

OPINION

OPI-2019-10

OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

for

Norway

regarding

Negative assessment of National Rules of Norway in addition to the latest TSIs in force for the Rolling Stock and on-board CCS subsystems notified in the Reference Document Database by Member States according to Articles 25 and 26 of the Agency Regulation

Disclaimer:

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

1. General Context

- 1.1 The scope extension of TSIs (with effect on 01 January 2015), the functional and technical harmonisation of requirements within TSIs made a series of national rules redundant and unnecessary.
- 1.2 While Directive(EU) 2016/797 does not yet apply to Norway, the principle of non-duplication of TSI requirements by national rules is already set in Directive 2008/57/EC, in particular in its Article 17. The processes described below are thus in line with the principles set in Directive 2008/57/EC and the Agency and the “Norway NSA” agreed to apply them.
- 1.3 The articles 13 and 14 of Directive(EU) 2016/797 indicate clearly cases where national rules may continue to apply:
- New national rules may only be adopted in of the following cases (article 14(4)), :
 - o when a TSI does not fully meet the essential requirements;
 - o as an urgent preventive measure, in particular following an accident.
 - Existing national rules (article 13(2)) are limited to :
 - o where the TSIs do not cover, or do not fully cover, certain aspects corresponding to the essential requirements, including **open points** as referred to in Article 4(6)Case where non-application of one or more TSIs or parts of them has been notified under article 7 of Directive(EU) 2016/797,
 - o Specific cases listed but not described in TSIs,
 - o Ensure technical compatibility with existing network not yet in compliance with TSI,
 - o Vehicles excluded from the scope of TSIs,
 - o Urgent temporary preventive measure, in particular following an accident.
- 1.4 According to article 14 of Directive(EU) 2016/797, Member States had to notify existing national rules before 16 December 2016. When notifying, Members States have to provide justification for the existence of national rules (e.g. identification of the related open-point).
- 1.5 Member States shall notify their national rules for vehicle authorisation. According to the communication of the Commission in RISC, until the Single Rules Database is available, the notification is performed in the Reference Document Database (RDD).
- 1.6 Since 2016, in accordance to the ERA programme plan on cleaning-up of national rules ERA-PRG-006-PPL, Member States and the Agency started the activity on identification and evaluation of national rules in addition to the following TSIs:
- TSI WAG: Commission Regulation (EU) No 321/2013, amended by Regulation (EU) No 1236/2013,
 - TSI LOC&PAS: Commission Regulation (EU) No 1302/2014,
 - TSI PRM: Commission Regulation (EU) No 1300/2014,
 - TSI Noise: Commission Regulation (EU) No 1304/2014,
 - TSI CCS: Commission Regulation (EU) No 2016/919 (including ERA/ERTMS/033281 rev 3.0 dated 04/12/2015).
- 1.7 From 16 June 2019 and pending the Single Rules Database, the Reference Document Database will be the reference for applicants, NSAs and the Agency in terms of applicable national rules for vehicle authorisation.
- 1.8 The scope of the technical opinion covers the examination of national rules (existing or draft) leading to a negative assessment by the Agency.

1.9 The complete assessment covering the examination of all national rules (existing or draft) in addition to TSIs mentioned in section 1.5 is available in the Evaluation Report of remaining national rules ERA-PRG-006-REP-RST.

2. Legal Background

2.1 According to the provisions of article 13.2 of Directive (EU) 2016/797, national rules and where relevant acceptable national means of compliance shall apply in the cases defined below :

- a) where the TSIs do not cover, or do not fully cover, certain aspects corresponding to the essential requirements, including open points ;
- b) where non-application of one or more TSIs or parts of them;
- c) where a specific case requires the application of technical rules not included in the relevant TSI;
- d) national rules used to specify existing systems, limited to the aim of assessing technical compatibility of the vehicle with the network;
- e) networks and vehicles not covered by TSIs;
- f) as an urgent temporary preventive measure, in particular following an accident.

2.2 According to the provisions of article 14 (9) of Directive (EU) 2016/797, draft national rules and national rules referred to in paragraph 1 shall be examined by the Agency in accordance with the procedures laid down in Articles 25 and 26 of Regulation (EU) 2016/796.

2.3 According to the provisions of Article 25 (3) of the Agency Regulation 2016/796, where the examination referred to in paragraph 1 leads to a negative assessment, the Agency shall inform the Member State concerned and ask it to state its position regarding that assessment. If, following that exchange of views with the Member State concerned, the Agency maintains its negative assessment, the Agency shall within a maximum period of 1 month:

- (a) issue an opinion addressed to the Member State concerned, stating the reasons why the national rule or rules in question should not enter into force and/or be applied; and
- (b) inform the Commission of its negative assessment, stating the reasons why the national rule or rules in question should not enter into force and/or be applied.

This shall not prejudice the right of a Member State to adopt a new national rule in accordance with point (c) of Article 8(3) of Directive (EU) 2016/798 or with point (b) of Article 14(4) of Directive (EU) 2016/797

2.4 According to the provisions of Article 26 (3) of the Agency Regulation 2016/796, where the examination referred to in paragraph 1 leads to a negative assessment, the Agency shall inform the Member State concerned and ask it to state its position regarding that assessment. If, following that exchange of views with the Member State concerned, the Agency maintains its negative assessment, the Agency shall within a maximum period of 1 month:

- (a) issue an opinion addressed to the Member State concerned, stating that the national rule or rules in question has or have been the subject of a negative assessment and the reasons why the rule or rules in question should be modified or repealed; and
- (b) inform the Commission of its negative assessment, stating the reasons why the national rule or rules in question should be modified or repealed.

