

#	N°	Reference (e.g. Art, §)	Type	Reviewer	Reviewer's Comments, Questions, Proposals	Reply	Proposal for the correction or justification for the rejection
1	1	4.2.8, § (2)	M	Alstom	reference EN 50388-1:2022, subclause 10.3, table 7 should be changed to EN 50388-1:2022, subclause 10.2, table 6	A	It is right, indeed in the last prEN draft available now to ERA, it is "EN 50388-1:2022, subclause 10.2, table 6". To be checked after publication of EN.
2	2	4.2.16.3. (2)	P	Alstom	Most of unintentionnaly raised pantographs situationsa are due to the same control order point (driver as example).	R	Then If a system separation section is traversed with pantographs lowered, it shall be designed so as to avoid the electrical connection of the two power supply systems by unintentionally raised pantographs . ERA: when needed in operation, it is necessary to lower a pantograph, but not necessarily both pantographs at the same time, to avoid the electrical connection between different phases. In addition, this was not modified in the present recommendation so it is out of the scope of the consultation. 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.
3	3	6.1.4.1 (3) (f)	U	Alstom	"Regarding the uplift measurement the uplift of at least two steady arms shall be measured." does not clarify if it is two steady arms adjacents from each other, of the same section, of the same line, two different lines neither track side. It does not specify if it shall/can be done at the same time and/or in the same conditions (speed, meteo, train direction...).	R	Remove the sentence ERA: this section describes the assessment methodology at interoperability constituent level, which the geographical scope of the assessment. The EN 50317:2012 is also referred for the measurement in section 6.1.4.1 (1) (d) Text of 6.1.4.1 (3) (f) 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.
4	4	Table E.1 index 5	P	Alstom	To be consistent with index 5a, EN 50367 revision 2020 should also be used	A	Use 2020 instead of 2012 ERA: Index 5 was already updated to version 2020 of EN 50367 in CR 419
11	1	TSI ENE	G	BaneDK	In TSI ENE, the standard DS/EN 50388 is referred in several places, however, the standard has not been published yet.	NWC	The publication is expected soon on time for the Recommendation
21	1	4.2.8	G	EastWestRail	EN 50388-1:2022 is called up. From what is seen on the CENELEC website this standard is still in the Approval process and has not yet been published.	NWC	The publication is expected soon on time for the Recommendation
31	1		G	Dr John C Morris	This document has existed for many years in pretty much its present format. A number of issues continue to exist with the form of wording, including ambiguities, vague requirements, inconsistency of format and terminology, lack of specificity, etc, which have not been addressed so far, and which undermine the impact of the document. It seems particularly important as the ERA is enforcing the legal 'tightness' of the supporting ENS, via the HAS consultant, that the TSI should be improved with the same level of rigour. Currently the TSI is not in a suitable state as a legal document, and its interpretation leaves too much in the hands of contracting entities and NoBos. The comments below are submitted in the spirit of achieving this rigour.	NWC	Thank you for all your inputs; the text is drafted by the sector including representative bodies and NSAs and then agreed by the MSs in the RISC committee
32	2	4.2.2.1	G	Dr John C Morris	The title of this sub-point is 'power supply system', but in 4.2.3, the term 'traction power supply system' is used. Employ consistency, do we assume traction power supply system is the accepted term here?	A	To modify 4.2.2.1 (b) with Parameters relating to power supply system performance (4.2.4). To be sent to TWG EDIT
33	3	4.2.2.1 (d)	M	Dr John C Morris	'Regenerative braking' is not a parameter, and should be replaced by a term which describes a genuine and relevant parameter. Suggested substitutes are: 'Capacity to absorb regenerative braking energy', 'Ability to deal with regenerative braking energy', etc.	R	Regenerative braking is a functionality with its parameters
34	4	4.2.6	G	Dr John C Morris	Use the term 'traction power supply system' (here and in subsequent occurrences throughout the TSI)	A	To use traction power supply system

35	5	4.2.9.1	G	Dr John C Morris	Clumsy point structuring and numbering prevents a clear understanding. Suggest three sub clauses are employed: 4.2.9.1 is the existing 4.2.9 (1) 4.2.9 (2) is deleted 4.2.9.2 is existing 4.2.9.1 4.2.9.3 is existing 4.2.9.2	R	Provisions of section 4.2.9 are common for contact wire height and maximum lateral deviation
36	6	4.2.9.1 (1)	M	Dr John C Morris	As point (4) of this sub point excludes track gauges 1520 and 1524 mm, then this should be included in this text here	R	Both ways, the one adopted in TSI and the one proposed are valid. Current way in TSI highlights the values for track gauges 1520 and 1524 mmm
37	7	4.2.9.1 (3)	M	Dr John C Morris	Why is no reference made to track gauge 1524?	NWC	Whereas it is not indicated explicitly, requirements apply to all track gauges
38	8	4.2.10 (1)	M	Dr John C Morris	'...except for the contact wire and steady arm'. Phase (and system) separation sections also infringe within the gauge of the pantograph	R	this was not modified in the present recommendation so it is out of the scope of the consultation.
