AB „LTG Infra“

LTGI
353/A

RULES FOR VERIFICATION OF THE TECHNICAL COMPATABILITY OF RAILWAY ROLLING STOCK AND THE NETWORKS OF LOCATIONS WHERE THEY ARE INTENDED TO BE USED WHEN THE RAILWAY ROLLING STOCK IS PLANNED TO BE OPERATED ON THE RAILWAY INFRASTRUCTURE AND RAILWAY SERVICE FACILITIES MANAGED BY THE PUBLIC RAILWAY INFRASTRUCTURE MANAGER

VILNIUS 2024

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CHAPTER I.
GENERAL PROVISIONS

1. The Rules for the verification of the technical compatibility of railway rolling stock (hereinafter - rolling stock) and the network of locations where they are intended to be used, when the rolling stock is planned to be operated on railway infrastructure and/or on railway service facilities (hereinafter referred to as railway Infrastructure) managed by the public railway infrastructure manager (hereinafter - Infrastructure Manager), establish the procedure for the Infrastructure Manager to verify whether the rolling stock is technically compatible with the railway Infrastructure managed by the Infrastructure Manager (hereinafter - rolling stock compatibility verification), as well as the procedure for issuing confirmation that the rolling stock is technically compatible with the railway infrastructure managed by the Infrastructure Manager (hereinafter - the Infrastructure Manager's confirmation).

2. The Rules apply to all owners or managers of rolling stock who intend to start using the rolling stock on the railway Infrastructure (on the relevant railway line, access track, railway station, etc.) where they have not been used, managed by the Infrastructure Manager.

3. If it is planned to start using a freight wagon whose model is included in the Freight Wagon Model Directory approved by the Railway Transport Council (RTC), this wagon has not been renovated or improved (technical parameters and/or operational characteristics have not been changed), its gauge, maximum axle load and equivalent load do not exceed the values specified in point 5.6 of the Rules, and the documents specified in point 12 of the Rules are submitted, such freight wagon shall be considered technically compatible with the 1520 mm gauge railway Infrastructure managed by the Infrastructure Manager.

4. When verifying the compatibility of rolling stock, an assessment is made as to whether the rolling stock in question is technically compatible with the railway Infrastructure managed by the Infrastructure Manager, and, taking into account the results of the rolling stock compatibility verification and the experience of using other rolling stock, the Infrastructure Manager may set conditions for the operation and/or restrictions on the use of such rolling stock.

CHAPTER II.
REFERENCES

5. Rolling stock compatibility verification shall be carried out in accordance with the network parameters specified in the railway infrastructure information system managed by the European Union Agency for Railways (hereinafter referred to as ERA) and considering the requirements (data) specified in:

5.1. Railway technical interoperability specifications.

5.2. Technical Regulations for Railway Operation, approved by Order No. 297 of the Minister of Transport and Communications of the Republic of Lithuania of 20 September 1996 „Dėl Techninio geležinkelių naudojimo nuostatų patvirtinimo“.

5.3. Railway Station Design Rules, approved by Order No. 3-25/D1-249 of the Minister of Transport and Communications of the Republic of Lithuania of 5 May 2004, „Dėl Geležinkelio stočių projektavimo taisyklių patvirtinimo“.

5.4. Railway Traffic Signaling Rules, approved by Order No. 483 of the Minister of Transport and Communications of the Republic of Lithuania of 30 December 1997, „Dėl Geležinkelių transporto eismo signalizacijos taisyklių patvirtinimo“.

5.5. The list of technical rules for railway subsystems applied in the Republic of Lithuania, approved by Order No. 3-146 of the Minister of Transport of the Republic of Lithuania of 25 April 2005, „Dėl Lietuvos Respublikoje taikomų geležinkelių posistemių techninių taisyklių sąrašo patvirtinimo“.

5.6. The provisions of the public railway infrastructure network in force at the time of the railway rolling stock compatibility verification.

5.7. European Commission Implementing Regulation (EU) 2019/777 of 16 May 2019 on the common specifications of the register of railway infrastructure, repealing Implementing Decision 2014/880/EU.

5.8. Special railway rolling stock used on public railway Infrastructure managed by the public Infrastructure Manager, technical requirements, maintenance and usage rules approved by

Order No. ĮS(LGI)-373 of the CEO of AB LTG Infra on 27 July 2020, „Dėl Specialiųjų geležinkelių riedmenų, naudojamų viešojoje geležinkelių infrastruktūroje ir viešosios geležinkelių infrastruktūros valdytojo valdomose geležinkelių paslaugų įrenginiuose, techninių reikalavimų, techninės priežiūros ir naudojimo taisyklių patvirtinimo“.

5.9. Description of references for the application of certain points of the Technical Regulations for Railway Use, approved by Order No. Į-62 of the CEO of AB Lietuvos Geležinkeliai on 20 January 2014, „Dėl 292/LG Techninio geležinkelių naudojimo nuostatų tam tikrų punktų taikymo nuorodų aprašo patvirtinimo“.