3. Analysis

3.1. Tasks under the responsibility of the Member States :

In accordance to rules cleaning-up program plan ERA-PRG-006-PPL from March 2016, Member states were asked to :

- Identify and remove national rules covered by TSIs,
- Relate national rules to the TSIs and to the list of parameters defined in decision 2015/2299/EU,
- Clearly refer national rules not related to open point(s) or specific case(s) to TSI requirements in order to identify if they complement/contradict/replace TSIs for compatibility with existing networks,
- Ensure that the requirement is a mandatory rule. Acceptable national means of compliance in accordance to the definition in article 2 (34) of Directive 2016/797 is not considered as a national rule,
- Identify and analyse requirements that don't relate to any of the above, verify, in this case for example if the TSI is deficient/non-exhaustive.

Based on the outcome of this activity, Member States should have:

- Published their national rules in the Reference Document Database and
- Aligned their national legislation for vehicle authorisation with the Reference Document Database.

3.2. Tasks carried out by the Agency

During the project of cleaning up of national rules for vehicle authorisation covered by the Rules cleaning up program plan ERA-PRG-006-PPL , the Agency has :

- Provided technical support to Member States in the cleaning up of the remaining rules by ensuring:
 - o That rules relate to : Open points, Specific cases, Legacy system or rule duly justified for compatibility with existing fixed installation (i.e. a specific case not declared up to now).
 - o Consistency with the EU framework, including register of infrastructure and responsibilities of actors as defined in the Safety Directive and TSI OPE.
 - o That the rule is transparent and not discriminatory.
 - o The update of the Reference Document Database.
- Assessed the relevance of the remaining national rules together with the Member states, using the Reference Document Database as a reference.
- Provided regular reporting to European commission on the progress made.
- Updated the Reference Document Database with the status of the evaluation.
- In accordance with article 25(3) and 26(3) of Agency regulation 2016/797, the Agency informed officialy the Member States and the European Commission through an assessment report, sent by email, on the national rules in addition to latest TSIs (ERA-PRG-006-REP-RST). This report was published on the ERA websiste and uploaded on the CIRCABC .
- The Agency asked to the Member States to check the report, to provide comments and to take into consideration the actions proposed.
- The Norwegian NSA provided feedback on the report and indicated that the highlighted clauses will be reviewed and reworded. NSA Norway informed also the Agency that the Vehicle Regulation containing the National Rules of Norway is being updated and will be adapted according to the Interoperability Directive 2016/797. The update started and planned to be finalized by the end of 2019. The draft Vehicle regulation will be sent for national and EU – hearing in due time.

3.2.1. National rules subject to assessment by the Agency

The table 1 below provides an overview of national rules notified by Member States and subject or not to an assessment by the Agency:

Table 1 : Overview of national rules notified by Member States and subject or not to an assessment by the Agency

National Rules relates to	Published in RDD	Evaluated	Remarks
Vehicles in the scope of Loc&Pas and WAG TSIs	Yes	Yes	Freight wagons, Locomotives, Trainsets / Electric or Diesel Multiple Unit, Passenger coaches, Track machines/OTMs.
Article 13.2(a): Open points listed in TSIs	Yes	Yes	TSIs clearly identify where a national rule may be kept and notified; traceability between TSIs and possible remaining national rules is clearly established, and the corresponding rules are recorded in RDD. The Agency checked if the national rule covers the scope of the open point.
Article 13.2(a): Other Directives	Yes	No	Corresponding rules are available in RDD. Anyway, it will have to be decided at later stage with the Commission how to deal with these rules, considering the mentioned Directives. As a general principle, the TSIs in force don't cover subjects in the scope of these other EU Directives. Corresponding parameters are defined in section 3.2.3 of the report ERA-PRG-006-REP-RST
Article 13.2 (b): Non application of TSI	No	No	
Article 13.2 (c): Specific cases mentioned but not described in TSIs	Yes	Yes	TSIs clearly identify where a national rule may be kept and notified. Traceability between TSIs and possible remaining national rules is clearly established, and the corresponding rules are recorded in RDD. The Agency checked if the national rule covers the scope of the specific case.
Article 13.2(d): Technical compatibility between vehicle and existing network(s)	Yes	Yes	This includes vehicles with ETCS pre-baseline 2 versions (e.g. 2.2.2), additional functionality implemented on-board (e.g. NTRs from other MS) and TSI options implemented trackside (e.g. infill).
Article 13.2 (e): Vehicles not covered by TSIs	No	No	Concern vehicles such as Tram-Train, metric gauge vehicle.
Article 13.2 (f): Urgent temporary preventive measure following an accident	No	No	

Table 1 : Overview of national rules notified by Member States and subject or not to an assessment by the Agency

National Rules relates to	Published in RDD	Evaluated	Remarks
TSI potentially deficient or not exhaustive	Yes	Yes	National rules when accepted by the Agency are maintained pending the resolution of the potential deficiency.
Previous versions of TSIs not listed in section 3.1.2 of the report ERA-PRG-006-REP-RST	Yes	No	
Vehicle not TSI compliant authorised before TSIs.	Yes	No	Rules are in RDD for reference/history and are not subject to Agency evaluation.

3.2.2. Summary of the results of the examination of national rules

The table 2 below provides an overview of the number of national rules and acceptable national means of compliance notified by the Member State in addition to latest TSIs and the results of the examination leading to a positive or negative assessment.