39	9	4.2.11 (2)	M	Dr John C Morris	This is not written in a normative way - creates problems in enforcement and application	NWC	Noted
40	10	4.2.12 (3)	M	Dr John C Morris	This is written as a statement, not as normative content or as a requirement	NWC	Noted
41	11	4.3.1	U	Dr John C Morris	These interfaces are written as lists, and not as requirements, which they should be.	R	Both ways, the one adopted in TSI and the one proposed are valid.
42	12	4.3.2	U	Dr John C Morris	'Regenerative braking' and 'On ground energy data collection systems' are not parameters, but are subjects for which parameters should be defined	R	They are functionalities with their own parameters
43	13	4.3.2	M	Dr John C Morris	The alignment of text for entry 'separation sections' is mis aligned in the second column	A	To be corrected
44	14	4.3.5	M	Dr John C Morris	The alignment of text for entry 'separation sections' is mis aligned in the second column	A	To be corrected
45	15	4.4	G	Dr John C Morris	These two points do not contain any normative requirements	NWC	It is justified: they provide provisions applicable to the EC verification procedure
46	16	5.2.1.4	U	Dr John C Morris	It is not clear that the steady arm is included in the definition of the OCL IC given in 5.1 (2) (c), in particular 'cantilevers' are excluded. It should be included as arm uplift is a measured characteristic.	R	Steady arm is a supporting component so accordingly to 5.1 (2 c) is not part of the OCL IC. This does not prevent to measure the uplift of the contact wire at a steady arm as defined in section 4.2.12
47	17	6.1.3	G	Dr John C Morris	Uses the phrase 'this regulation', when previously in this document, the phrase 'this TSI' has been used - consistency required	NWC	Noted
48	18	6.1.4.1	G	Dr John C Morris	It would be useful to refer to the flow chart(s) included in Annex C of EN 50318:2018, which illustrate this procedure described here.	NWC	Noted although the methodology to be applied is the defined one in section 6.1.4.1 (1). Then, if reference to flowchart is to be made, It is necessary to discuss it in the topical working group and check consistency with section 6.1.4.1.(1)
49	19	6.1.4.1	U	Dr John C Morris	This whole section applies to 'an OCL design'. It would be helpful to avoid ambiguity to explain exactly what an 'OCL design' is; is it a concept, or type, with a particular identifier to differentiate from other 'types', or is it a particular physical installation?	NWC	Noted although there are some clarification in the TSI ENE application guide, sections 2.3.11 and 2.6.2
50	20	6.1.4.1 (1)	G	Dr John C Morris	I believe it would be an improvement if the TSI at this point (and also in next point for measurements) could specify more exactly the arrangement and extent of the OCL to be used for this simulation, or at least give guidelines. As written the point allows free choice in this by the contracting entity, with the possibility that this is not truly representative of actual performance, and, additionally, preventing any meaningful comparison between different OCL. Perhaps a WG may be set up to look into the practicality of this? A possible analogy might be the WLTP standard for measuring and reporting fuel consumption for cars – where two sets of conditions are defined: 'urban', and 'extra urban' along with a 'combined'.	NWC	Clarifications are given in section 2.6.4 of TSI ENE application guide on the certification of OCL. In addition, freedom is given to the applicant of authorisation as far as the provisions of TSI ENE and the EC verification procedure are fulfilled.
