track gauge system, also third countries and is still relevant. It goes like this "The end of a passenger and mail and luggage train running on a single-track railway and on a double-track railway on a regular or irregular track shall be marked with three red lights during the day and at night.":</i>	D	To be discussed bilaterally
177	8	Section 4.2.8.3 of the Annex	P	Ministry (LT)	<i>Section 4.2.8.3 and some other sections / points in the Annex and appendixes are marked "not used". After the consultation with market participants, we think that the mark "not used" may be confusing as to whether some requirements are not applicable since the new version of the TSI enters into force, or these requirements always have been not applicable, or it means something else. For instance, section 4.2.8.3 sets that diesel engines are to comply with the Union legislation concerning exhaust (composition, limit values). Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery refers to LOC&amp;PAS. The regulation is in line with the EU green freight goal, therefore, the requirement is likely to apply. We suggest clarifying the mark "not used".</i>		
178	9	Section 7.1.1.3 point 3 of the Annex	P/U	Ministry (LT)	<i>Section 7.1.1.3 point 3 of the Annex sets that in case the applicant chooses not to apply this TSI, the special vehicle may be authorized in accordance with Article 21 of Directive (EU) 2016/797 against national rules as regards the basic parameters of this TSI. There was a case when an applicant requested authorization according to national rules, covering open points of the TSI. The application was denied because there are no national rules covering all the basic parameters. However, the applicant insisted on authorization according to national rules, because the TSI allows this opportunity. In the end, the solution was found. However, the question remains unanswered: whether the member state holds the obligation to lay down the national rules? Please, clarify. We suggest amending the section 7.1.1.3 point 3 of the Annex accordingly.</i>	D	To be discussed bilaterally
179	10	Section 7.3.2.6 table 20 of the Annex	M	Ministry (LT)	We suggest correcting the values in the table 20: "Height of the flange (Sh)": min. 27 mm, max. 37 mm (for 2nd and 5th axles of the locomotive ČME3 - min. 26.25 mm, max. 33.25 mm), "Thickness of the flange (Sd)": min. 25 mm, max. 33 mm. (for 2nd and 5th axles of the locomotive ČME3 - min. 21 mm, max. 23 mm).	D	To be discussed bilaterally
180	1	4.2.9.3.7.	U	NSA NL - 2	Derailment detection: here it is noticeable that this must be built into the vehicles. Existing system such as Qua Vadis used by IM (ProRail) seems not to have been taken into account, while the latter also checks for irregularities and, if analyzed correctly, can detect vehicles that are/are prone to derailment. The data in Quo Vadis is available and can be linked to the individual vehicles with passive tags. Smart software can do the rest.	NWC	This system isn't considered as a derailment detection system in the meaning of the new LOC&PAS TSI, but its use isn't prohibited
181	2	4.2.9.3.7.	U	NSA NL - 2	Is usage of the existing hotbox detection system in combination with Tags an option?	D	This question would require to be clarified
182	3	Appendix H, Table H1	U	NSA NL - 2	In Table H1 diesel and other thermal traction are scrapped. Does this mean that there is no more room for e.g. steam heated by combustion of hydrogen and or converted diesel engines running on ammonia as sources of traction? In short, what is the scope of deleting this paragraph: Diesel and other thermal traction system.	NWC	There are other Directives applying to rolling stock: EMC, pressure equipment, diesel exhaust gas emission... Either the TSI lists all these Directives, or it lists none of them. The Directives having their own implementation rules, it was decided to remove the references

190	1	G	Siemens	<p>Siemens Mobility appreciates very much the final setting of the transition rules of the rolling stock related TSI coming with an unlimited validity of a type certificate as well as the possibility to make use of the initial assessment framework (IAF) for variants of a given type.</p> <p>Nevertheless, Siemens Mobility also supports UNIFE, having expressed clearly within the Working Party on TSIs that the European rail supply industry cannot support the proposed chapter 7 modifications to the TSIs. This is notably due to the current wording for "Changes with a specific transition regime" (C3 changes) without a clear justification for these being established. C3 changes being potentially subject to immediate implementation on running projects and contracts, in design and in production phase and even on rolling stock already in commercial operation, create unnecessary and unpredictable risks for the rail sector as a whole.</p>	NWC	<p>Solutions for dealing with retroactive costs occurred by new TSI requirements impacting signed contracts should be aligned upon.</p> <p><b>ERA answer</b> The CCM procedure isn't part of the consultation. However, it isn't true to write that changes with a specific transition regime can be created "without a clear justification for these being established". The Agency has drafted with the Working Party a detailed procedure about how the changes are processed, including how they are categorised. According to that procedure, changes can only have a specific transition regime when they address a safety or technical compatibility issue or when they are covering a policy objective. In any case, a specific impact assessment needs to be provided (unless decided otherwise by the Working Party). The new transition regime could not be proposed without this possibility to have specific transition regimes for some change requests.</p>