The annex 1 provides details of the assessment leading to negative assessment. The national rules subject to discussion/clarification with the Member State are also counted in the column "Negative assessment".

Table 2 : number of national rules notified by Member states and results of the examination

Member States	Number of National rules (or draft national rules) and Acceptable national means of compliance	Results of the examination		Remarks
		Positive assessment	Negative assessment	
Norway	28	12	16	Norwegian NSA informed the Agency that the Vehicle Regulation containing the National rules for vehicle authorisation is being revised. The process for adapting the regulations to the Directive is started and planned to be finished by the end of 2019. The review of ERAs draft assessment report will be then a part of this revision. 11 National rules should be modified 5 National rules should be repealed

4. The opinion

In accordance with article 26(3) of Regulation 2016/796, the opinion covers the examination of national rules by the Agency leading to a negative assessment.

The annex 1 provides to the Member State:

- The list of actions to be taken into account,
- An assessment table with :
 - o The national rules concerned,
 - o The Agency assessment of each rule and the reasons why this is not accepted,
 - o The status of the assessment indicating whether the rule(s) should be modified or repealed.

Valenciennes, 19.09.2019



Josef DOPPELBAUER
Executive Director

5. ANNEX 1 – Examination of draft national rules leading to negative assessment

The following actions should be taken into account by Norway :

- Revision of the Vehicle Regulation FOR-2016-12-19-1846-with the comments provided by the Agency and available in the table below.
- Provide clarification for rules identified in the table below.

The table below presents the rules where the evaluation performed by the Agency lead to a negative assessment.

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
RST/CCS	Documentation	<p><u>1.4-National requirement for testing</u> The national rule attached to this parameter might have a longer text than the RDD data base can store. The complete text can be found in the DESCRIPTION field:</p> <p><u>Description:</u> Documentation as referred to in § 12 in this regulation shall be available. Further on the documentation shall validate the design concept and confirm that the vehicle tested on the track is able to withstand the operational and climate conditions to which it will be exposed during operation, including anti-derailment safety, satisfactory running properties in the speed class for which the rolling stock is designed and braking effect. Interface with the infrastructure and safe integration on the railway network shall be verified and documented. The tests shall be risk assessed and carried out depending on the risk and extend in several steps, first on closed test track and eventually thereafter in mixed traffic; tests shall validate among other things, CCS functionality, communication, power supply, train detection, noise, dynamic</p>	<p>Agency : The rule refers to : section 12 of Vehicle Regulation FOR-2016-12-19-1846 and additional requirements related to the tests to be performed (as EN 50215). The parameter 1.4 should contain <u>only</u> rules related to testing (organisation of tests...). Tests to be performed are covered through the TSIs or National rules notified and accepted by the Agency. The parameter 1.4 should refer only to section 12 of the Vehicle regulation FOR 2016 12 19 1846. NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : 1.4 will be revised.</p>	Not accepted National rule should be modified

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
RST	Compatibility with existing network	<p>properties, etc. For vehicles intended with axle load higher than 25 tons, dedicated tests, risk assessments, calculations and verifications shall be carried out. Following standard shall be compiled with: EN 50215.</p> <p><u>3.2.2-Equivalent conicity:</u> The national rule attached to this parameter might have a longer text than the RDD data base can store. The complete text can be found in the DESCRIPTION field <u>Description:</u> The requirements in TSI LOC & PAS 4.2.3.4.3 applies correspondingly. In addition, the following requirements apply: The range for the equivalent conicity where the vehicle running dynamics has been assessed and found to be stable, shall be specified in the documentation under point 1.4. The wheel profile shall contribute to stable running characteristic. Measurements and process of the measured values shall be done according to UIC 518 or 14363. Wheel profile shall be in accordance to UIC 510-2. Generally accepted wheel profile is S1002. Based on testing and safety assessments can other wheel profiles be accepted. Coordinate tables and drawings for rail-head are provided by the infrastructure manager. The size of wear groove in the wheel tread shall not be more than 2 mm. Wheel surface material defects (flaked-off material) and wheel hammer-blow/wheel flats shall not exceed an area of 60 mm in length for wheels with diameter</p>	<p>The national rule refers to clause 4.2.3.4.3 of Loc&Pas TSI 1302/2014. NSA NO already indicated to the Agency that some rewording is needed, most valid as test requirements and safe integration, the NTR will be re-assessed in connection with the 2018 revision. Agency: The applicant will demonstrate running dynamic behaviour via the EN 14363 and ERA/TD/2012-17/INT that determines the operating conditions. Contact conditions covering the norway case (e.g rail inclination) shall be covered. NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST: 3.2.2 will be revised. However the problem is not running dynamic behaviour with new wheels, the issue is mainly degraded behaviour due to wear of the profile and undetermined equivalent conicity. The text will be re-assessed.</p>	Not accepted National rule should be modified