51	21	6.1.4.1 (1) (b) and (c)	U	Dr John C Morris	It is not clear if the requirement in point (c) only applies to the choice of Fm or percentage arcing described in point (b). If it is, suggest points (b) and (c) be merged to avoid ambiguity	R	Section (c) refers to verification activity which is clear described in section (b)
52	22	6.1.4.1 (1) (d)	U	Dr John C Morris	Does this exemption for OCL < 100 km/h also apply to an OCL 'designed' for (i.e. capable of) >100 km/h, but in this case installed on a line where it is only used <100 km/h?	NWC	OCL is normally certified at interoperability constituent level (see section 6.2.4.5 of TSI) and this certification is performed for the maximum speed available for the tests, or simulations allowed for speed ≤100 km/h. Please see also the recommendation for use RFU-ENE-900 from NB Rail
53	23	6.1.4.1 (2)	G	Dr John C Morris	In point (a) it could usefully describe how the proportion of 'normal' OCL and the various features described are combined into a 'representative' section length of OCL for assessment.	NWC	Noted

54	24	6.1.4.1 (3)	M	Dr John C Morris	This point does not repeat the requirement (for simulations) in point 6.1.4.1 (2) (a) for a representative combination of features and plain line in the OCL. This could caused the simulations and measurements to be not directly comparable, and hence misleading	NWC	Section 6.1.4.1 (3) (a) is coming after the previous 6.1.4.1 (2) (a): in order the simulations to be acceptable, the section 6.1.4.1 (2) (a) applies
55	25	6.2	G	Dr John C Morris	As the entire TSI is about the 'energy subsystem' the title of this set of points seems superfluous. Consider a more meaningful title, e.g. 'The entire Energy subsystem' or 'the energy subsystem as a whole'	R	This is done on purposes as section 6.1 is for assessment at IC level and 6.2 for the assesemnt at the subsystem level
56	26	6.2.1 (1)	M	Dr John C Morris	Should say, in normative language, 'the notified body shall carry out...'	A	To be corrected
57	27	6.2.4.2	M	Dr John C Morris	Title should be something like 'assessment of provision for regenerative braking'	R	These are provisions for the assesemnt of regenerative braking
58	28	6.2.4.2 (1) and (2), 6.2.4.3	M	Dr John C Morris	The wording here is poor. It is not 'the assessment' that is demonstrated, but compliance with the requirements.	A	Use compliance instead assessment
59	29	6.2.4.5	G	Dr John C Morris	This section could also usefully define how a 'representative' section of OCL is chosen for the assessment to be valid.	NWC	Noted. See also comment 29
60	30	7.2.1	G	Dr John C Morris	An energy subsystem is not a railway line, and a new energy sub system does not create a new route. A new energy subsystem can be added to an existing railway line, or included with a new railway line. Clarify.	NWC	The wording has ben improved in section 7 with the change request CR 171
61	31	7.2.1 (2)	U	Dr John C Morris	Are these the only situations that constitute renewal or upgrade? Surely not. The wording here is not sufficiently comprehensive or clear.	NWC	CR 171 introduces new provisions for upgrading
62	32	7.2.3	U	Dr John C Morris	There is no definition for 'OCL geometry', which is necessary for the proper implementation of this point.	NWC	See section 5.2.1.1. Geometry of the OCL. See also the TSI ENE application guide, section 2.7.3
63	33	7.3.2	G	Dr John C Morris	What has happened to point (2). Should it not be identified as having been removed?	NWC	As indicated, it was remoded by amemdment of regulation (EU)776/2019 Art. 3.6 and Annex III.12
64	34	Appendix G Table G.1	G	Dr John C Morris	Definition of 'Nominal Contact Wire Height' This definition has always been problematic, defining as it does one meaningless expression with another. The word 'nominal' is not suitable here, as it means used as a name or identifier, and there is no practice anywhere in Europe of naming or identifying a type of OCL by is CW height. The opportunity should be taken to get much closer to an improved definition. This has been attempted in EN 50119:2020 in clause 3.1.5.6, and particularly the Note 1, is meaningful, and is, in fact, the interpretation used by most of Europe for this phrase. The main definition is still constrained in ENs by necessary reliance on IEC definitions, but the TSI has no such restriction, and a definition based entirely on the Note 1 could be adopted, to great benefit.	D	Noted
65	1	4.2.3	U	NSA ES	We do not understand why subsection 2 has been eliminated. Now there is no reference to point 4 of EN 50367, where the values the subsystem must comply with for permanent, minimum and maximum, and non-permanent minimum and maximum voltages are established (Umax1, Umax2, Umin1 and Umin2), in addition to the nominal voltage that is already given in subsection 1 of 4.2.3 of the TSI ENE.	NWC	It is meant 50163 instead of 50367? This is the result of CR 379, which was agreed in the previous former ENE WP (but not yet implemented at that time) before the launch of this TSI revision package and the current TWG FI-RST. Please note also, that now section 6.2.4.1a for the assessment of the power supply performance refers to EN 50388-1:2022 which refers to EN50163. In any case Umax2 had currently one specific case in TSI ENE: - France. This specific case is planned to be transferred to the TSI LOC&PAS as it relates to rolling stock subsystem - Appendix D1 of TSI OPE to be amended accordingly.