5.10. LST EN 50388 Railway applications. Power sources and rolling stock. Technical criteria for the coordination of power sources (substations) and rolling stock to ensure their functional compatibility.

5.11. The analyses of the basic parameters necessary to ensure technical and operational compatibility between 1520 mm and 1435 mm gauge systems at the EU-CIS border, prepared by the ERA and the Organisation for Cooperation between Railways (hereinafter referred to as OSJD) contact working groups, published on the ERA and OSJD websites.

5.12. In the design documentation for the relevant railway infrastructure objects and rolling stock.

5.13. Minimum operating requirements for railway traction vehicles used on public railway infrastructure, approved by Order No. ĮS(LGI)-385 of the CEO of AB LTG Infra on 3 August 2020, „Dėl Minimalių eksploatavimo reikalavimų viešojoje geležinkelių infrastruktūroje naudojamiems geležinkelių traukos riedmenims patvirtinimo“.

5.14. By order No. PO(LGI)-157 of the CEO of AB LTG Infra on 22 September 2020 „Dėl geležinkelių infrastruktūros ir geležinkelių riedmenų techninio suderinamumo parametrų nustatymo“ approved the technical parameters of railway rolling stock, which must be followed when assessing the technical compatibility of railway rolling stock with the public railway Infrastructure managed by AB LTG Infra.

5.15. Technical requirements, maintenance and usage rules for rolling stock and non-rolling stock LTGI 405/R, approved by AB LTG Infra Maintenance Manager Decision No. SPR-L2(INFRA)-371/2024 of 4 September 2024.

6. The provisions of the legal acts and other documents referred to in point 5 of the Rules shall be applied together with their subsequent amendments and additions.

7. The terms used in the Rules shall be understood as defined in the Law on Railway Transport Safety of the Republic of Lithuania, the Railway Transport Code of the Republic of Lithuania, the Rules for Issuing Permits to Start Using Railway System Structural Subsystems and Railway Rolling Stock in the Republic of Lithuania, approved by Order No. 3-507 of the Minister of Transport and Communications of the Republic of Lithuania on 22 December 2006 „Dėl Leidimų pradėti naudoti Lietuvos Respublikoje geležinkelių sistemos struktūrinius posistemius ir geležinkelių riedmenis išdavimo taisyklių patvirtinimo“ and the legal acts and documents referred to in point 5 of the Rules.

CHAPTER III.
SUBMISSION OF THE APPLICATION FOR ROLING STOCK COMPATIBILITY VERIFICATION

8. Rolling stock compatibility verification is carried out once the Infrastructure Manager receives an application, in the form specified in Annex 1 to the Rules, requesting the compatibility verification of the rolling stock and the issuance of the Infrastructure Manager’s confirmation (hereinafter – the application). The application must be accompanied by a completed declaration, in the form specified in Annex 2 or Annex 3 to the Rules, of the parameters required to verify the technical compatibility of the rolling stock with the railway Infrastructure managed by the Infrastructure Manager, together with the documents indicated in it, or the documents specified in point 12 of the Rules.

9. If approval from the Infrastructure Manager is requested for special self-propelled railway rolling stock adapted for operation on both rail and non-rail tracks (rail-road vehicles) and are planned to be used on narrow-gauge railway tracks, the Infrastructure Manager shall take this into account when carrying out the compatibility verification of such rail-road machines and assessing the submitted documents.

10. The declaration shall be completed considering the type of rolling stock planned to be used and the nominal track gauge (1520 mm or 1435 mm) of the railway infrastructure network (or

part of the network) in which this railway rolling stock is to be used. The declaration must contain the actual data of the railway rolling stock as of the date on which the declaration is completed.

11. If confirmation from the Infrastructure Manager is requested for upgraded or renewed rolling stock which, prior to renewal or upgrading, was already used on the railway Infrastructure managed by the Infrastructure Manager, the declaration may include only the data related to the modified parameters, together with the documents confirming such data.

12. The declaration shall not be filled out if the request from the Infrastructure Manager is for a freight wagon referred to in point 3 of the Rules, which is intended to be used on the 1520 mm gauge railway Infrastructure managed by the Infrastructure Manager. The application must be accompanied by a copy of the wagon's technical passport or other documents allowing the identification of the wagon model, and a completed form specified in Annex 4 to the Rules for the submission of information on a freight wagon included in the register of freight wagon models and intended for use on the 1520 mm gauge railway Infrastructure managed by the Infrastructure Manager, indicating the relevant information about the freight wagon.

13. The documents referred to in points 8 and 12 of these Rules may be submitted to the Infrastructure Manager by sending them by registered mail or by sending a digital copy of the documents to the email address indicated on the Infrastructure Manager's website (https://ltginfra.lt).