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
RST	Compatibility with existing network	<p>over or equal to 920mm, and 40 mm for wheels with diameter under 920mm. Accepted standards shall be used, for instance: EN 15302:2008, EN 13715:2006, EN 13674-1:2003, EN 14363, UIC 518, UIC 519 and UIC 510.</p> <p>3.2.3-Wheel profile and limits: The wheel profile shall contribute to a stable running characteristic. Measurements and process of the measured values shall be done according to UIC 518 or EN14363. Wheel profile shall be in accordance with UIC 510-2. Generally accepted wheel profile is S1002. Based on testing and safety assessments can other wheel profiles be accepted. Coordinate tables and drawings for rail-head are provided by the infrastructure manager. The size of wear groove in the wheel tread shall not be more than 2 mm. Wheel surface material defects (flaked-off material) and wheel hammer-blow/wheel flats shall not exceed an area of 60 mm in length for wheels with diameter over or equal to 920mm, and 40 mm for wheels with diameter under 920mm. Accepted standards shall be used, for instance: EN 15302:2008, EN 13715:2006, EN 13674-1:2003, EN 14363, UIC 518, UIC 519 og UIC 510</p>	<p>See parameter 3.2.2 above NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : 3.2.3. will be revised - mainly same comments as above.</p>	Not accepted National rule should be modified
RST	Compatibility with existing network	<p>3.2.4-Track loading compatibility parameters: The national rule attached to this parameter might have a longer text than the RDD data base can store. The complete text can be found in the DESCRIPTION field <u>Description:</u> "Vehicles shall not cause higher dynamic track load than the values specified by the infrastructure</p>	<p>The national rule refers to clause 4.2.3.4.2.2 of Loc&Pas TSI 1302/2014. NSA NO already indicated to the Agency that some rewording is needed, most valid as test requirements and safe integration, ref for specifications over 25 tons, the rule will be revised and re-worded in next revision. Agency :</p>	Not accepted National rule should be modified

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
		<p>manager in order to ensure compatibility between the vehicle and railway track. The requirements in section 3.2.1 applies correspondingly for track load test. The requirements in TSI LOC & PAS point 4.2.3.4.2.2 applies correspondingly. For freight wagons the requirements in TSI WAG point 4.2.3.5 applies correspondingly. For vehicles with axle load higher than 25 tons, adequate risk assessments, calculations and verifications shall be carried out. Accepted standards shall be used, for instance: EN 15528, EN 14363, UIC 615 og EN 13749.</p> <p>Vertical acceleration, self-resonant frequency and dynamic load for bridges shall not exceed bridge's carrying capacity. Limit values are set by the infrastructure manager.</p> <p>To accomplish safety and running stability, measurements under different operating conditions or comparison studies with a proven design (e. g. simulation/calculation) shall be carried out in order to assess the dynamic load. Elements to be examined are, i.e. mass and inertia of car body, bogies and wheelsets, vehicle's suspension characteristic, distribution of the payload.</p> <p>The requirements in TSI LOC & PAS point 4.2.3.4.2.2 applies correspondingly. For freight wagons WAG TSI point 4.2.3.5 applies correspondingly. For vehicles with axle load higher than 25 tons, adequate risk assessments, calculations and verifications shall be carried out.</p> <p>Test conditions set in section 3.2.1 applies correspondingly</p>	<p>The application of TSI loc&Pas (including ERA/TD/2012-17/INT clause 4.1) cover severe conditions.</p> <p>For vehicle with axle load above 25 tones: not covered by TSI, National rule is possible. The rule is to be revised.</p> <p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST :</p> <p>The rule will be reworded.</p>	

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
RST	Compatibility with existing network	<p><u>3.2.5</u>-Minimum horizontal curve radius, vertical concave curve radius, convex curve radius: The requirements in TSI LOC & PAS clause 4.2.3.6 applies correspondingly. Minimum curve radius, vertical, horizontal, or in track switches, is specified in the infrastructure manager's Network statement</p>	<p>The national rule refers to clause 4.2.3.6 of Loc&Pas TSI 1302/2014. NSA NO justify that the requirements refers to test and radius under 150 m in e.g. switches. The rule will be revised and re-worded in next revision. Agency : The requirement refers to the register of infrastructure(RINF) and is more related to the route compatibility check performed by a railway undertaking after authorisation (see revised TSI OPE 4.2.2.5 and appendix D). Information from the network statement mentioned in the rule should be transferred in RINF. NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : 3.2.5 will be reworded. However RINF do not cover al the parameters yet. Characteristics for switches are not mapped or recorded. Our opinion is that the situation shall be captured somewhere , as a transition mesure. The text will be revised.</p>	Not accepted National rule should be modified
RST	Other rules not covered technical compatibility (e.g potential TSI deficiency)	<p><u>6.1.1.3</u>-Humidity : The requirements in TSI LOC & PAS clause 4.2.6.1.3 applies correspondingly, but the maximum temperature variation to be taken into account shall be up to 40 K.. It shall exists the possibility of drainage of all safety-critical spaces and openings in which condensation can occur. On design and operation of electrical and brake systems, the risk of condensation and freezing shall be taken into account . The general requirements in TSI LOC & PAS clause 4.2.6.1 and TSI WAG clause 4.2.5 applies</p>	<p>The national rule refers to clause 4.2.6.1 of Loc&Pas TSI 1302/2014. NSA NO indicates that the rules are valid mainly for use of vehicles without operational restrictions, the text will be revised in 2018 Agency: The rule refer to a parameter corresponding to technical requirements not retained in TSIs (see clause 3.2.5 of this report). The requirement is already covered by clause 4.2.6.1 of Loc&Pas TSI and clause 7.4. NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST :</p>	Not accepted National rule should be repealed