66	2	4.2.4	U	NSA ES	We do not understand why subsection 4.2.4.1 (Maximum train current) has been removed. This point stablishes that the subsystem must be designed so trains with power less than 2 MW can circulate without current or power limitations. This is an interface parameter with the TSI LOC and PAS, in whose latest draft the corresponding requirement still appears, that is, rolling stock with a power greater than or equal to 2 MW must be equipped with a current or power limiter. In point 4.2.4 of this new ETI ENE version reference is made to point 8.2 of the new EN 50388-1. To cover the requirement that we are commenting on, a reference to point 7.2 of EN 50388-1 should also appear, which is where the mentioned requirement is established (subsystem designed so that trains of more than 2 MW can run without limiter).	NWC	This is the result of CR 379, which was agreed in the previous former ENE WP (but not yet implemented at that time) before the launch of this TSI revision package and the current TWG FI-RST. To check availability of EN 50388-1:2022 and to confirm the relevant clauses. In any case, the subsystem shall be designed that trains of less than 2MW are allowed to operate without power or current limitation, and not the contrary as referred by ES.(referring to point 8.2 of EN 50388-1:2022 we will link the fullfilment of point 8.1 and subsequently pf chapter 7 of the same EN. In point 7.2 of the same EN: "Train sets with a maximun power at wheel less than 2 MW may operate without this functionality", the mentioned fucntionality is current limitation.)

67	3	various	M	NSA ES	References to EN standards still need to be updated. We understand it will be done in subsequent versions.	NWC	Some standards have been updated in CR 419. The revision of standards would continue for future revisions of TSI.
75	1		G	NSA FR	Many standards are mentioned in the text. We understand that according to CR 526, all standards will be moved to an appendix.	NWC	Right: it is envisaged in CR 526
76	2		G	NSA FR	Agency should have a unique position regarding specificities for United Kingdom. All UK specific cases are removed in CCS TSI project but here, paragraphs dedicated to UK remain.	A	Specific cases for Great Britain will be removed, but specific cases for Northern Ireland will be kept
77	3	4.2.15.1	G	NSA FR	The added text is written from driver or vehicle point of view. Proposal: remove ", by switching off the circuit breaker or other equivalent means," If this precision has to be kept, its place is in the application guide.	R	The Power exchange between the OCL and the unit can be brought to zero by other means which are equivalent to switching off the circuit breaker. The added text of 4.2.15.1 was reworded and agreed by the Task Force ENE-RST experts.
78	4	4.2.16.2	G	NSA FR	The added text is written from driver or vehicle point of view. Proposal: remove ", by switching off the circuit breaker or other equivalent means," If this precision has to be kept, its place is in the application guide.	R	The Power exchange between the OCL and the unit can be brought to zero by other means which are equivalent to switching off the circuit breaker The added text of 4.2.16.2 was reworded and agreed by the Task Force ENE-RST experts.
