**VALUES FOR ERATV PARAMETERS**

While the responsibility for providing the values for ERATV lies with the applicant for vehicle type authorisation, the Agency, when acting as authorising entity, has the legal duty to:

* Include in the issued type authorisation the values for the parameters set out in the applicable TSI(s) (values for ERATV parameters and/or basic design characteristics), pursuant to Article 48 of Regulation (EU) 2018/545
* Publish the type in ERATV (which includes the values for TSI parameters and/or basic design characteristics), after checking the "consistency of the data provided by the applicant" with the technical file(s) accompanying the EC declaration(s) of verification, pursuant to Article 50 of Regulation (EU) 2018/545
* "make publicly available the data that has been validated", following point 5.4 of Annex I of Decision 2011/665/EU

During the assessment of applications for vehicle type authorisation and the works related to the publication of an ERATV entry following the issued vehicle type authorisation, the Agency is often finding errors and inconsistencies between the values declared by applicants for ERATV and the technical file(s) accompanying the EC declaration(s) of verification. This causes delays (and additional costs) in the issuing of the authorisation and in the publication of the related ERATV during the last and most critical stage of the authorisation process.

With the use of this form, the Agency expects a reduction of time and cost thanks to the fact that:

* The applicant identifies possible errors and inconsistencies in the values for ERATV parameters, with the support of the concerned conformity assessment bodies, early in the process (before submission of the application), providing a better quality file, and
* The Agency spends less time checking the consistency of the data, thanks to a better quality file and by having all the information to perform the spot checks that are needed to verify the consistency of the data in a single document.

This form should be filled-in by the applicant for a vehicle type authorisation when the Agency is the Authorising Entity and should be revised by the concerned NoBo(s) for the assessment of the compliance of the mobile subsystem(s) with the requirements of the TSI(s). In case of special vehicles (e.g., OTMs) for which the applicant decides not to use the TSI LOC&PAS (possibility described in section 7.1.1.3 of the TSI), the revision of the values should be performed by the DeBo in charge of assessing the national rules as regards the basic parameters of the TSI.

Please note that in case of types/variants following a new authorisation, types/versions following an extension of the area of use and creation of versions following 15(1)(c) changes, only the information related to ERATV parameters impacted and mandatory ERATV parameters (such as 4.1.3 Gauge, 4.10.1 electrification, 4.13.1.1 ETCS on-board, 4.13.1.5 class-B system, etc.) should be filled in in section 6.

The use of this template by applicants is not mandatory. However, filling-in this template is considered as a mean to fulfil the legal obligation for applicants to provide the information which is necessary for ERATV pursuant to point 18.13 of Annex I of Regulation (EU) 2018/545.

The verification by NoBo(s) / DeBo(s) is also not compulsory. Nevertheless, being the conformity assessment bodies the entities in charge of the preparation of the file(s) accompanying the type examination certificate(s), they are in the best position (most efficient in terms of time/cost) to double check that the information provided by the applicant is consistent with the file that they have prepared, the assessments they have performed and the documents used for the assessment.

The revision by the NoBo(s) / DeBo(s) should be focused on checking that the values declared by the applicant, and the references to the documents where the values can be found, are consistent with the results of the conformity assessment of the requirements in the TSI(s) performed during the EC verification procedure, including the documents used for the assessment.

After having filled-in and signed the form, please upload it to the concerned application in the OSS, in the folder “Information required for ERATV (18.13)”.

More information about ERATV, in particular the ERATV application guide, is available at: <https://www.era.europa.eu/domains/registers/eratv_en>

|  |
| --- |
| 1. General information

*Please fill in the corresponding fields using the information available in OSS & ERATV.* |
| * 1. Application ID (OSS): (if available)
 | Click here to enter text. |
| * 1. Type name (ERATV):
 | Click here to enter text. |
| * 1. Type ID (ERATV):
 | Click here to enter text. |

|  |
| --- |
| 1. Applicant for authorisation

*Please fill in the corresponding fields.* |
| * 1. Legal denomination (5.1): Click here to enter text.
 | Date and signature |
| * 1. Applicant signatory name & position: Click here to enter text.
 |

|  |
| --- |
| 1. NoBo for the Rolling Stock subsystem

*Please fill in the corresponding fields. Remove this section if not applicable.* |
| * 1. Legal denomination (8.1): Click here to enter text.
 | Date and signature |
| * 1. NoBo ID number: Click here to enter text.
 |
| * 1. NoBo signatory name & position: Click here to enter text.
 |

|  |
| --- |
| 1. NoBo for the Control, Command and Signalling subsystem

*Please fill in the corresponding fields. Remove this section if not applicable.* |
| * 1. Legal denomination (8.1): Click here to enter text.
 | Date and signature |
| * 1. NoBo ID number: Click here to enter text.
 |
| * 1. NoBo signatory name & position: Click here to enter text.
 |

|  |
| --- |
| 1. DeBo (in case of special vehicles not applying the TSI LOC&PAS but national rules)