191	2	G	Siemens	<p>Siemens Mobility furthermore supports the UNIFE request for C3 requirements to be connected to a full quantitative impact assessment which demonstrates a positive cost/benefit assessment for the rail sector considering the impact on all sector stakeholders and end users. This impact assessment shall contain a detailed implementation plan supported by all impacted stakeholders considering the impact on new and existing projects/assets, the availability of EU funding/compensation mechanisms, the technology readiness level of the proposed change or new requirement, and the supply and integration capacity of the sector.</p>		<p>C3 should only become valid after a detailed analysis of the consequences and a clarification of the way forward to minimize negative consequences for all stakeholders. Otherwise, the costs, delays and risks for C3 will most likely be taken by the supply industry, being in charge for managing a "change in law" closely after the signing of the contract.</p> <p><b>ERA answer</b> The CCM procedure isn't part of the consultation.. However, changes with a specific transition regime require an impact assessment. The type of impact assessment is according to the model of the Agency.</p>
192	3	G	Siemens	<p>Siemens Mobility supports the UNIFE call for the ERA Working Party Change Control Management (CCM) document to be embedded in the regulation in order to secure the pre-requisite of a clear cost-benefit assessment and justification process for all changes with a specific transition regime. The same principle should apply to the TSI CCS.</p>		<p>Propose a potential format for this document.</p> <p><b>ERA answer</b> The CCM procedure isn't part of the consultation. It is an ERA working document shared with a Working Party and it doesn't need to be part of the regulation.</p>
193	4	G	Siemens	<p>Siemens Mobility understands the general role of the TSI ("Technical specifications for Interoperability") to provide for requirements which enable interoperable operation of railways. The current revision contains too many CR's ("change requests") which are not necessarily related to interoperability as such but are more dedicated to enable the SERA ("Single european Railway Area") or follow the general target of "Green Freight" and "Digital Rail". We would like to reiterate again that we see a TSI as a regulation/tool that should only include developed and market ready technologies. However, the one common bus/onboard modularity is an example of a neither purely interoperability-related nor fully developed technology which is foreseen to become mandated via the TSI CCS 2022 Annex B1 and as such becomes part of the VA process (keeping in mind the specifications for the one common bus/onboard modularity will evolve over the years with an impact the VA process, especially if projects are signed lasting for several years).</p> <p>While we support in principle the development of a one common bus/onboard modularity, we would have preferred the technology to be fully developed first and only then being mandated via a TSI (to leave the VA process unimpacted).</p>		<p>Requirements which come with an extended scope beyond interoperability should be highlighted as this and agreed by all stakeholders. These requirements should not necessarily be subject of authorisation.</p> <p><b>ERA answer</b> The interoperability directive scope (article 1) includes the objective of the progress achievement of the internal market. The on-board modular topics are considered part of the achievement of an internal market as the on-board modular specifications provide the necessarily optimal level of harmonisation to connect the different ICs and CCS parts from different suppliers in an efficient way.</p>

194	5		G	Siemens	Siemens Mobility considers that some TSI 2022 CR's (Change Request) which are partly comprising new ideas without any maturity checks are adapted by the Working Party on TSI (WP) until the very end of the finalisation of the technical work (June 2022). Some decisions of the Working Party on TSI regarding the application and assignment of these CR are sometimes taken even in the absence of consensus of all stakeholders. This may lead to the unfortunate situation that e. g. manufacturers are requested to implement functions without the possibility to prepare a roadmap for their realization and assessment which might take years to be designed. This is even more challenging for new projects which are foreseen to be kicked-off closely after publication of the TSI where bids need to be prepared properly.	<p>In future, create a framework on CR's to be tackled and perform a maturity test for their potential solutions (1. step). Perform a Cost-benefit-analysis for this framework comprising all TSI (2nd step). In case of positive outcome start the work (3rd step). Let the TSI enter into force a certain time after its publication in order to allow stakeholders to prepare for its application (4th step).</p> <p><b>ERA answer</b> This point can be discussed as a return of experience of the TSI revision 2022. The procedure followed for this revision is new for all participants and ideas for improvement are welcome.</p>
