

Commission Implementing Decision of 4 October 2011 on the European register of authorised types of railway vehicles (notified under document C(2011) 6974) (Text with EEA relevance) (2011/665/EU)

COMMISSION IMPLEMENTING DECISION

of 4 October 2011

on the European register of authorised types of railway vehicles

(notified under document C(2011) 6974)

(Text with EEA relevance)

(2011/665/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2008/57/EC of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community⁽¹⁾, and in particular Article 34(4) thereof,

Whereas:

- (1) In accordance with Article 34(1) of Directive 2008/57/EC, the European Railway Agency (the Agency) should set up and keep a register of types of vehicles authorised by the Member States for placing in service on the Union rail network.
- (2) For some existing vehicles it is not possible to establish a correspondence to a type of vehicle that is authorised in accordance with Article 26 of Directive 2008/57/EC. A possibility to include the technical characteristics of all the vehicles in service in one single register may, however, be beneficial for the railway sector.
- (3) Restrictions on how the vehicle may be used as mentioned in Article 33(2)(e) of Directive 2008/57/EC are in most cases subject to a specific code. Those restriction codes should be harmonised. The use of national restriction codes should be limited to those restrictions that reflect particular characteristics of the existing railway system of a Member State and are unlikely to be applied with the same meaning in other Member States. The Agency should keep up-to-date the list of harmonised restriction codes and of national codes and publish them on its web site.
- (4) In accordance with Article 34(3) of Directive 2008/57/EC, when an authorisation of type is granted, modified, suspended or withdrawn in a Member State, national safety authorities should inform the Agency so that the latter may update the register. The register should include types of vehicle authorised in accordance with Article 26 of Directive 2008/57/EC. Therefore, when informing the Agency, national safety authorities should indicate which parameters of the given type were checked according

to the notified national rules. This indication should be established in accordance with the reference document referred to in Article 27(4) of Directive 2008/57/EC.

- (5) The European Railway Agency submitted its recommendation ERA/REC/07-2010/INT to the Commission on 20 December 2010.
- (6) The measures provided for in this Decision are in accordance with the opinion of the Committee set up under Article 29 of Directive 2008/57/EC,

HAS ADOPTED THIS DECISION:

Article 1

Subject matter

This Decision establishes the specification for the European register of authorised types of vehicles referred to in Article 34 of Directive 2008/57/EC.

Article 2

Specification of the European register of authorised types of vehicles

- 1 The Agency shall develop, operate and maintain the European register of authorised types of vehicles on the basis of the specification set out in Annexes I and II.
- 2 The European register of authorised types of vehicles (ERATV) shall contain data on the types of vehicle authorised by the Member States pursuant to Article 26 of Directive 2008/57/EC.
- 3 Types of vehicle authorised by a Member State before 19 July 2010 for which one or more vehicles have been authorised in one or more Member States pursuant to Article 22 or 24 of Directive 2008/57/EC after 19 July 2010 are deemed to fall under provisions of Article 26 of Directive 2008/57/EC and shall be registered in ERATV. In this case, data to be recorded may be limited to the parameters that have been verified during the type authorisation process.
- 4 The types of vehicles which can be registered voluntarily are those set out in Section 1 of Annex I.
- 5 The structure of the number that each type of vehicle receives shall be as set out in Annex III.
- 6 The register shall be operational by 31 December 2012. In the meantime the Agency shall publish the information relating to the authorised types of vehicles on its website.

Article 3

Information to be sent by national safety authorities

- 1 The Member States shall make sure that the national safety authorities provide the information on the type authorisations they have granted, as set out in Annex II.
- 2 The national safety authorities shall provide the information referred to in paragraph 1 of this Article in accordance with the rules laid down in Section 5.2 of Annex I.

3 The national safety authorities shall submit the information by using the standard web-based electronic form with the relevant fields filled in.

4 The national safety authorities shall submit the information related to the authorisations of types of vehicles that they have granted after 19 July 2010 and before the entry into force of this Decision not later than 4 months after the date of entry into force of this Decision.

Article 4

Restriction codes

1 Harmonised restriction codes shall be applicable in all the Member States.

The list of harmonised restriction codes for the whole of the Union rail system shall be kept up-to-date by the Agency and published on its web site.

If a national safety authority considers that a new code needs to be added to the list of harmonised restriction codes, it shall request the Agency to evaluate the inclusion of this new code.