79	5	4.3.4	G	NSA FR	Interfaces also exist between Energy subsystems and class B subsystems, which here the same functionalities for running through system separation sections or phase separation sections. Redaction should not be focused on ETCS only.	R	Legacy systems, like Class B subsystems, shall not be part of section 4.3.4, as they are not CCS target system. The same approach is being taken for train detection systems. Please note that TSI CCS clearly states that requirements of class B systems are the responsibility of the concerned MSs
80	6	7	G	NSA FR	We take note of the proposal sent by the Agency on June, 17th and would like to thank here the Agency. This proposal corresponds to the French sector expectations. Generally speaking, it is important for the sector that implementation of TSIs is done in a sustainable manner regarding IM and Member States resources and interoperability stakes.	NWC	Thank you for your input
81	7	7.4.2.2.1	G	NSA FR	There are currently some discussions about this French specific case.	NWC	Discussions still on-going. The result is not part of the present recommendation and it could be implemented later
82	8	D.1.2.1.2	M	NSA FR	Check both formulas with Σ . "j" should be behind and not under Σ .	NWC	Noted
83	1	Appendix E	P/M	Ministry (LT)	<i>To our understanding in the List of referenced standards (Appendix E) there should be standard EN 50388-1:2022 which sets technical criteria for the coordination between electric traction power supply systems and rolling stock to achieve interoperability.</i> We propose to add EN 50388-1:2022 in Appendix E.	D	The reference is present in the TSI corrected. However, in case the EN 50388-1:2022 isn't available when adopting the revised TSI, the reference would be modified
84	1	Table E1	U	NSA NL - 3	• The new EN standard on energy supply EN 50388-1:2022 has been added in the TSI. This EN standard is not mentioned in Table E.1 (List of referenced standards) – further check needed for completeness	D	The reference is present in the TSI corrected. However, in case the EN 50388-1:2022 isn't available when adopting the revised TSI, the reference would be modified
94	1	Appendix C	P	PKP Energetyka S.A.	Consequence of changing point 4.2.4 should be removal of appendix C in the document.	D	The comment done seems correct. The deletion of 4.2.4 is the result of CR 379, which was agreed in the previous former ENE WP (but not yet implemented at that time) before the launch of this TSI revision package and the current TWG FI-RST. It also seems the request for deletion for Appendix C was forgotten in the CR 379. To be further analysed
95	2	pkt 7.4.2.6.1	P	PKP Energetyka S.A.	Removal of 7.4.2.6.1, as consequence of new standard EN 50388: 2022 and a lack of note C (note C is admitted in this point).	R	EN 50388 was updated to 2022 version only for specific sections. Specific case for Poland in section 7.4.2.6.1 refers to section 4.2.7. This section was not reviewed in the scope of this TSI revision and systematic revision of standards did not include EN 50388
96	3	document	G	PKP Energetyka S.A.	Unify EN standards in the document – replacing EN standard 50388:2012, with the new EN standard from 2022 (TSI ENE refers to both versions, that might lead to mix up)	R	The TSI can refer to different versions of a standard when necessary
97	4	document	G	PKP Energetyka S.A.	Unify document – section devoted to interfaces still refers to non-existing, deleted provisions (for ex. 4.3.2 – Maximum train current or mean useful voltage). It is necessary to edit version of TSI, according to introduced modifications.	A	Thank you for the input. To verify: upon modification of sections 4.2.4 to check cross references in TSI ENE (sections 3, 4.2.2.1, 4.3.2, 4.3.5, table B1, table E1). To involve TWG EDIT

98	5	document	G, U	PKP Energetyka S.A.	<p>General remark: The main aim of new railway regulations - on a European level - should be greater support for 'green solutions'. All technical regulations (i.e. TSIs) should be developed in strong connection with promotion of real 'green railway' and fully compliant with systemic legal solutions (Directives). From our perspective, system of incentives for solutions like:</p> <ul style="list-style-type: none"> - support for green energy production and purchase for railways, - support for energy storage solutions for railways, - support for railway entities that use regenerative braking (both IMs and RUs), would help to deliver an overall more sustainable transport system. Moreover, lack of legal link between railway regulations and energy regulations, might make it impossible for railway sector to achieve climate goals. 	NWC	<p>Thank you for your input. Please take also into consideration that the existing regulation "Emissions from non-road mobile machinery regulation (NRMM) (EU) 2016/1628" is applicable to railways and it sets up emission limits. This regulation is also applicable to the vehicle authorisation process and it is even referred to in the ERA clarification note ERA1209-146 Clarification about requirements capture in section 2.2.5</p> <p>In addition, TSI ENE and TSI LOC&PAS were open for the charging of batteries for the traction purposes in the requirements related to the maximum current at standstill</p>