195	6		G	Siemens	One example lacking a clear and transparent decision process was/is the CR527 (quoting two versions of one EN standard in the Annexes of the TSI in case of unchanged requirement) for which all stakeholders worked for about 2 years pro-actively together and had a commonly accepted proposal ready, which was then "taken off the table" in the last minute due to an opposition from very few members of the Working Party/Topical Working Group. This CR 527 has cost the industry and ERA / COM a lot of resources and its outcome is unfortunate after such extensive resources have been invested.	<p>Reconsider and reintegrate CR 527</p> <p><b>ERA answer</b> There was no consensus on the CR 527 and ERA had to make the decision at the end. The proposal of CR527 was a complex way to say something simple like: in case a revised standard doesn't affect the compliance with the TSI, an earlier can be used (it is already done in practice). Adding such a clarification in the application guide is considered.</p>
196	7		G	Siemens	Siemens Mobility believes that current draft of the TSI CCS requires the applicant to take into account parameters (such as the required ETCS system version mentioned in annex B1 of TSI CCS) of the routes in the area of use from the RINF (Register of Infrastructure). The RINF is an extensive database being under constant review and every applicant would have constantly to monitor it in order to record changes relevant to the Vehicle Authorisation process in due time.	<p>Irrespective of the entries in the RINF, the IMs should issue corresponding statements with the approval-relevant parameters of their routes (e.g. ETCS system version) and publish them, for example, on the ERA homepage - similar to what is already done with the ECS/RSC statements. If necessary, the ETCS system version could be added to the ECS/RSC statements in which case there would only be one requirements paper/document the applicant would have to take into account.</p> <p><b>ERA answer</b> The RINF describes the nature of the infrastructure. ESC/RSC statements have another objective and are intended to be gradually phased out in the longer term. Article 21 point 2 of the interoperability directive stipulate that the application shall include evidence that the technical compatibility between the vehicle and the network of the area of use has been checked. Article 21 point 3 request that the application shall be accompanied by a file ... including documentary evidence of:...</p> <p>(d) technical compatibility of the vehicle with the network in the area of use referred to in paragraph (2), established on the basis of the relevant TSIs, and where applicable, national rules, registers of infrastructure and the CSM on risk assessment.</p>

197	8		G	Siemens	<p>The TSI drafts Loc &amp; Pas and CCS refer to extensive specifications of interfaces between ETCS and vehicle to ensure a future compliance with the planned expansion of the ERTMS functions. Compared to the previous TSI versions, this part of the specification has been significantly expanded.</p>		<p>When involving the NoBos in the testing/evaluation of these interfaces as part of the approval process, it must be ensured that there is no mutual dependency in the NoBo assessments on the vehicle (LOC &amp; PAS TSI) and CCS (CCS TSI) side, which could lead to considerable delays in the approval process.</p> <p>If tests/assessments of the interfaces between ETCS and vehicle are required as part of the approval process, these may only be carried out at one point and, if possible, only by one authority. It is proposed that the assessment of the integration of the CCS subsystem, including the functions at the interfaces to the vehicle, be carried out only by the CCS NoBo.</p> <p>The approach of placing on the market the mobile subsystems (RST, CCS) independently must continue to be maintained. The proof of the integration of the subsystems in the vehicle is only provided with the 2nd step/phase of the 4th Railway Package VA process diagram. The Interfaces between the subsystems are assigned to this step.</p> <p><b>ERA answer</b> Interfaces are more detailed because they are more completely described than in past revisions, not because there are more requirements. Our objective was primarily clarification. In particular, the role of each NoBo (CCS and RST) is clarified.</p>