*Please fill in the corresponding fields. Remove this section if not applicable.* |
| * 1. Legal denomination: Click here to enter text.
 | Date and signature |
| * 1. DeBo signatory name & position: Click here to enter text.
 |

| 1. Values and references for ERATV parameters

*Please fill in the values for the different parameters and the references (including page, section, chapter etc.) to the document where the value can be found. Where a parameter is not applicable to the category of vehicle or it´s not impacted, use “n.a.” in the column “Value” and “Reference to the document which contains the value”* |
| --- |
| ERATV parameter | TSI clause 4 | Category of vehicle | Technical compatibility | Parameter impacted? | Value | Reference to the document which contains the value |
| 4.1.1 | Number of driving cabs | 4.2.12.2 (L&P) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.1.2.1 | Maximum design speed | 4.1.3, 4.2.8.1.2 & 4.2.12.4 (L&P)4.4 & 4.8 (WAG)4.2.2 (CCS) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.1.3 | Wheelset gauge | 4.2.3.5.2.1 (L&P)4.2.3.6.2 (WAG) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.1.5 | Maximum number of trainsets or locomotives coupled together in multiple operation. | 4.2.12.2 (L&P) |  Traction vehicles | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.1.11 | Wheelset gauge changeover facility | 4.2.3.5.2.3 (L&P)4.2.3.6.6 (WAG) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.1.12 | Number of vehicles composing the fixed formation (for fixed formation only) | 4.2.12.2 (L&P)4.4 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.2.1 | Reference profile | 4.2.3.1 (L&P)4.2.3.1 (WAG) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.3.1 | Temperature range | 4.2.6.1.1 (L&P)4.2.5 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.3.3 | Snow, ice and hail conditions | 4.2.6.1.2 (L&P)4.2.5 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.4.1 | Fire safety category | 4.2.10.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.1  | Permissible payload for different line categories | 4.2.3.2 (WAG) | Freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.1.1 1 | EN line category(ies) | 4.2.2.10 (L&P)4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.2.1 | Design mass in working order | 4.2.2.10 (L&P)4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.2.2 | Design mass under normal payload | 4.2.2.10 (L&P)4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.2.3 | Design mass under exceptional payload | 4.2.2.10 (L&P)4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.2.4 1 | Operational mass in working order | 4.2.2.10 (L&P)4.2.3.2.1 (L&P) | Traction & hauled passenger vehicles | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.2.5 1 | Operational mass under normal payload | 4.2.2.10 (L&P)4.2.3.2.1 (L&P) | Traction & hauled passenger vehicles | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.3.1 | Static axle load in working order | 4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.3.2 | Static axle load under normal payload | 4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.3.3 | Static axle load under exceptional payload | 4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.3.4 | Position of the axles along the unit (axle spacing):a: Distance between axlesb: Distance from end axle to the end of the nearest coupling planec: distance between two inside axles | 4.2.2.10 &4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.5 | Total vehicle mass (for each vehicle of the unit) | 4.2.2.10 &4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.5.6 | Mass per wheel | 4.2.2.10 &4.2.3.2.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.6.4 | Combination of maximum speed and maximum cant deficiency for which the vehicle was assessed | 4.2.3.4 (L&P)4.2.3.5 (WAG) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.6.5 | Rail inclination | 4.2.3.4 (L&P)4.2.3.5 (WAG) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.1 | Maximum average deceleration | 4.2.4.5.1 (L&P) | Traction & special vehicles | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.2.1.1 | Reference case of TSI | 4.2.4.5.4 (L&P)4.2.4.3.3 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.2.1.2 | Speed (if no reference case is indicated) | 4.2.4.5.4 (L&P)4.2.4.3.3 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.2.1.3 | Gradient (if no reference case is indicated) | 4.2.4.5.4 (L&P)4.2.4.3.3 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.2.1.4 | Distance (if no reference case is indicated) | 4.2.4.5.4 (L&P)4.2.4.3.3 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.2.1.5 | Time (if distance is not indicated) (if no reference case is indicated) | 4.2.4.5.4 (L&P)4.2.4.3.3 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.2.1.6 | Maximum brake thermal energy capacity | 4.2.4.5.4 (L&P)4.2.4.3.3 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.3.3 | Maximum gradient on which the unit is kept immobilized by the parking brake alone (if the vehicle