102	1	TSI ENE, Sub-clause 4.2.4	P	PLK	<p>Specification of "traction power supply performance" should not be limited only to "newly built subsystems" which are to enable "every trainset to meet the design timetable". Majority of railway infrastructure modernisation schemes consist in upgrading Energy subsystem, among others, aiming at introduction new (designed) timetable representing enhanced offer by the railway transport on the lines under consideration. Thus interoperability requirements should be checked and proofed in relation to the parameters also of upgraded subsystems.</p> <p>Here, we refer to the content of the letter by EC Directorate General for Mobility and Transport Ref. Ares(2022)977049 – 10/02/2022 which stresses that: Projects for upgrading should achieve full compliance (within the TSI concerned, and the geographical project scope including cross-border situations) ... and It is the Commission's understanding that ... share our ambition to fulfil the 4th Railway Package's goals and reach a truly interoperable European railway network in a cost-efficient manner ...</p> <p>Our proposal is aiming at the inclusion of also upgraded subsystems to the references made in sub-clause 4.2.4.</p>	NWC	<p>This is the result of CR 379, which was agreed in the previous former ENE WP (but not yet implemented at that time) before the launch of this TSI revision package and the current TWG FI-RST. Please note also that the criteria of upgrading subsystems are in amendment of Chapter 7 of TSI, which was developed in coordination with the Directorate General for Mobility and Transport</p>
103	2	TSI ENE, Sub-clause 4.2.12, point 2	P	PLK	<p>"OCL design speed" should be changed (reinstated) into: "maximum line speed".</p> <p>Quite often a particular OCL design is to be used (for uniformity purpose, for example) in locations with low curve radii, where OCL design speed, suitable for straight sections or sections with greater curve radii, is not attainable. For example – an OCL system designed for $v_{max} = 200$ km/h which is to be installed on some sections of the line with curve radii below 1000 m, where maximum line speed is established on the level, say, 100 km/h. The solution of OCL suited for local conditions consisting, among others, in decreasing of the distances between the subsequent suspension structures, in majority cases, will not be suitable for 200 km/h (OCL design speed), but should fully fulfil TSI requirements relative to the maximum line speed on such route's sections.</p>	R	<p>This was changed for sake of consistency internally in section 4.2.12(2) (overhead contact line design) and with section 4.2.13 of TSI. In addition, OCL is normally certified at interoperability constituent level (see section 6.2.4.5 of TSI) and this certification is performed for the maximum speed available for the tests. Please see also the recommendation for use RFU-ENE-900 from NB Rail</p>
104	3	TSI ENE, Sub-clause 4.3.4, point 3	M	PLK	<p>"The relevant information to perform the switching off the circuit breaker ..." seems more appropriate than "The relevant information to perform the switching of the circuit breaker ...".</p>	D	<p>Editorial proposal depending on the text revisors: to change to "The relevant information to perform the switching off of the circuit breaker ...". To involve TWG EDIT</p>
105	4	TSI ENE, Sub-clause 6.1.4.1, point 1d	P	PLK	<p>Our proposal is to change: "For OCL with a design speed up to 100 km/h, ..." into: "For OCL destined for lines with maximum speed up to 100 km/h, with OCL design speed of at least the above line speed, ...".</p> <p>Justification – like at N°2 remarks.</p>	R	<p>It is necessary to keep the wording simple: we consider that if the OCL design speed is less than 100 km/h then in any case simulation and measurement of the dynamic behaviour are not required.</p>
106	5	TSI ENE, Sub-clause 6.1.4.1, point 3f	P	PLK	<p>Our proposal is to change: "Regarding the uplift measurement the uplift of at least two steady arms shall be measured" into: "Regarding the uplift measurement the uplift of steady arms for at least two subsequent suspension structures shall be measured". Our guess is that the above will mirror the intentions of this supplementary requirements in more precise way, making the statement correct for both AC and DC OCL systems comprising of two contact wires.</p>	R	<p>If clarification is needed, the best place would to do it in the application guide</p>
107	6	TSI ENE, Sub-clauses: 6.2.4.1, 6.2.4.1a	p	PLK	<p>The assessments should not be limited only to "newly built energy subsystems" and should relate also to upgraded subsystems, for the reasons presented at N°1 remarks.</p>	R	<p>This is the result of CR 379, which was agreed in the previous former ENE WP (but not yet implemented at that time) before the launch of this TSI revision package and the current TWG FI-RST. Please note also that the criteria of upgrading subsystems are in amendment of Chapter 7 of TSI, which was developed in coordination with the Directorate General for Mobility and Transport</p>