200	1	<p>LOC&amp;PAS Appendix L NOI Appendix H PRM Appendix P WAG Appendix A CCS Appendix B</p>	G/P	UNIFE	<p>UNIFE expressed clearly within the Working Party on TSIs that the European rail supply industry cannot support the proposed chapter 7 modifications to the TSIs. This is notably due to the current wording for "Changes with a specific transition regime" (C3 changes) without a clear justification for these being established. C3 changes being potentially subject to immediate implementation on running projects and contracts, in design and in production phase and even on rolling stock already in commercial operation, create unnecessary and unpredictable risks for the rail sector as a whole.</p> <p>UNIFE has requested C3 requirements to be connected to a full quantitative impact assessment which demonstrates a positive cost/benefit assessment for the rail sector considering the impact on all sector stakeholders and end users. This impact assessment shall contain a detailed implementation plan supported by all impacted stakeholders considering the impact on new and existing projects/assets, the availability of EU funding/compensation mechanisms, the technology readiness level of the proposed change or new requirement, and the supply and integration capacity of the sector.</p> <p>UNIFE calls for the <b>ERA Working Party Change Control Management (CCM) document to be embedded in the regulation</b> in order to secure the pre-requisite of a clear cost-benefit assessment and justification process for all changes with a specific transition regime. The same principle should apply to the TSI CCS.</p>	NWC	<p>It isn't true to write that C3 changes can be created ""without a clear justification for these being established"". The Agency has drafted with the Working Party a detailed procedure about how the changes are processed, including how they are categorised. According to that procedure, changes can only be categorised C3 only when they address a safety or technical compatibility issue or when they are covering a policy objective. In any case, a specific impact assessment needs to be provided for all C3 changes (unless decided otherwise by the Working Party), according to the procedure ("For any CR categorized C3 and its respective phases, an individual economic evaluation is mandatory unless otherwise decided and approved by the Working Party"). The type of impact assessment is according to the model of the Agency."</p> <p>The new transition regime that is proposed, including the unlimited validity of a type and the possibility to develop variants based on the same initial assessment framework that the original type, could not be proposed without this possibility to have specific transition regimes for some change requests.</p> <p>The Agency believes that the procedure of categorisation of changes, that relates to a working method of the Agency with its working groups, shouldn't be part of the regulation.</p> <p>UNIFE position will be reported.</p>

201	1	4.2.3.1 (5)	P	UTP	In paragraph 4.2.3.1, bullet 5, reference is made to the rules for checking the pantograph in annex D of the ENE TSI. It is not the role of the TSI to give the rules for determining the kinematic gauge, as all these rules are already described in the standard EN15273-3. We propose to delete all rules in relation with the kinematic gauge in this Annex D of this TSI ENE and to modify the text as below: (5) For electric units, the pantograph gauge shall be verified by calculation according to the specification referenced in Appendix J-1, index 14, clause A.3.12 to ensure that the pantograph envelope complies with the mechanical kinematic pantograph gauge in relation with the choice made for the pantograph head geometry. the two permitted possibilities are defined in clause 4.2.8.2.9.2 of this TSI.	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
202	3	4.2.9.3.7 point 8	P	UTP	References are missing. It seems that at the moment, there is no §5.3.x dealing with automatic coupling in STI WAG. Reference to ERA/TD document is missing too. Correct this as the TSI can't be published this way	A/NWC	TSI LOC&PAS Master document is already corrected, point 8 is deleted.
203	1	4.2.5.8	P	EPF	During the COVID pandemic, we saw that safe CO2 levels were often defined as under 800 or 900 ppm. In Belgium, for example, 900 ppm was the advised limit and 1200 ppm may not be exceeded: <a href="https://www.info-coronavirus.be/en/ventilation/">https://www.info-coronavirus.be/en/ventilation/</a> Therefore, we propose that the limits mentioned here (5000 and 10000 ppm) are revised in this light.	R	This point wasn't in the Commission mandate and wasn't raised by any organisation during the revision
204	2		G	EPF	Previously, passenger coaches that fulfilled the RIC requirements could be used on all RIC railways without needing special permission. However, new coaches must now be authorised country by country, which is a lengthy and costly process. There should be a European authorisation process for passenger coaches so that only one authorisation procedure is necessary, instead of one procedure per country.	NWC	This point was discussed in the context of the TSI revision, and a proposal in made in the recommendation