CHAPTER IV.
PROCEDURE FOR CARRYING OUT ROLLING STOCK COMPATABILITY VERIFICATION AND ISSUANCE OF THE INFRASTRUCTURE MANAGER'S CONFIRMATION

14. During the rolling stock compatibility verification, considering the railway rolling stock being assessed and the railway Infrastructure or the part of the railway Infrastructure in which the rolling stock is intended to be used, the following shall be verified:

14.1. In the case referred to in point **Error! Reference source not found.** of the Rules – w hether the railway rolling stock data indicated in the submitted documents comply with the criteria set out in point 3 of the Rules.

14.2. In cases other than those referred in point 12 of the Rules – whether the parameter values of the railway rolling stock provided in the declaration comply with and are compatible with the network parameter values indicated in the railway infrastructure information system managed by ERA, as well as with requirements and data established in the documents referred to in point 5 of the Rules.

14.3. If the railway rolling stock will be operated on railway Infrastructure where technological radio communication uses the frequency ranges 2.13 MHz (reserve channel 2.15 MHz) and 150-154 MHz, the levels of radio interference caused by electromagnetic emissions shall be verified in accordance with the information provided in Annex 5.

15. If, upon receiving the application the Infrastructure Manager determines that not all documents specified in point 8 of the Rules have been submitted and/or that the declaration does not contain all data required for the assessment or contains inaccurate data, the infrastructure Manager shall, within 5 working days, inform the applicant in writing or by email. The applicant must then clarify the submitted information and/or provide additional documents necessary for carrying out the rolling stock compatibility verification.

16. During the rolling stock compatibility verification, an inspection of the railway rolling stock may be carried out, in coordination with the applicant, in order to verify the accuracy of the data indicated in the documents submitted by the applicant.

17. Taking into account the results of the rolling stock compatibility verification, including the inspection if it was carried out, and point **Error! Reference source not found.** of the Rules, the I nfrastructure Manager shall, within 10 working days from the date of receipt of all documents specified in point 8 of the Rules, decide whether to issue or refuse to issue the Infrastructure Manager's confirmation.

18. The Infrastructure Manager's confirmation shall not be issued if, after evaluating the data indicated in the documents submitted by the applicant and/or the inspection results, it is determined that the parameter values of the relevant railway rolling stock are incompatible with the criteria set out in point 3 of the Rules and/or with the network parameter values indicated in the railway infrastructure information system managed by the European Union Agency for Railways, as well as with the requirements established in the documents referred to in point 5 of the Rules.

CHAPTER V.
FINAL PROVISIONS

19. The Rules shall be reviewed and updated when necessary and in the following cases:

19.1. When the relevant operational parameters of the railway Infrastructure managed by the Infrastructure Manager are changed.

19.2. When the legal acts and/or documents referred to in point 5 of the rules are amended.

19.3. Upon receiving proposals from entities involved in the rolling stock compatibility verification process regarding the improvement of the procedures established in the Rules.

Rules for verification of the technical compatibility of railway rolling stock and the networks of locations where they are intended to be used when the railway rolling stock is planned to be operated on the railway infrastructure and railway service facilities managed by the public railway infrastructure manager
Annex 1

(Form for requesting verification of the technical compatibility of railway rolling stock with the railway Infrastructure managed by the public railway infrastructure manager)

_____
(Applicant's full name, legal entity identification code, office address, contact details)

_____
(Addressee)

REQUEST
CHECK WHETHER THE RAILWAY STOCK ARE TECHNICALLY COMPATIBLE WITH THE RAILWAY INFRASTRUCTURE AND RAILWAY SERVICE FACILITIES MANAGED BY THE PUBLIC RAILWAY INFRASTRUCTURE MANAGER.

20 ___ m. _____ ___ d.

(place of document creation)

Please check (assess) whether the rolling stock is technically compatible with the railway Infrastructure managed by AB LTG Infra.

INFORMATION ABOUT THE APPLICANT'S CONTACT PERSON:

Full name	
Phone number	
Email address	
Other	

LIST OF ATTACHED DOCUMENTS:

Line num.	Document title	Page count

Application submitted by _____
(Full name, Signature)

DECLARATION OF PARAMETERS OF RAILWAY VEHICLE (LOCOMOTIVES & PASSENGER ROLLING STOCK, SPECIAL RAILWAY VEHICLES SUBSYSTEMS) RELATED TO EVALUATION OF CONFORMITY TO RAILWAY INFRASTRUCTURE MANAGED BY JSC „LTG INFRA“