108	7	TSI ENE, Sub-clause 6.3.1	P	PLK	<p>Taking into consideration the recent calendar data, this exemption is no more relevant. In our opinion sub-clause 6.3.1 should be deleted.</p>	NWC	<p>A change request (CR540) was proposed on that point but not accepted by the WP and postponed (Discussion during the WP15 on 25 Apr 2022 didn't permit to resolve the change request. As the resolution presents no urgency, the CR is postponed to a next TSI revision).</p> <p>In addition, this condition may be useful to be described in the TSI, as certificates issued in such conditions before 31 May 2021 may be still valid.</p>
109	#REF!			PLK			

110	1	Generality	G	UTP	As the TSI was under a review process when it entered in public consultation, we chose to comment the most recent draft version of the TSI, which contains a critical evolution. Below are expressed the most significant comments on which modifications are expected. They are identified with type ""P"".	NWC	
111	2	Chapter 7	P	UTP	In the frame of CR 171, the Commission advocates a general principle which is the obligation to make existing fixed installations fully compliant with "infrastructure" and "energy" TSIs when they are "upgraded". These provisions may have serious consequences for IMs. The additional costs resulting from this new obligation could be both considerable and unnecessary, since it generally has no effect on the ability of trains to run on the network without constraints. Concrete examples provided by France in response to the impact assessment launched by the ERA show the risk that such an obligation would pose to "upgrade" projects: either abandonment due to excessive additional costs, or the preparation of applications for derogation, which are both cumbersome and of uncertain outcome. This total compliance obligation has been mitigated by a certain number of detailed provisions added to Chapters 7 after the publication of the version submitted for public consultation. This occurred in recent discussions in the WP dealing with CR 171, (e.g. restrictive definition of the notion of "upgrade", exemptions from certain parameters...). However, the general principle remains; it may affect future projects in a way that has not yet been foreseen; moreover, the provisions stated above, spread out in the texts, may eventually be modified in an uncontrolled manner. In addition, we are concerned that no exemption appears for §4.2.9 1 "OCL height" and §4.2.9 2 "OCL lateral deviation". Indeed, the application of the TSI requirements in this area could lead in some cases to demolition of existing structures or to re-electrification of the line due to position of poles, without any effect on the running conditions of trains. Removing the obligation of full compliance from the draft text would be the most rational option.	NWC	First of all thank you for your input. The Agency is aware about the position from the sector and has tried to bring together all the stakeholders, in order to implement the required "policy". Please take also into account that an exemption is proposed for section 4.2.9.2. Maximum lateral deviation.
112	1	6.1.4.1(d)	U	CER-EIM	Current TSI text: TSI ENE 6.1.4.1(d): <i>[...] For OCL with a design speed up to 100 km/h, simulation and measurement of the dynamic behaviour are not required.</i> Editorial enhancement is required as 100km/h is intended to be included the range of speed for which this requirement applies. Although, the current wording may lead to discussion with NoBos. An improved wording is suggested to avoid any possible misunderstanding. Text proposal: <i>For OCL with a design speed up to and including 100 km/h, simulation and measurement of the dynamic behaviour are not required.</i>	A	The wording "up to" already means that 100 km/h is included. However, if it is better understood by the sector ERA accepts the proposal
113	2	4.2.3	M	CER-EIM	Current TSI text: <i>4.2.3. Voltage and frequency (1) The nominal voltage and nominal frequency of the energy subsystem traction power supply system shall be one of the four systems, specified in accordance with Section 7: [...]</i> Comment: Regarding the nominal voltage and nominal frequency of the traction power supply system a reference to clause 7 is made. Depending the final text for chapter 7 (CR 171) this part may need to be adapted.	D	The final text of chapter 7 (section 7.1.1) includes provisions for the Implementation rules for voltage and frequency for new lines with speed greater than 250 km/h. Maybe we can propose to delete: <i>specified in accordance with Section 7</i> , as conditions for other lines (with speed lower or equal than 250 km/h) are not imposed in chapter 7. Therefore, it would become: 4.2.3. Voltage and frequency (1) The nominal voltage and nominal frequency of the energy subsystem traction power supply system shall be one of the four systems: [...] To be agreed