is fitted with it) | 4.2.4.5.5 (L&P) | All except freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.3.4  | Parking brake | 4.2.4.3.2.2 (WAG) | Freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.4.1.1 | Eddy current track brake fitted | 4.2.4.8.3 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.4.1.2 | Possibility of preventing the use of the eddy current track brake (only if fitted with eddy current track brake) | 4.2.4.8.3 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.4.2.1 | Magnetic track brake fitted | 4.2.4.8.2 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.4.2.2 | Possibility of preventing the use of the magnetic track brake (only if fitted with magnetic brake) | 4.2.4.8.2 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.4.3.1 | Regenerative brake fitted | 4.2.8.2.3 (L&P) | Traction & special vehicles | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.4.3.2 | Possibility of preventing the use of the regenerative brake (only if fitted with regenerative brake) | 4.2.8.2.3 (L&P) | Traction & special vehicles | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.5 | Emergency brake: Stopping distance and deceleration profile for each load condition per design maximum speed | 4.2.4.5.2 (L&P) | All except freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.6 | For general operation:Brake weight percentage (lambda) or Braked mass | 4.2.4.5.2 (L&P)4.2.4.3.2.1 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.7 | Service brake:At maximum service brake: Stopping distance, Maximum deceleration, for the load condition ‘design mass under normal payload’ at the design maximum speed. | 4.2.4.5.3 (L&P)4.2.4.3.2.1 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.7.8 | Wheel slide protection system | 4.2.4.6.2 (L&P)4.2.4.3.4 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.8.1 | Vehicle length | 4.2.2.10 &4.2.3.2.1 (L&P) | All except freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.8.2 | Minimum in-service wheel diameter | 4.2.3.5.2.2 (L&P)4.2.3.6.3 (WAG) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.8.4 | Minimum horizontal curve radius capability | 4.2.3.6 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.8.5 | Minimum vertical convex curve radius capability | 4.2.3.1 (L&P, WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.8.6 | Minimum vertical concave curve radius capability | 4.2.3.1 (L&P, WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.9.1 | Type of end coupling | 4.2.2.2.3 (L&P)4.2.2.1.1 (WAG) | All | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.9.2 | Axle bearing condition monitoring (hot axles box detection) | 4.2.3.3.2 (L&P)4.2.3.4 (WAG) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.9.3.1 1 | Flange lubrication fitted | 4.2.3.3.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.9.3.2 1 | Possibility of preventing the use of the lubrication device (only if fitted with flange lubrication) | 4.2.3.3.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.1 | Energy supply system (voltage and frequency) | 4.2.8.2.2 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.4 | Maximum current at standstill per pantograph (to be indicated for each DC systems the vehicle is equipped for) | 4.2.8.2.5 (L&P) | All except freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.5 | Height of interaction of pantograph with contact wires (over top of rail) (to be indicated for each energy supply system the vehicle is equipped for) | 4.2.8.2.9.1.1 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.6 | Pantograph head geometry (to be indicated for each energy supply system the vehicle is equipped for) | 4.2.8.2.9.2 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.7 | Number of pantographs in contact with the overhead contact line (OCL) (to be indicated for each energy supply system the vehicle is equipped for) | 4.2.8.2.9.7 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.8 | Shortest distance between two pantographs in contact with the OCL (to be indicated for each energy supply system the vehicle is equipped for; to be indicated for single and, if applicable, multiple operation) (only if number of raised pantographs is more than 1) | 4.2.8.2.9.7 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.10 | Material of pantograph contact strip the vehicle may be equipped with (to be indicated for each energy supply system the vehicle is equipped for) | 4.2.8.2.9.4.2 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.11 | Automatic dropping device (ADD) fitted (to be indicated for each energy supply system the vehicle is equipped for) | 4.2.8.2.9.10 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.14 | Electric units equipped with power or current limitation function | 4.2.8.2.4 (L&P) | Traction & special vehicles | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.15 | Mean contact force | 4.2.8.2.9.6 (L&P) | All except freight wagons | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.10.16 1 | Vehicle equipped with electric energy storage for traction purposes and with the function of charging with OCL at standstill | 4.2.8.2.5 (L&P) | Traction & special vehicles | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.12.3.1 | Platform heights for which the vehicle is designed. | 4.2.2.11 (PRM) |  Traction & hauled passenger vehicles | Y/N 2 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.1.1 | ETCS equipment on-board and the set of specifications from CCS TSI Annex A | 4.2.