_____
(Date)

_____
(Place)

GENERAL INFORMATION ABOUT RAILWAY VEHICLE AND EQUIPMENT

No.	Information about railway vehicle	Answer/Parameter value (see remarks below the table)
1	2	3
1.	**Type of railway vehicle** Remarks: 1. (locomotive/ shunter/ self-propelling passenger vehicle (EMU, DMU, railcar, trainset)/ OTM/ power car/ coach/ van/ driving trailer, coach or van/ car carrier (intended to be integrated in passenger trains)/ fixed rake of coaches). 2. If the road-rail machine is planned to use: 2.1. The machine cateogry should be determined according EN15746-2010; 2.2. Documents, proving that the machine accomplies with requireents specified in standard EN15746-2010 paragraphs 5.2.5, 5.3, 5.4, 5.6, 5.7, 5.10.3, 5.10.4, 5.22 or requirements specified in equivalent documents according to 5.1 and 5.2 paragraphs of „Rules for the authorization of the use of fixed rail subsystems and the placing on the market of rolling stock“ approved by 22-12-2006 order No. 3-507 of Minister of Transport of Republic of Lithuania; 2.3. Documents proving positive results of practical inspection and testing the road-rail machine must be attached to the declaration.	
2.	**Purpose of railway vehicle** Remark: Specify the type of works the rolling stock will be used: (freight operations/ shunting operations/ carrying passengers (also restaurant car, sleeping car, etc.)/ carrying mail and (or) luggage/ infrastructure construction or maintenance/ sanitary/ service/ research–measuring or other special purposes)	
3.	**Railway vehicle class (model), serial number, manufacturing number**	
4.	**Railway vehicle manufacturer**	
5.	**Date of manufacture**	
6.	**Date of rebuild or modernization of railway vehicle and changed parameters** Remark: Must be specified if the railway vehicle was rebuilt (renewed) or modernized (upgraded) and by the time of modernization (upgrade) any of parameters specified in this table were changed.	

No.	Information about railway vehicle	Answer/Parameter value (see remarks below the table)
1	2	3
7.	**Type of traction** Remark: internal combustion/ electric (catenary) or other	
8.	**Railway infrastructure where railway vehicle is intended to be operated** Remark: whole JSC "LTG Infra" network or respective part of it	
9.	**TSI conformity** Remark: (must be specified is vehicle TSI (all related) conform (fully or particularly); if vehicle is fully TSI conform must be made reference to respective TSI; if vehicle is particularly TSI conform additionally must be made reference to respective TSI clauses)	
10.	**Railway vehicle restrictions on use** Remark: Indicate whether the railway vehicle is subject to restrictions by the vehicle manufacturer, owner, keeper, national safety authorities or other (eg restrictions set out in the Rolling Stock Upgrade Project, National Safety Authority Decision, Rolling Stock Technical Documentation, etc.)	
11.	Nominal track gauge of wheelset, ***mm***	
12.	Environment temperature range (the design of railway vehicle), ***°C***	
13.	Clearance gauge (reference profile, including lower parts) Remark: Standard and version must be specified	
	Non-metallic chassis parts or tires intrusion below the lower line of clearance gauge and/or lower than rail head level, ***yes/no*** Remarks: 1. Must be filled if the road-rail vehicle is intended to use. 2. If the parts/elements intrudes, the practical inspection and test documents and the following documents must be submitted: 2.1.Documents (with drawings), proving that these parts/elements have/do not have interaction with railway infrastructure devices, buildings and other objects and do not damage them; 2.2.Force load to railway infrastructure devices, buildings and other objects interacting with parts/elements.	
14.	Maximum design speed, ***km/h***	
15.	Number of driving cabs, ***pcs.*** Remark: must be filled if vehicle is with driving cab(s)	
16.	Number of axles, ***pcs.***	
17.	Maximum axle load, ***t*** Remark: if axles have different loads – the axle load scheme must be attached	
18.	Minimum axle load, ***t*** Remarks: 1. Must be filled if the railway vehicle is intended to use in lines with **automatic interlocking and/or electric rail circuits**, these railway vehicles are: self propelled vehicles, railcars or road-rail machines. These vehicles could be used as independent railway vehicles.	

No.	Information about railway vehicle	Answer/Parameter value (see remarks below the table)
1	2	3
	2. Minimum axle load must be specified (considering design mass in working order); axle load layout must be specified if axle loads are different.	
19.	Maximum equivalent load, ***t/m*** Remark: design mass of normal (exceptional) payload divided by length of the vehicle must be specified	
20.	Electric circuit shunting devices, ***yes/no*** Remarks: 1. Must be filled if the vehicle meets requirements set in 1st remark of parameter No. 18 and minimum axle load is less than 11 t; 2. If the shunting devices are mounted in the vehicle and these vehicles are intended to use in lines with axle counters – there must be defined if there is a possibility to raise (turn off) the shunting devices (to extract the devices from axle counter work zone).	
21.	Brakes/Brake system Remarks: 1. If the braking force of the main brake is produced in different way than pushing brake blocks to running surfaces (disc brakes, retarders, etc.) of the wheels must be specified is the vehicle equipped with any equipment ensuring proper shunting on tracks with track-circuits. 2. If the vehicle is equipped with magnetic, eddy current or regenerative brakes must be specified must be specified is it possible to switch these systems off.	
22.	Maximum train deceleration, ***m/s²*** Remark: must be filled if nominal track gauge of wheelset is 1435 mm	
23.	Type of brake blocks, ***cast iron/composite*** Remarks: 1. Must be filled if the braking force of the main brake is produced pushing brake blocks to running surfaces of the wheels. 2. If composite brake blocks are used documents proving that these brake blocks were used in similar infrastructure under similar conditions or documents proving that use of these brake blocks does not increase electrical resistance between the running surfaces of wheels and rails must be submitted.	
24.	Possibility for the train driver to suspend use of sanding equipment, ***yes/no*** Remark: must be filled if the vehicle is with driving cab and equipped with sanding devices or equipment which allows to operate these devices	
25.	The allowed amount of sand per sanding device, ***g/30s*** (for rail gauge 1435 mm)***, g/60s*** (for rail gauge 1520 mm) Remark: must be filled if vehicle is with driving cab and equipped with sanding devices or equipment which allows to operate these devices	
26.	Possibility for the train driver to activate/deactivate use of on-board flange lubrication equipment, ***yes/no*** Remark: must be filled if the vehicle is with driving cab and equipped with on-board flange lubrication devices or equipment which allows to operate these devices	