205	1	4.2.9.3.1	G	ASSOCIAZIONE AUGUSTO CASTRUCCI APS – Ancora IN MARCIA	<p style="text-align: center;"><b>4.2.9.3.1. Driver activity control function</b></p> <p>1) The driver's cab shall be equipped with tools for controlling the driver's activity and for automatically stopping the train when the absence of driver's activity is detected.</p> <p style="color: red;">These control instruments must satisfy the ergonomic requirements set out in the directive of the Council Directive of 12 June 1989 concerning the introduction of measures aimed at promoting the improvement of the safety and health of workers at work (89/391 / EEC) , as implemented by each member state. The tools and devices for controlling the driver's activity must be identified, designed, manufactured and installed according to the degree of technical evolution, to improve working conditions, to avoid aggravation of the workload, additional stress, possible distractions from driving, to eliminate monotonous and repetitive actions and movements during work, in order to reduce the related risks to the health of workers.</p> <p>In this way, the railway undertaking has on board the technical means to meet the requirements of point 4.2.2.9 of the OPE TSI (*).</p> <p style="color: red;">If, according to the authorities responsible for the control and supervision of health and safety in the workplace of each member state, the tools used to control the driver's activity do not comply with the ergonomic requirements contained in the Council Directive of 12 June 1989, as transposed into national legislation, each member state can arrange, only for the time necessary for technological adaptation, for the temporary exclusion of these instruments, by means of a specific device. The exclusion of the driver's activity control tools is allowed only in the case of train running protected by a system (Train Control and Monitoring System - TCMS, type ETCS, ERTMS, SCMT, SSC).</p> <p><b>2) Specification of the control tools (and identification of absence) of the driver's activity.</b></p> <p>he driver's activity <b>and presence</b> must be monitored when the train is in the driving configuration and is in motion (the criterion for motion detection is at a low speed threshold);</p> <p style="color: red;"><b>(2 bis) First movement</b></p> <p style="color: red;">During the first movement of the train, this monitoring must be conducted by controlling the driver's action on the driver's recognized interfaces, such as appropriate devices (pedals, push buttons, tactile buttons, etc.) and / or on recognized interfaces of the driver with the driver. train control and monitoring system (TCMS). When, for a period exceeding X seconds, no action is detected on the recognized interfaces of the driver, an intervention must be triggered due to the absence of his activity.</p> <p style="color: red;"><b>2 ter) Running the train</b></p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.

				<p>While the train is running, in order to avoid work overload and distractions from the movements necessary for driving, the driver must not be required to mechanically and / or manually operate interfaces that are not functional to driving actions. While driving, the presence and activity of the driver must be controlled on the basis of the detection of physiological, postural, behavioral parameters, etc. by non-invasive devices that do not require specific movements of the arms or legs and / or on recognized interfaces of the driver with the train control and monitoring system (TCMS). These devices must be designed and built to prevent the recording of the images, information and data detected, in compliance with the Regulations (UE) 2016/679.</p> <p><b>2 quater) control interval</b></p> <p>When, both in the first movement phase (2 bis) and in the train running phase (2 ter), for a period of more than X seconds, no action is detected <u>on the recognized interfaces</u> of the driver, an intervention must be triggered to absence of activity of the same. The system must allow adjustment (in the workshop, as maintenance) of the time period X in the range of 5 to 60 seconds. An intervention must be triggered due to the absence of the driver's activity even when the same action is constantly detected, <u>without further action on the recognized interfaces of the driver</u>, for a period greater than a defined time interval, which in any case must not exceed 60 seconds. Before triggering an intervention due to the absence of driver activity, both in the first movement phase and in the driving phase, the latter must receive a warning <b>lasting at least 8 seconds</b>, so that he has the possibility to react and perform the reset of the system. The system must have the information «intervention triggered by the absence of driver's activity» to interface with other systems (ie the radio system).</p>		
206	1	4.2.5.2	Trade union organization on CUB TRASPORT I	<p><b>Revision proposals to the TSITSI LOC and PAS rev 2022</b> (...) (5) Provisions for passengers to contact train crew are prescribed in clause 4.2.5.3 (passenger alarm) and in clause 4.2.5.4 (communication devices for passengers).</p> <p><b>In both cases, since the communication is intended to report even dangers of any sorts, there have to be applicable procedures for a prompt and affective action to be taken, on the spot if necessary, responding to the danger alleged: verify the claim, assist passengers, provide safety measures.</b></p> <p><b>(6) The driver must answer to the alarm call, stopping the train movement.</b></p>	R	This is an operational rule, not for the TSI LOC&PAS.