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.1.5 | Class B or other train protection, control and warning legacy systems installed (system and, if applicable, version) | 2.2 (1), 4.2.6.1 & 7.2.5 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.1.7 | ETCS on-board implementation | 4.2.2 & 7.2.1a.1.11 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y/N 2 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.1.8 | ETCS System Compatibility | 4.2.17.1 (CCS) | All except freight wagonsTraction & special vehicles 1 | N/Y 3 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.1.9 | Managing information about the completeness of the train (not from driver) | 4.2.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.1.10 1 | Safe consist length information from on-board necessary to access the line and corresponding SIL | 4.2.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.1.111 | Envelope of legally operated ETCS system versions | 4.2.2 & 7.4.2.4.1 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.1 | GSM-R Radio voice on board and its Baseline | 4.2.4 & 4.2.4.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y/N 2 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.3 | Class B or other radio legacy systems installed (system and, if applicable, version) | 2.2 (2) & 4.2.5.1 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.5 | Radio Voice System Compatibility | 4.2.17.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | N/Y 3 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.6 | Voice and operational communication implementation | 4.2.4 & 4.2.4.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y/N 2 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.7 | GSM-R Radio Data communication on board and its Baseline | 4.2.4 & 4.2.4.3 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y/N 2 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.8 | Radio Data System Compatibility | 4.2.17.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | N/Y 3 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.9 | Data communication application for ETCS implementation | 4.2.4 & 4.2.4.3 (CCS) | All except freight wagonsTraction & special vehicles 1 | Y/N 2 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.10 | Voice SIM Card GSM-R Home Network | 4.2.4 & 4.2.4.1 (CCS) | All except freight wagonsTraction & special vehicles 1 | N/Y 3 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.11 | Data SIM Card GSM-R Home Network | 4.2.4 & 4.2.4.1 (CCS) | All except freight wagonsTraction & special vehicles 1 | N/Y 3 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.2.12 | Voice SIM Card support of Group ID 555 | 4.2.4 & 4.2.4.2 (CCS) | All except freight wagonsTraction & special vehicles 1 | N/Y 3 |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.3.1 1 | On-board ATO system version | 4.2.18 (CCS) | All except freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.13.3.2 1 | On-board ATO implementation | 4.2.18 (CCS) | All except freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.14.1 | Type of train detection systems for which the vehicle has been designed and assessed | 4.2.3.3.3.1 (L&P)4.2.3.3 (WAG)4.2.10 & 4.2.11 (CCS) | All | Y |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.15.1 1 | Presence and type of derailment detection and prevention function(s) | 4.2.3.5.3 (WAG) | Freight wagons | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.15.2 1 | Presence of derailment prevention and detection function | 4.2.9.3.7a (L&P) | Traction vehicles | N |  ☐ Yes ☐ No ☐ n.a. |  |  |
| 4.15.3 1 | Presence of derailment prevention and detection signal processing | 4.2.9.3.7 (L&P) | Traction vehicles | N |  ☐ Yes ☐ No ☐ n.a. |  |  |

*1 Only for TSIs as amended by Regulations (EU) 2023/1694 or (EU) 2023/1695*

*2 Not anymore a parameter for technical compatibility between the vehicle and the network(s) of the area of use after amendment introduced by Regulation(s) (EU) 2023/1694 or (EU) 2023/1695*

*3 Parameter for technical compatibility between the vehicle and the network(s) of the area of use after amendment introduced by Regulations (EU) 2023/1694 or (EU) 2023/1695*

*4 L&P: Regulation (EU) No 1302/2014, as amended by Regulations (EU) 2018/868, 2019/779, 2020/387 and 2023/1694*

*WAG: Regulation (EU) No 321/2013, as amended by Regulations (EU) 1236/2013, 2015/924, 2019/776, 2020/387 and 2023/1694*

*CCS: Regulation (EU) 2016/919, as amended by Regulations (EU) 2019/776, 2020/387 and 2020/420, or Regulation (EU) 2023/1965*