No.	Information about railway vehicle	Answer/Parameter value (see remarks below the table)
1	2	3
27.	Minimum horizontal curve radius, ***m***	
28.	Cant deficiency (maximum uncompensated lateral acceleration), ***mm (m/s²)***	
29.	Minimum vertical curve radius (in a hollow), ***m***	
30.	Minimum vertical curve radius (on a crest), ***m***	
31.	End coupling type Remark: additionally, must be specified standard(s) end coupling and its coupling contour complies with	
32.	Compatibility with automatic (SA-3 type) end coupling type, ***yes/no*** Remark: must be filled if nominal rail gauge is 1520 mm and if end coupling is not automatic (SA3 type); must be specified the means to ensure compatibility with the SA-3 end coupling (eg adapter, etc.)	
33.	Height above rail of end coupling center line, ***mm*** Remark: must be filled if end coupling is automatic (SA3 type) and must be specified range of height	
34.	The wheel material is ferroomagnetic, ***yes/no***	
35.	Electric (active) resistance of wheelset, ***Ω*** Remark: must be specified design resistance	
36.	Nominal distance between inner edges of wheels of wheelset (back-to-back), ***mm***	
37.	Wheel profile Remarks: 1. must be filled if nominal track gauge of wheelset is 1520 mm; 2. must be made reference to relevant standard and added drawing of wheel profile with dimensions	
	Wheel profile compliance with *EN13715:2006*, ***yes/no*** Remarks: 1. must be filled if nominal track gauge of wheelset is 1435 mm; 2. if wheel profile is not compliant with this standard then must be added drawing of wheel profile with dimensions and documents confirming that wheels with this profile were used in similar infrastructure under similar conditions or documents (calculations) proving that wheel with such profile are suitable for use in railway infrastructure conforming *INF TSI 2011/275/EU*.	
38.	Minimum wheel diameter, **mm** Remark: must be specified minimum design value (new wheelsets) and minimum in-service value	
39.	Minimum wheel rim width, **mm**	
40.	Minimum flange thickness, **mm** Remark: must be specified minimum in-service value	

No.	Information about railway vehicle	Answer/Parameter value (see remarks below the table)
1	2	3
41.	Minimum flange height, ***mm***	
42.	Maximum flange height, ***mm*** Remark: must be specified minimum in-service value	
43.	Maximum axle distance, ***mm***	
44.	Minimum axle distance, ***mm***	
45.	Distance between first and last axle of vehicle, ***mm***	
46.	Maximum distance between end of vehicle (end of coupling) and first axle, ***mm***	
47.	Type of Automatic locomotive signaling system and operating frequency, ***Hz*** Remark: must be filled if the vehicle has a driving cab	
48.	Type of driver vigilance system and principle of operation Remark: must be filled if vehicle fitted with driving cab and must be submitted information on the operation of the device	
49.	Recording and saving data of vehicle on-board equipment during travel (driving), ***yes/no*** Remark: must be filled if vehicle fitted with driving cab and must be specified what data is being recorded and saved by on-board data recording equipment (Recording device)	
50.	Possibility to store track characteristics in the memory of vehicle on-board signaling system, ***yes/no*** Remark: must be filled if vehicle fitted with driving cab and must be specified what data of track characteristics can be stored in the on-board signaling system memory (such as track number, speed limits, ordinates of traffic lights, bridges, level crossings, etc.)	
51.	Type of radio communication equipment, frequency band, ***MHz*** Remark: must be specified **all installed radio equipment** if vehicle fitted with driving cab. If vehicle fitted with GSM-R equipment (voice), additionally must be submitted: 1. *UPLINK* frequency band (used for data transmission) and *DOWNLINK* frequency band (used for data reception). 2. Versions of Functional (FRS) and System (SRS) requirement specifications GSM-R equipment complies with.	
52.	External lights and their layout (front and rear) Remark: must be added external light layout and colour scheme	
53.	Audible warning devices (horn) Remark: must be filled if vehicle fitted with driving cab and must be submitted information about audible warning devices (layout on the vehicle, sound frequency, ***Hz***, and pressure level, ***dB***)	
54.	Platform height vehicle is suitable for, ***mm*** Remark: must be filled if vehicle purpose is to carry passengers (excluding passenger-train locomotives)	