207	2	4.2.5.5.2	Trade union organization on CUB TRASPORT I	<p><b>4.2.5.5.2 Terminology used</b></p> <p>(1) In the context of this clause a 'door' is an external passenger access door (with one or more leaves), intended primarily for passengers to enter and leave the unit. (2) A 'locked door' is a door held closed by a physical door locking device (3) A 'door locked out of service' is a door immobilised in a closed position by a manually operated mechanical locking device. (4) A door 'released' is a door that is able to be opened by operating the local or, central door control. <u>(where the latter is available).</u></p>	R	This isn't deemed appropriate for a definition
208	3	4.2.5.5.3	Trade union organization on CUB TRASPORT I	<p>4.2.5.5.3. Door closing and locking (1) The door control device shall allow the train crew to close and lock all the doors before the train departs. The status of the doors shall be visible to the driver/central position at any time, with an alarm in case the status of open occurs (either activated by the driver or not). For the purpose of this clause/topic the device is called "door-closed proving system".</p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
209	4	4.2.5.5.5	Trade union organization on CUB TRASPORT I	<p><b>4.2.5.5.5 Information available to the train crew</b></p> <p>(...) (5) A 'door locked out of service' is permitted to be by-passed by the 'doors-closed proving system'. <b>Bypass should be activated only under procedures that detect its requirement (only when the locked-out-service-door interferes with the closed proving system), since a bypassed door/unit is excluded from the central control.</b></p>		This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.

210	5	4.2.5.5.8	Trade union organization on CUB TRASPORT I	<p>4.2.5.5.8 Safety requirements for clauses 4.2.5.5.2 to 4.2.5.5.7</p> <p>(1) For the scenario one door is unlocked (with train crew not correctly informed of this door status) or released or opened in inappropriate areas (e.g. wrong side of train) or situations (e.g. train running), it shall be demonstrated that the risk is controlled to an acceptable level, considering that the functional failure has typical credible potential to lead directly to:</p> <ul style="list-style-type: none"> <li>* 'single fatality and/or severe injury' for units in which passengers are not supposed to stay in standing position in the door area (long distance), or to</li> <li>* 'single fatality and/or severe injury' for units in which some passengers stay in standing position in the door area in normal operation.</li> </ul> <p>(2) For the scenario several doors are unlocked (with train crew not correctly informed of this door status) or released or opened in inappropriate areas (e.g. wrong side of the train) or situations (e.g. train running), it shall be demonstrated that the risk is controlled to an acceptable level, considering that the functional failure has typical credible direct potential to lead to:</p> <ul style="list-style-type: none"> <li>* 'fatality and/or severe injury' for units in which passengers are not supposed to stay in standing position in the door area (long distance), or to</li> <li>* 'fatalities and/or severe injuries' for units in which some passengers stay in standing position in the door area in normal operation.</li> </ul> <p><b>(2 bis) For the scenario of lack of information about the closure status of the train doors (failure on closed proving system), or the impossibility of central doors opening/closing (failure on doors control), there have to be provided certified procedures of degraded mode that maintain the same safety standards, regarding the prosecution or not of same journey as well as the re-use of the train onto another journey if this doesn't pass by/reach a railway node where a maintenance implant is located and the failure is mended.</b></p> <p>(3) The demonstration of conformity (conformity assessment procedure) is described in clause 6.2.3.5 of this TSI.</p>	R	This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
				<p style="text-align: center;"><b>4.2.9.3.1. Driver activity control function</b></p> <p>1) The driver's cab shall be equipped with tools for controlling the driver's activity and for automatically stopping the train when the absence of driver's activity is detected.</p> <p><b>This tool should satisfy ergonomic requirements under the EU Council Directive (dated June 12th, 1989), aimed at fostering and improving health and safety of employees in the workplace (89/391/EEC) as incorporated by each Member of the EU. Tools &amp; devices aimed at monitoring and control the activities carried out by machinists/drivers must be made, manufactured and installed taking into account new technological specifics, to better improve working conditions but also aimed at avoiding the increase of workload, additional stress, potential distractions when driving, avoid monotonous &amp; repeated movements. Additionally, these tools contribute to minimize and prevent health issues.</b></p> <p>In this way, the railway undertaking has on board the technical means to meet the requirements of point 4.2.2.9 of the OPE TSI (*).</p> <p><b>If tools &amp; devices adopted by any of the EU Member shall not respect standards or requirements according to the relevant Bodies (as per EU Directive 12th June 1989) and therefore absorbed at national level, each Member can fill this gap by adopting an ad hoc tool while preparing to fulfill the Directive. The aforementioned tools &amp; devices are then excluded from the adoption only when the train runs with Train Control and Monitoring System — TCMS, ETCS, ERTMS, SCMT, SSC)</b></p> <p><b>2) Specification of the control tools (and identification of absence) of the driver's activity.</b></p> <p>he driver's activity <b>and presence</b> must be monitored when the train is in the driving configuration and is in motion (the criterion for motion detection is at a low speed threshold);</p> <p><b>(2 bis) First movement</b></p>		