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
RST	Compatibility with existing network	<p>correspondingly, as far as appropriate with regard to the geographical conditions.</p> <p><u>8.2.1.2-Voltage and frequency of overhead contact line power supply:</u> The requirements in TSI LOC & PAS clause 4.2.8.2.2 applies correspondingly along with the testing requirements given in EN50163 point 5.</p> <p>There are no requirements as to the length of ""unspecified period"" described under point 4.1 letter f) in EN 50163 if the voltage increase is caused by the backfeed of energy. This means that a traction vehicle can generate voltage up to Umax2 continuously by backfeed.</p> <p>Practical short circuit test as specified in EN 50215 point 9.16.5 shall not be performed on the line, but as a factory test.</p>	<p>6.1.1.3. will be checked and reworded.</p> <p>The national rule refers to clause 4.2.8.2.2 of Loc&Pas TSI 1302/2014.</p> <p>NSA NO indicates that the rule apply to all vehicles due to power supply system particularities.</p> <p>Agency: There is no additional requirement on top of TSIs, if a specific case is needed for regenerative brake, UMax2 shall be set as done in section 7.3.2.12 of Loc&Pas 1302/2014 . If so the second paragraph should be transferred to parameter 8.2.1.3.</p> <p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : 8.2.1.2 will be revised, ERAs comments are noted and will be taken into consideration.</p>	Not accepted National rule should be repealed
RST	Compatibility with existing network	<p><u>8.2.1.3-Regenerative braking:</u> The national rule attached to this parameter might have a longer text than the RDD data base can store. The complete text can be found in the DESCRIPTION field</p> <p>Description : "The requirements in TSI LOC & PAS clause 4.2.8.2.3 applies correspondingly along with the testing requirements given in EN50388 point 15.7.</p> <p>Due to the contact line's thermal capacity and the contact line's protective device ability to detect a short circuit on the same section where a traction vehicle is regenerating power, is the national railway network divided into classes with maximum allowed regenerated effect/power. This classification is indicated by the infrastructure manager in the</p>	<p>The national rule refers to clause 4.2.8.2.3 of Loc&Pas TSI 1302/2014.</p> <p>NSA NO indicates that the rule apply to all vehicles due to power supply system particularities.</p> <p>Agency : The functional requirement is already covered by TSI, see clause 4.2.8.2.3 (2) "<i>It shall be possible to control the use of the regenerative brake.</i>" TSI does not impose a solution.</p> <p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : 8.2.1.3 will be revised. Regenerative capability of the contact line will be better specified.</p>	Not accepted National rule should be repealed

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
RST	Compatibility with existing network	<p>network statement. Limitation applies to total effect/power from all traction vehicles in multiple formation, and can be managed either manually by the driver or through a technical solution.</p> <p>If the traction vehicle in a satisfactory manner automatically stops the regenerated power when there is a short circuit in the section where the traction vehicle is located, the limitations due to the ability of the contact line's protective device to detect a short circuit at the same time might be mitigated. This functionality shall be documented. See also point 8.2.2.10 in the appendix here.</p> <p><u>8.2.1.4-Maximum power and maximum train current that is permissible to draw from the overhead contact line:</u></p> <p>The requirements in TSI LOC & PAS clause 4.2.8.2.4 applies correspondingly along with the testing requirements given in the TSI LOC & PAS clause 6.2.3.18.</p> <p>The classification of the national railway network in terms of maximum effect and power allowed to draw from the contact line is specified by the infrastructure manager in the network statement.</p> <p>Automatic current limiting, at low contact line voltage according to 50388 point 7.2 shall be active in normal operation due to the weak power supply.</p>	<p>The national rule refers to clause 4.2.8.2.4 of Loc&Pas TSI 1302/2014.</p> <p>NSA NO indicates that the rule apply to all vehicles due to power supply system particularities.</p> <p>Agency:</p> <p>The requirements are covered by TSIs : <i>"The requirements in TSI LOC & PAS clause 4.2.8.2.4 applies correspondingly along with the testing requirements given in the TSI LOC & PAS clause 6.2.3.18.</i></p> <p><i>Automatic current limiting, at low contact line voltage according to 50388 point 7.2 shall be active in normal operation due to the weak power supply."</i></p> <p>The clause : <i>"The classification of the national railway network in terms of maximum effect and power allowed to draw from the contact line is specified by the infrastructure manager in the network statement."</i> is relevant for route compatibility check and has to be in RINF</p> <p>If Norway impose power limitation different to what is in the clause 4.2.8.2.4 it shall be highlighted.</p>	<p>Not accepted</p> <p>National rule should be repealed,</p> <p>Clarification needed from Norway</p>

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
RST/CCS	Train detection System	<p>8.4.2-EMC between the vehicle and the railway system:</p> <p>Tests of electromagnetic compatibility between the vehicle and the signal and telecommunications network according to EN 50121, TS 50238-2 and TS 50238-3 shall be performed. Vehicles shall not affect other vehicles and the ground-based infrastructure of the rail system in a negatively way. Infrastructure equipment, such as train detection and axle counter types, can be found in the infrastructure manager's network statement. Declaration of conformity according to regulation 15. April 2016 nr. 378 about electromagnetic compatibility (EMC) for electronic communication equipment shall be provided.</p> <p>The main switch shall be automatically disconnected if the current in all frequency areas with 1 Hz frequency gap in the areas 92 – 98 Hz and 102 – 108 Hz is equal to or greater than 2 Arms for minimum 1,0 s.</p> <p>The following standard is accepted: EN 50121. Accepted standards shall be used, for instance: EN 50121.</p>	<p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST :</p> <p>NSA NO will review this rule with added weight on test and line capability.</p> <p>Agency:</p> <p>No requirements under 8.4.2. as this is a header EN 50121, TS 50238-2 and TS 50238-3 to be placed under the right parameters according to my table</p> <p>The different §§ of regulation 15. April 2016 nr. 378 about electromagnetic compatibility (EMC) have to be placed under the relevant parameters</p> <p>The main switch shall be automatically disconnected if the current in all frequency areas with 1 Hz frequency gap in the areas 92 – 98 Hz and 102 – 108 Hz is equal to or greater than 2 Arms for minimum 1,0 s: To be placed under parameter 8.4.2.1.1</p> <p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST :</p> <p>8.4.2 as heading will be dealt with re-distribution of rule under different parameters will be assessed.</p>	Not accepted National rule should be modified
RST/CCS	Train detection System	<p>8.4.2.1.5-Effects of DC content in AC supply:</p> <p>Electric traction vehicles shall be designed so that they are not affected by the limited DC content in the AC power supply. Limit values for the DC content is specified by the infrastructure manager and will be validated by testing.</p>	<p>The national rule refers to clause 4.2.8.2.7 of Loc&Pas TSI 1302/2014.</p> <p>NSA NO indicates that the rule Apply for all vehicles due to infrastructure particularities.</p> <p>Agency :</p>	Not accepted National rule should be modified.