No.	Information about railway vehicle	Answer/Parameter value (see remarks below the table)
1	2	3
55.	Limit levels of electromagnetic radiation interference (dB μV, compliance with *EN 50121-2, EN 50121-3-1, EN 50121-3-20*), ***yes/no***	
56.	Limit levels of radio interference caused by electromagnetic radiation (dB μV, compliance with Annex 5), ***yes/no*** Remark: must be filled if vehicle will be used on tracks where radio communications with 2,13 MHz (2,15 MHz additional) and 150-153 MHz bandwidth is used.	
57.	Limit levels of rail-circuit and signaling devices interferences caused by electromagnetic radiation of vehicle electrical equipment (mA, compliance with *TSI CCS*), ***yes/no*** Remark: must be filled if vehicle is electric traction unit or electric train which uses track's rails as return circuit or passenger coach with electrical heating system which uses track's rails as return circuit and will be used on railway tracks with track-circuits	
58.	Type of contact line system for which the rolling stock is designed Remark: must be filled if the traction energy to the vehicle is supplied from the catenary	
59.	Energy supply system vehicle is adapted to, *voltage, **kV**, and frequency, **Hz*** Remark: must be filled if the traction energy to the vehicle is supplied from the catenary	
60.	Maximum electric current, ***A*** Remark: must be filled if the traction energy to the vehicle is supplied from the catenary	
61.	Power of the rolling stock ***W***, and efficiency coefficient, ***%*** Remark: must be filled if the traction energy to the vehicle is supplied from the catenary	
62.	Maximum number of raised pantographs, ***pcs.*** and minimum spacing, ***m*** Remark: must be filled if the traction energy to the vehicle is supplied from the catenary and must be added drawing of pantograph spacing layout (if more than 1 pantograph)	
63.	Pantograph head geometry Remark: must be filled if the traction energy to the vehicle is supplied from the catenary; pantograph gauge and profile must be specified.	
64.	Pantograph contact strip material Remark: must be filled if the traction energy to the vehicle is supplied from the catenary	
65.	Pantograph contact force, ***N*** Remark: must be filled if the traction energy to the vehicle is supplied from the catenary	

No.	Information about railway vehicle	Answer/Parameter value (see remarks below the table)
1	2	3
66.	Return of electrical energy generated during regenerative braking to the contact network, ***yes/no*** Notes: 1. must be filled if the traction energy to the vehicle is supplied from the catenary; 2. It must be specified whether it is possible to disable this feature.	
67.	Compliance of rolling stock with the requirements of standard EN 50388, ***Yes/No*** Note: If the rolling stock does not comply with the requirements of the standard (no conclusion of the accredited body), positions 68-72 of the declaration must be filled.	
68.	Possibility to pass through unpowered sections or overlapping segments of different current sources with a raised pantograph, ***yes/no*** Notes: to be filled if: 1. the answer to position 67 of the declaration is 'no'; 2. the traction energy to the vehicle is supplied from the catenary;	
69.	Automatic power regulation and/or current limiting devices according to the contact network voltage. ***(specify)*** Notes: to be filled if: 1. the answer to position 67 of the declaration is 'no'; 2. the traction energy to the vehicle is supplied from the catenary; The conditions under which the limiting devices are triggered or the maximum power values depending on the mains voltage shall be described.	
70.	Maximum value of surge voltage caused by interference, ***(specify)*** Notes: to be filled if: 1. the answer to position 67 of the declaration is 'no'; 2. the traction energy to the vehicle is supplied from the catenary;	
71.	Short circuit protection, ***(specify)*** Notes: 1. to be filled if the answer to position 67 of the declaration is 'no'; 2. to be filled if the traction energy to the vehicle is supplied from the catenary; 3. Turi būti nurodyta didžiausia greitaeigių jungtuvų srovės vertė; The duration of the tripping of the high-speed circuit breakers must be specified.	
72.	On-board interferences and surges caused by harmonics (affecting the operation of the contact network equipment), ***(specify)*** Notes: 1. to be filled if the answer to position 67 of the declaration is 'no'; 2. to be filled if the traction energy to the vehicle is supplied from the catenary; Tests carried out by an independent conformity assessment body and a conclusion must be presented.	

REMARKS:
1. If parameter value is not indicated when parameter SHOULD BE indicated, in 'Parameter value' cell must be entered 'N' and in 'Remark' cell must be specified the reason why parameter value is not indicated.
2. If parameter value is not indicated when parameter SHOULD NOT BE indicated because it is not applicable to relevant vehicle, in 'Parameter value' cell must be entered '–'.

In addition, these photographs of the railway vehicle and the equipment shall be provided:

- general view of the railway vehicle (side view and view from both ends);
- shunting assisting device;
- on-board data recording device;
- driver vigilance and emergency brake command device (widget: knob, button, bracelet, etc.);
- Control-Command and Signalling equipment (indication unit, on-board traffic light, etc.);
- radio communication equipment (radio station control panel);
- audible warning device (whistles, horns, etc.)