211	1	4.2.9.3.1	Sindacato Autonomo e di Base ORSA FERROVIE	<p>During the very first movement of the train, this monitoring must be conducted by controlling the driver's action on the driver's recognized interfaces, such as appropriate devices (pedals, push buttons, tactile buttons, etc.) and / or on recognized interfaces of the driver with the driver. train control and monitoring system (TCMS). When, for a period exceeding X seconds, no action is detected on the recognized interfaces of the driver, an intervention must be triggered due to the absence of his activity.</p> <p><b>2 ter) Running the train</b></p> <p>While the train is running, in order to avoid work overload and distractions from the movements necessary for driving, the driver must not be required to mechanically and / or manually operate interfaces that are not directly related to driving. While driving, the control of the presence and activity of the driver must be based on the detection of physiological, postural, behavioral parameters, etc. by non-invasive devices that do not require specific movements of the arms or legs and / or on recognized interfaces of the driver with the train control and monitoring system (TCMS). These devices must be designed and built to prevent the recording of the images, information and data detected, in compliance with the Regulations</p> <p><b>2 quater) control interval</b></p> <p>When, both in the first movement phase (2 bis) and in the train running phase (2 ter), for a period of more than X seconds, no action is detected <b>on the recognized interfaces</b> of the driver, an intervention must be triggered to absence of activity of the same.</p> <p>The system must allow adjustment (in the workshop, as maintenance) of the time period X in the range of 5 to 60 seconds.</p> <p>An intervention must be triggered due to the absence of the driver's activity even when the same action is constantly detected, <b>without further action on the recognized interfaces of the driver</b>, for a period greater than a defined time interval, which in any case must not exceed 60 seconds.</p> <p>Before triggering an intervention due to the absence of driver activity, both in the first movement phase and in the driving phase, the latter must receive a warning for at least 8 seconds, so that he has the possibility to react and perform the reset of the system. The system must have the information «intervention triggered by the absence of driver's activity» to interface with other systems (ie the radio system), also connected with equipment supplied to other <u>personnel who carry out safety activities on board.</u></p> <p><b>(3) Additional requirement:</b></p> <p>The detection of the lack of the driver's activity is a function that shall be subject to a reliability study considering the failure mode of components, redundancies, software, periodic checks and other provisions, and the estimated failure rate of the function (lack of driver's activity as specified above not detected) shall be provided in the technical documentation defined in clause 4.2.12.</p> <p><b>(4) Specification of actions triggered at train level when a lack of driver's activity is detected:</b></p> <p>lack of driver's activity when the train is in driving configuration and is moving (criterion for movement detection is at a low speed threshold) shall lead to a full service brake or an emergency brake application on the train. In case of application of a full service brake, its effective application shall be automatically controlled and in case of non-application, it shall be followed by an emergency brake.</p> <p><b>(5) Notes:</b> It is allowed to have the function described in this clause fulfilled by the CCS Subsystem. The value of the time X has to be defined and justified by the railway undertaking (application of TSI OPE and CSM, and consideration of its current code of practice or means of compliance; outside of scope of the present TSI). As a transitional measure, it is also allowed to install a system of a fix time X (no adjustment possible) provided that the time X is within the range of 5 seconds to 60 seconds and that the railway undertaking can justify this fix time (as described above). A Member State may impose to the railway undertakings operating on its territory to adjust their rolling stock with a maximum limit for time X, if the Member state can demonstrate that this is needed to preserve the national safety level. In all other cases, Member States cannot prevent the access of a railway undertaking that is using a higher time Z (within the range specified)</p>	R  This change proposal would need to be discussed with a Working Party and cannot be introduced at this stage of the revision for the TSI package 2022. A change request can be created to initiate that discussion for a future revision.
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