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
CCS	ETCS and GSM-R	<p>EN 50388 point 13 applies correspondingly with additional conditions: transitory DC content up to 40 A in 60 seconds and 70 A shortly will be measured on existing vehicles on the national railway network due to rim on the contact line.</p> <p><u>12.1.1-Non-GSM-R radio system:</u> Other radio communication systems may be used in addition to the GSM-R system in connection with shunting.</p>	<p>1st § : Based on the max DC content on the overhead line accepted by the IM, are there requirements for the vehicle? Reinjection of max DC currents in the power supply, filters,...? What is tested and how? According to what procedure if relevant for vehicle authorisationTo clarify</p> <p>2nd § : OK</p> <p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : The rule will be reviewed, accept criteria will be revised.</p> <p>The national rules refers to clauses 4.2.5.1 (Radio communication with the train) of CCS TSI. NSA NO indicates that the rule is to be assessed and cleaned up in connection with next revision.</p> <p>Agency: This rule is an operational rule and not related to Vehicle authorisation , so to be deleted in RDD. NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : The rule will be reviewed.</p>	Not accepted National rule should be repealed
CCS	CCS and Radio class B systems (legacy systems)	<p><u>12.2.1-National on-board signalling systems:</u> Traction vehicles to be used on sections equipped with class-B automatic train control shall have equipment compatible with the control system. Class B equipment approved for use in Norway is listed in TSI CCS Annex B.-see also point 12.2.2-STM requirements. Accepted standards shall be used, for instance: EN 50129.</p>	<p>The national rules refers to clauses 4.2.6.1 (ETCS and Class B train protection) of CCS TSI. NSA NO indicates that the rule give indication of the class B system used in Norway. Ref to Test requirements will be provided in connection with next revision. Agency: NSA NO to explain what are the functional/interface requirements checked and tested during authorisation? What and how? Annex B gives only a description of the basic functionalities NSA NO to Indicate at least the type of Class B, manufacturer and Version Annex B does not exist at least since TSI CCS 2012 (see comment in the Excel file from 16.02.2018). Normally</p>	Not accepted National rule should be modified

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
CCS	ETCS and GSM-R	<p><u>12.2.2-STM requirements:</u> The national rule attached to this parameter might have a longer text than the RDD data base can store. The complete text can be found in the DESCRIPTION field</p> <p>Description: "Norwegian railway supervision shall have complementary requirements for STM-unit. To ensure technical compatibility and safe integration, testing of management and control equipment shall be performed in connection with integration of this equipment in the vehicle (integration testing). Infrastructure manager has complementary provisions regarding integration testing. STM-unit shall communicate securely with the class B system. The following shall be documented: a) description of the STM device. Description of all interfaces that are not part of the TSI CCS. b) compliance with the specification for STM device (ref. supplementary provisions from the SJT). c) ISA report for compliance with the requirements of EN 50126, EN 50128 and EN50129 c) safety report confirming safe integration of STM-unit with relevant subsystems, see. section 14 d)</p>	<p>Annex B and the follow up document contains a description of the relevant Class B parameter, therefore I do not see a problem with the NTR.</p> <p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : 12.2.1 will be revised according to the comments.</p> <p>NSA NO indicates that the rule applies to all vehicles. Ref to STM specifications and test specifications will be added- next revision.</p> <p>Agency : The "complementary provisions" coming from the IM shall be documented and made available as a national technical requirement. What is tested exactly and how during the authorisation? Is there a document describing the STM and the connection with the Class B system? The testing issues will be part of the ESC tests.</p> <p>NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : The rule will be completed and revised, test provisions will be updated.</p>	Not accepted National rules should be modified Discussion needed with Norway

Subsystem	Distribution of remaining rules	National rules	Examination of national rules leading to a negative assessment	Agency assessment status
		<p>d) safety report that confirms secure integration between the vehicle and the Norwegian railway network, cf. section 14 d) or section 15 e), including integration tests.</p>		
		<p><u>12.2.3-Transitions</u> It shall be carried out a risk assessment on matters related to border crossing (Directed/automatic network selection). This shall at least deal with the frequency limitations, network selection, installation of filters to reduce interference (see also point 12.1.2.2) and key management. Only manual procedures for selection of GSM-R-network are accepted.</p>	<p>Agency : Mixture of requirements, to be discussed. It seems that GSM-R filter are required In case filter are required for re-authorisation this is not acceptable > DV 81 to be applied. NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : 12.2.3 transitions might refer to a multitude of rules. To be clarified. Eventually splitted.</p>	<p>Not accepted National rule should be modified Clarification from Norway needed</p>
		<p><u>12.2.5.6-Interface with service brake:</u> It shall be carried out risk assessment and test for validation of the interface between ETCS-onboard equipment and vehicle's braking system.</p>	<p>Agency : No requirement on top of TSI CCS for a B3 on-board, part of the safe integration of ETCS (NoBo), to be clarified if this is an requirement for B2 (open point) only. NSA Norway feedback on the assessment report ERA-PRG-006-REP-RST : The rule will be reviewed</p>	<p>Not accepted National rule should be modified Clarification from Norway needed</p>

Making the railway system
work better for society.