Annexes

No.	Annex name	Number of pages

I confirm that the data provided is correct.

Vehicle owner's (keeper's) representative:

_____

(Entity, position, name, surname, signature)

_____

(Date)

Representative of Entity in charge of maintenance of vehicle:

-

_____

(Entity, position, name, surname, signature)

_____

(Date)

DECLARATION OF PARAMETERS OF FREIGHT WAGON (FREIGHT WAGONS SUBSYSTEM) RELATED TO EVALUATION OF CONFORMITY TO RAILWAY INFRASTRUCTURE MANAGED BY JSC „LTG INFRA“

_____
(Date)

_____
(Place)

GENERAL INFORMATION ABOUT FREIGHT WAGON

No.	Information about freight wagon	Answer/Parameter value (see remarks below the table)
1	2	3
1.	**Type of freight wagon** Remark: (covered wagon/ open wagon/ tank wagon/ flat wagon/ spine car (for intermodal containers)/ refrigerated wagon/ car carrier (intended to be integrated only in freight trains)/ self-discharging wagon/ other	
2.	**Freight wagon marking (model, model number, code)**	
3.	**Serial number (manufacturing number)**	
4.	**Name of freight wagon producer**	
5.	**Date of manufacture**	
6.	**Date of reconstruction/ modernization and changed parameters of freight wagon** Remark: must be specified if wagon was reconstructed/ modernized and if any of parameters listed below was changed	
7.	**Railway infrastructure where railway vehicle intended to be operated** Remark: whole JSC Lithuanian Railways network or respective part of it	
8.	**TSI conformity** Remark: must be filled if wagon intended to be used on 1435 mm railway infrastructure and must be specified is wagon TSI (all related) conform (fully or particularly); if wagon is fully TSI conform must be made reference to respective TSI; if wagon is particularly TSI conform additionally must be made reference to respective TSI clauses	
9.	**Restrictions of use** Remark: Indicate whether freight wagon use is restricted by the manufacturer, owner, keeper, national safety authorities or other (eg restrictions set out in the Rolling Stock Upgrade Project, National Safety Authority Decision, Rolling Stock Technical Documentation, etc.)	

No.	Information about freight wagon	Answer/Parameter value (see remarks below the table)
1	2	3
10.	**Freight wagon expiry (date)** Remark: Indicate the service life of the freight wagon and its renewal dates (if extended)	
11.	Rail track gauge, ***mm***	
12.	Ambient temperature range, ***°C***	
13.	Clearance gauge (reference profile, including lower parts) Remark: must be made reference to relevant standard	
14.	Maximum speed, ***km/h***	
15.	Number of axles, ***pcs.***	
16.	Maximum axle load, ***t*** Remark: if axles have different loads – the axle load scheme must be attached	
17.	Maximum equivalent load, ***t/m*** Remark: design mass under normal payload divided by length of the wagon must be specified	
18.	Type of brake blocks, ***cast iron/composite*** Remarks: if composite brake blocks are used documents proving that these brake blocks were used in similar infrastructure under similar conditions or documents proving that use of these brake blocks does not increase electrical resistance between the running surfaces of wheels and rails must be submitted	
19.	Minimum horizontal curve radius, ***m***	
20.	Incline deficiency (maximum uncompensated lateral acceleration), ***mm (m/s$_2$)***	
21.	Minimum vertical curve radius (in a hollow), ***m***	
22.	Minimum vertical curve radius (on a crest), ***m***	
23.	End coupling type Remark: additionally, must be specified standard(s) end coupling and its coupling contour complies with	
24.	Height above rail of end coupling center line, ***mm*** Remark: must be filled if end coupling is automatic (SA3 type) and must be specified range of height (empty wagon – full wagon)	
25.	The wheel material is ferroomagnetic, ***yes/no***	
26.	Electric (active) resistance of wheelset, ***Ω*** Remark: must be specified design resistance	
27.	Nominal distance between inner edges of wheels of wheelset, ***mm***	

No.	Information about freight wagon	Answer/Parameter value (see remarks below the table)
1	2	3
	Wheel profile Remarks: 3. must be filled if nominal track gauge of wheelset is 1520 mm; 4. must be made reference to relevant standard and added drawing of wheel profile with dimensions	
28.	Wheel profile compliance with EN13715:2006, ***yes/no*** Remarks: 1. must be filled if nominal track gauge of wheelset is 1435 mm; 2. if wheel profile is not compliant with this standard then must be added drawing of wheel profile with dimensions and documents confirming that wheels with this profile were used in similar infrastructure under similar conditions or documents (calculations) proving that wheel with such profile are suitable for use in railway infrastructure conforming INF TSI 2011/275/EU.	
29.	Minimum wheel diameter, ***mm*** Remark: must be specified minimum design value (new wheelsets) and minimum in-service value	
30.	Minimum wheel rim width, ***mm***	
31.	Minimum flange thickness, ***mm*** Remark: must be specified minimum in-service value	
32.	Minimum flange height, ***mm***	
33.	Maximum flange height, ***mm*** Remark: must be specified minimum in-service value	
34.	Maximum axle distance, ***mm***	
35.	Minimum axle distance, ***mm***	
36.	The distance between first and last axle, ***mm***	
37.	Maximum distance between end of wagon (end of coupling) and first axle, ***mm***	
38.	Wagon rear end indication conformity with *Railway Transport Traffic Signaling Rules* requirements (issued by The Ministry of Transport and Communications of Republic of Lithuania), ***yes/no*** Remark: must be filled if nominal track gauge of wheelset is 1520 mm	
	Wagon rear end indication conformity with *OPE TSI* requirements, ***yes/no*** Remark: must be filled if nominal track gauge of wheelset is 1435 mm	