114	3	4.2.8 (2)	M	CER-EIM	<p>Current TSI text: <i>4.2.8. Harmonics and dynamic effects for AC traction power supply systems</i> <i>(2) In order to achieve electrical system compatibility, harmonic overvoltages shall be limited below critical values according to EN 50388-1:2022, subclause 10.3, table 7.</i></p> <p>Comment: Reference to "table 7" of EN 50388-1:2022 is incorrect according to the actual FprEN 50388-1:2022. Table 7 in EN 50388:2012 is now Table 6 in EN 50388-1:2022. Numbering of the current draft for vote is expected to be changed with the publication of EN 50388-1:2022. TSI text to be adapted accordingly based on published version.</p> <p>Draft text proposal (to be checked based on numbering of published version of EN 50388-1:2022): <i>(2) In order to achieve electrical system compatibility, harmonic overvoltages shall be limited below critical values according to EN 50388-1:2022, subclause 10.3, table 6.</i></p>	A	<p>It is right. In accordance with the last prEN draft available now to ERA, it is " <i>EN 50388-1:2022, subclause 10.2, table 6</i>". To be checked after publication of EN. Please note that such amendment depends on the on-time publication of the referred EN, comparable with the timeframe of TSIs 2020 revision package.</p>
115	4	6.2.4.1a (1) (b)	M	CER-EIM	<p>Current TSI text: <i>6.2.4.1a. Assessment of traction power supply performance</i> <i>(1) The applicant shall declare:</i> <i>(b) that the output of the design study complies with clause 8.3 of EN 50388-1:2022.</i></p> <p>Comment: Reference to "clause 8.3" of EN 50388-1:2022 is incorrect according to the actual FprEN 50388-1:2022. Clause 8.3 in EN 50388:2012 is now clause 8.4 in EN 50388-1:2022. Numbering of the current draft for vote is expected to be changed with the publication of EN 50388-1:2022. TSI text to be adapted accordingly based on published version.</p> <p>Draft text proposal (to be checked based on numbering of published version of EN 50388-1:2022): <i>(b) that the output of the design study complies with clause 8.4 of EN 50388-1:2022.</i></p>	A	<p>Yes, also in in the last prEN 50388-1:2022 draft available now to ERA, Acceptance criteria are not in clause 8.3 but clause 8.4 (which also includes reference to voltage limits in clause 8.3). To be checked after publication of EN. Please note that such amendment depends on the on-time publication of the referred EN, comparable with the timeframe of TSIs 2020 revision package.</p>
116	5	Liste of referenced standards, Table E.1	P	CER-EIM	<p>Add index nr 6a for EN 50388-1:2022 and corresponding basic parameters.</p> <p>In the case EN 50388-1:2022 will be valid for all clauses of the TSI (based on CR419 "version 2"), referenced document in index nr 6 should be changed from EN 50388:2012 to EN 50388-1:2022 and corresponding additional basic paramemters should be integrated.</p>	R but partially accepted	<p>To add/amend in Annex E, the corresponding references to EN50388-1:2022 for sections 4.2.4, 4.2.8 and 6.2.4.1a. To be checked after publication of EN. However, this is only for the mentioned sections of the TSI, the rest of references to EN 50388 remains to 2012 version. CR 419 did not include 50388</p>
117	6	4.2.3 (2)	M	CER-EIM	<p>L&P TSI 4.2.8.2.2 refers to ENE TSI 4.2.3 for systems «voltage and frequency». It also requires the rolling stock to be able to operate withing the range of at least one of these systems. There is no reference in L&P TSI to what range is, e.g. voltage and frequency in EN 50163 as this is maintained by ENE TSI. If corresponding sentence in ENE TSI 4.2.3(2) is deleted, L&P TSI should be updtated to include it.</p>	D	<p>It is true that section 4.2.3 of recommendation TSI ENE does not include anymore the reference to EN 50163. However, section 6.2.4.1a for the assessment of the power supply performance refers to EN 50388-1:2022 which refers to EN50163. To amend section 4.2.8.2.2 of TSI LOC&PAS: "<i>(1) Electric units shall be able to operate within the range of at least one of the systems 'voltage and frequency' defined in the TSI Energy, clause s 4.2.3. and 6.2.4.1a</i>" Referring to chapter 6 of ENE TSI in the LOC&PAS TSI maybe would not be the best approach. Therefore we shall reflect if the deletion of 4.2.3 (2) in ENE TSI shall be done or not</p>
118	7	Appendix G	P	CER-EIM	<p>"Nominal voltage" to be completed by "Nominal voltage and frequency" (both for the 'Defined term' and for its 'Definition') to align with the TSI text (4.2.3(1) and 6.1.5(b))</p>	R	<p>Section 4.2.3 of TSI ENE was already amended adding "nominal" to both voltage and frequency, also to align with the terminology nominal voltage already present in the Appendix G Glossary. In addition, the definition in Appendix G is limited to voltage. Until now, no feedback from the sector that definition on nominal frequency was also needed to be included in Appendix G. So no discussion has been taken place in the TWG, for such proposal.</p>