Light Impact Assessment

*4th Railway Package – Cleaning up National rules for Vehicle
Authorisation*

Technical Opinion OPI-2019-10

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1. Context and problem definition

<p>1.1. Problem and problem drivers</p>	<p>One of the main objectives of the the 4th Railway Package (RP) is to increase the efficiency of the authorisation process of vehicles and to ensure transparency and non-discrimination of applicants in this process.</p> <p>Applicants for vehicle authorisations have to demonstrate compliancy with TSIs and with national rules notified by MSs.</p> <p>The scope extension of TSIs, the functional and technical harmonisation of requirements within TSIs made a number of national rules redundant and unnecessary.</p> <p>Problem/need to be addressed:</p> <p>In accordance with Art. 14 (9) of Interoperability Directive 2016/797 the Agency examined the draft national rules and national rules notified in accordance to Art 13.2. The majority of rules were cleaned in consensus with the MS. The Technical Opinion focus on rules where there is disagreement between MS and the Agency concerning their justifications/acceptance. These rules might represent an obstacle in the vehicle authorisation process.</p>
<p>1.2. Main assumptions</p>	<p>1. In June 2012, the European Commission has commissioned an impact assessment in view of the preparation of the 4th RP, hereinafter referred to as the 4th RP IA¹. The cleaning of national rules is represented as an horizontal measure (to increase efficiency of the authorisation process) in all evaluated option. (where one of the option was the policy package summarized as 4th RP). This LIA uses this IA as main source for economic data.</p> <p>2. The TO only identifies the remaining rules in addition to TSIs refered in section of the TO where there is disagreement between MS and the Agency. As long as there is no removal or modification of the concerned rule(s), there is no economic impact. In this LIA we assume, that as a consequence of publication of the TO, the MS will withdraw the remaining rules so that an economic impact will appear.</p> <p>3. The majority of national rules was cleaned in consensus with the MS, which already lead to a significant reduction of applicable rules in the framework of vehicle authorisation (e.g. from approx. 14.000 national rules to less than 1000 national rules). As a consequence this achievement contributes significantly to the economic impacts of the complete cleaning process. The scope of the TO focus on the remaining rules where there is disagreement between MS and Agency, It contributes much lower to the economic impacts of the complete cleaning process.</p>

¹ See <https://ec.europa.eu/transport/sites/transport/files/modes/rail/studies/doc/2012-06-ia-support-study-era-final-report.pdf>

1.3. Stakeholders affected		
	<i>Category of stakeholder</i>	<i>Importance of the problem (*)</i>
	National Safety Authorities	2 NSAs have to check the national part of the application for vehicle authorisation. However as compliance with national rules is checked by a DeBo, they are not directly concerned by the problem. However NSAs might be in charge of the management of national rules, especially keeping them up to date. In this context the problem could be relevant for them.
	ERA	2 Although ERA is not involved in the assessment of the national part of the application for vehicle authorisation, ERA is delivering the final authorisation decision. For this reason, ERA is concerned by the problem however in a limited way.
	Vehicle Supplier	5 As applicants for vehicle authorisations they have to declare compliance with all applicable national rules.
	RUs	5 If they are applicants for vehicle authorisations – see vehicle suppliers
	Infrastructure Managers	5 If they are applicants for vehicle authorisations – see vehicle suppliers
	<p>Note: Other stakeholders not listed in this table like IMs, wagon keepers are not impacted.</p> <p>*) 1=low; 5=high</p>	
1.4. Evidence and magnitude of the problem	<p>The evidence of the problem related to the inefficiency of the authorisation process was analysed in detail in the 4th RP impact assessment (see section 3 problem definition).</p> <p>The magnitude of the problem for all EU countries was not quantified but it is estimated to be an impact of hundreds of millions EUR for the European railway sector.</p>	
1.5. Baseline scenario	<p>The remaining national rules, where there is disagreement between MS and the Agency concerning their justifications/acceptance, are kept in force after the publication of this TO by the MS.</p>	
1.6. Subsidiarity and proportionality	<p>According to the provisions of article 14 (9) of Directive (EU) 2016/797 , draft national rules and national rules referred to in paragraph 1 shall be</p>	

	examined by the Agency in accordance with the procedures laid down in Articles 25 and 26 of Regulation (EU) 2016/796
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2. Objectives

<p>2.1. Strategic and specific objectives</p>	<p>Strategic objective(s) of the Agency with which this initiative is coherent.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Europe becoming the world leader in railway safety <input type="checkbox"/> Promoting rail transport to enhance its market share <input checked="" type="checkbox"/> Improving the efficiency and coherence of the railway legal framework <input type="checkbox"/> Optimizing the Agency’s capabilities <input checked="" type="checkbox"/> Transparency, monitoring and evaluation <input checked="" type="checkbox"/> Improve economic efficiency and societal benefits in railways <input type="checkbox"/> Fostering the Agency’s reputation in the world <p>The specific objective is to Increase the efficiency of the vehicle authorisation processes (Specific Objective 1);</p>
<p>2.2. Link with Railway Indicators</p>	<p>N/A</p>