REMARKS:
1. If parameter value is not indicated when parameter SHOULD BE indicated, in 'Parameter value' cell must be entered 'N' and in 'Remark' cell must be specified the reason why parameter value is not indicated.
2. If parameter value is not indicated when parameter SHOULD NOT BE indicated because it is not applicable to relevant vehicle, in 'Parameter value' cell must be entered '–'.

Annexes

No.	Annex name	Number of pages

I confirm that the data provided is correct.

Freight wagon owner’s (keeper’s) representative:

_____

___

(Entity, position, name, surname, signature)

_____
(Date)

Representative of Entity in charge of maintenance of freight wagon:
-

_____

___

(Entity, position, name, surname, signature)

_____
(Date)

DECLARATION OF PARAMETERS OF FREIGHT WAGON (WAGON IS INCLUDED IN THE FREIGHT WAGON MODEL CATALOGUE) RELATED TO EVALUATION OF CONFORMITY TO 1520 MM TRACK GAUGE RAILWAY INFRASTRUCTURE MANAGED BY JSC „LTG INFRA“

_____
(Date)

_____
(Place)

GENERAL INFORMATION ABOUT FREIGHT WAGON

No.	Information about freight wagon	Answer/Parameter value (see remarks below the table)
1	2	3
1.	**Type of freight wagon** Remark: (covered wagon/ open wagon/ tank wagon/ flat wagon/ spine car (for intermodal containers)/ refrigerated wagon/ car carrier (intended to be integrated only in freight trains)/ self-discharging wagon/ other	
2.	**Freight wagon marking (model, model number, code)**	
3.	**Serial number (manufacturing number)**	
4.	**Name of freight wagon producer**	
5.	**Date of manufacture**	
6.	**Freight wagon expiry (date)** Remark: Indicate the service life of the freight wagon and its renewal dates (if extended)	
7.	**Clearance gauge (reference profile, including lower parts)** Remark: must be made reference to relevant standard	

Annexes

No.	Annex name	Number of pages

I confirm that the data provided is correct.

Freight wagon owner’s (keeper’s) representative:

_____

(Entity, position, name, surname, signature)

_____
(Date)

Representative of Entity in charge of maintenance of freight wagon:
-

_____

(Entity, position, name, surname, signature)

_____
(Date

LEVEL OF RADIO INTERFERENCE GENERATED BY TECHNOLOGICAL RADIO COMMUNICATION AND DATA TRANSMISSION FREQUENCIES

1. The requirements for permissible radio interference levels are specified in the table in this Annex:

Railway rolling stock type	Radio interference level, dB, by frequency band			
	2,1 MHz	153,0 MHz	2,1 MHz	153,0 MHz
	Stationary		Moving	
Electric rolling stock: AC 25 kV 50 Hz	46	26	60	46
Diesel rolling stock:	30	14	40	26
Note: 1 µV is considered 0 dB				

2. When assessing whether the technological radio communication data of railway rolling stock complies with the requirements specified in the table in this Annex, the following methods and requirements shall apply:

2.1. Standard meters (e.g. STV-301, STV-401 or similar) shall be used to determine the level of radio interference, with antenna power sources connected to their inputs, running towards antennas mounted on the roof of the railway vehicle:

2.1.1. The specified power sources shall first be disconnected from the radio transceivers of the rolling stock intended for technological radio communication.

2.1.2. Measurements shall be performed at frequencies of 2.13 and 153 MHz.

2.1.3. When measuring a stationary railway vehicle, all auxiliary electrical equipment and auxiliary converters shall be switched on in sequence.

2.1.4. The maximum readings of the measuring instruments shall be recorded and compared with the permissible values specified in the table in this Annex.

2.2. When performing measurements while the rolling stock is moving, the devices shall be connected in accordance with the requirements specified in points 2.1.1 and 2.1.2 of this Annex. During this measurement, the speed of the rolling stock shall not exceed 60-80 km/h, and radio interference measurements shall be performed with the drive operating continuously.

2.3 An assessment of the level of radio interference generated by traction converters (if present in the rolling stock) is carried out in the yard, during which the rolling stock is switched off. The traction mode is switched on for 10-15 seconds at a load of 0.1-0.25 of the rated load. After switching on the converters, the instrument readings are recorded and the measurement results are compared with the permissible values set for when the rolling stock is moving.