3. Options

<p>3.1. List of options</p>	<p>Baseline Option 1 – Technical Opinion</p>
<p>3.2. Description of options</p>	<p>Baseline - corresponds to the Baseline of the 4th RP IA</p> <ul style="list-style-type: none"> › No cleaning of national rules <p>Option 1 – TO Negative Assessment of National Rules</p> <ul style="list-style-type: none"> › Description of remaining rules where there is disagreement between MS and ERA about their justification. › Further Assumption: These remaining rules will be removed or modified by the MS as a consequence of the publication of the TO
<p>3.3. Uncertainties/risks</p>	<p>1. The residual risk (related to a potential incompatibility with the network of the concerned MS) resulting from a removal or modification of a national rule is not taken into account in this LIA. It is considered to be marginal or non existent.</p> <p>2. The estimation of benefits of the 4th RP as stated in the 4th RP IA was based on stakeholders’ opinion survey and was performed in 2012. More updated evidence is not yet available.</p>

4. Impacts of the options

<p>4.1. Impacts of the options (qualitative analysis)</p>	<p>The positive or negative impacts from the option are derived by comparing the option against the baseline.</p>		
	<p><i>Category of stakeholder</i></p>		<p><i>Option 1</i></p>
	<p>NSAs</p>	<p>Positive impacts</p>	<p>Reduced costs in the framework of management of/ keeping up to date remaining national rules</p>
	<p>Agency</p>	<p>Negative impacts</p>	<p>N/A</p>
	<p>RUs</p>	<p>Positive impacts</p>	<p>Less work in the framework of classification of national rules (art 14.10)</p>
	<p>Vehicle Suppliers</p>	<p>Negative Impacts</p>	<p>N/A</p>
		<p>Positive impacts</p>	<p>They profit from clear and transparent national rules Reduced costs for vehicle (type) configuration management (e.g. in terms of vehicle change management and management of its operational use)</p>
		<p>Negative Impacts</p>	<p>N/A</p>
		<p>Positive impacts</p>	<p>see RUs</p>
		<p>Negative Impacts</p>	<p>N/A</p>

	<p>Overall assessment <i>(input for section 5.1)</i></p>	<p>Positive impacts</p>	<p>Reduced costs for vehicle (type) configuration management due to an increase in the efficiency and transparency of the authorisation process.</p>																							
		<p>Negative impacts</p>	<p>Very limited</p>																							
<p>4.2. Impacts of the options (quantitative analysis)</p>	<table border="1"> <thead> <tr> <th>Category of stakeholder</th> <th></th> <th>Option 1</th> </tr> </thead> <tbody> <tr> <td rowspan="2">RUs, Suppliers</td> <td>Benefits (euro)</td> <td><<100 M€ (1)</td> </tr> <tr> <td>Costs (euro)</td> <td>N/A</td> </tr> <tr> <td rowspan="2">NSAs</td> <td>Benefits</td> <td>N/A</td> </tr> <tr> <td>Costs (euro)</td> <td>N/A</td> </tr> <tr> <td rowspan="2">Agency</td> <td>Benefits (euro)</td> <td>N/A</td> </tr> <tr> <td>Costs (euro)</td> <td>N/A</td> </tr> <tr> <td rowspan="2">Overall</td> <td>Benefits (euro)</td> <td><<100 M€</td> </tr> <tr> <td>Costs (euro)</td> <td>N/A</td> </tr> </tbody> </table>			Category of stakeholder		Option 1	RUs, Suppliers	Benefits (euro)	<<100 M€ (1)	Costs (euro)	N/A	NSAs	Benefits	N/A	Costs (euro)	N/A	Agency	Benefits (euro)	N/A	Costs (euro)	N/A	Overall	Benefits (euro)	<<100 M€	Costs (euro)	N/A
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		Costs (euro)	N/A																							
<p>(1) Based on 4th RP IA: section 5.59 – estimated benefits for cleaning up of national rules. The amount of 100 M€ relates to the complete cleaning process. However the economic impact with regards to the TO can be considered much lower.</p>																										
<p>Overall resulting figures:</p>																										
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5. Comparison of options and preferred option

<p>5.1. Effectiveness criterion (options' response to specific objectives)</p>	<p>The proposed option meets all specific objectives.</p> <p>Comparison not applicable as only one option was proposed and the baseline is not legally compliant with the 4th RP in force.</p>
<p>5.2. Efficiency (NPV and B/C ratio) criterion</p>	<p>The proposed option retrieves positive NPV (<< 100 M€) and B/C ratio >1</p> <p>Comparison not applicable as only one option was proposed and the baseline is not legally compliant with the 4th RP in force.</p>
<p>5.3. Summary of the comparison</p>	<p>N/A as there is only one option.</p>
<p>5.4. Preferred option(s)</p>	<p>The proposed option is recommended in terms of both effectiveness and efficiency. There is no alternative proposal concerning the implementation of the 4th RP.</p>

5.5. Further work required	The risks mentioned under section of 3.3 have to be closely monitored once the 4 th RP is transposed in all Member States , in particular to detect any potential negative economic impacts.
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6. Monitoring and evaluation

6.1. Monitoring indicators	N/A
6.2. Future evaluations	N/A