The Agency shall evaluate the request, in consultation with other national safety authorities. If appropriate, the Agency shall include a new restriction code in the list. Prior to the publication of the modified list, the Agency shall communicate it to the Commission together with the change request and its evaluation.

The Commission shall keep the Member States informed through the committee established in accordance with Article 29(1) of Directive 2008/57/EC.

2 The Agency shall keep up-to-date the list of national restriction codes. The use of national restriction codes shall be limited to those restrictions that reflect particular characteristics of the existing railway system of a Member State and are unlikely to be applied with the same meaning in other Member States.

For types of restrictions not indicated in the list referred to in paragraph 1, the national safety authority shall request the Agency the inclusion of a new code in the list of national restriction codes. The Agency shall evaluate the request, in consultation with other national safety authorities. If appropriate the Agency shall include a new restriction code in the list. Prior to the publication of the modified list, the Agency shall communicate it to the Commission together with the change request and its evaluation.

The Commission shall keep the Member States informed through the committee established in accordance with Article 29(1) of Directive 2008/57/EC.

3 The restriction code for multinational safety authorities shall be treated as national restriction codes.

4 The use of non-coded restrictions shall be limited to those restrictions that due to their particular character are unlikely to be applied to several types of vehicle.

Article 5

Final provisions

1 The Agency shall publish and keep up-to-date an application guide for the European register of authorised types of vehicles. Among other information, this guide shall include for each parameter a reference to the clauses of the technical specifications for interoperability that state the requirements for this parameter.

2 The Agency shall submit a recommendation to the Commission on the possible inclusion in the register of types of vehicles that were authorised before 19 July 2010 and on the possible amendment of this Decision based on the experience gained not later than 18 months after the entry into force of this Decision.

Article 6

Date of application

This Decision shall apply from 15 April 2012.

Article 7

Addressees

This Decision is addressed to the European Railway Agency and the Member States.

Done at Brussels, 4 October 2011.

For the Commission

Siim KALLAS

Vice-President

ANNEX I

**SPECIFICATION FOR THE EUROPEAN REGISTER
OF AUTHORISED TYPES OF VEHICLES****1. TYPES OF VEHICLE TO BE VOLUNTARILY REGISTERED**

Types of vehicle authorised before 19 July 2010 for which no new vehicles have been authorised after 19 July 2010 may be registered in ERATV voluntarily.

In addition, the following types of vehicle may be registered voluntarily:

- vehicles authorised to be placed in service before 19 July 2010 for which an additional authorisation for placing in service has been granted pursuant to Article 23 or 25 of Directive 2008/57/EC,
- vehicles authorised to be placed in service before 19 July 2010 for which a new authorisation for placing in service has been granted after an upgrading or renewal,
- vehicles coming from third countries and authorised on the EU territory according to COTIF 1999 and particularly its Appendices F and G or,
- vehicles coming from third countries and authorised under provisions of Article 21(11) of Directive 2008/57/EC.

In these four cases of voluntary registration, data to be recorded may be limited to the parameters that have been verified during the authorisation process.

Temporary permissions, such as permissions for testing and trial runs, shall not be recorded in ERATV.

2. FUNCTIONAL ARCHITECTURE**2.1. Administration of ERATV**

The Agency shall host and manage ERATV. The Agency shall create user accounts and to grant access rights at the request of national safety authorities in accordance with this specification.

2.2. Address of ERATV

ERATV shall be a web-based application. The address of ERATV shall be made available on the Agency website.

2.3. Users and user access rights

ERATV shall have the following users:

User	Access rights	Log in, user accounts
National safety authority of any Member State	Submission of data related to this Member State to be validated by the Agency. Unrestricted consultation of any data, including the data for which the validation is pending.	Logging in with user name and password. No functional or anonymous accounts shall be made available. Several accounts shall be created if the national safety authority so requires.
Agency	Validation regarding the compliance with this specification and publication	Logging in with user name and password.

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	of the data submitted by a national safety authority. Unrestricted consultation of any data, including the data for which the validation is pending.	
Public	Consultation of validated data.	Not applicable.

2.4. Interface to external systems

Any type of vehicle registered (i.e. validated and made public) in ERATV shall be available via a hyperlink. These hyperlinks may be used by external applications.

Attention shall be given to possible links between ERATV and the European Centralised Virtual Vehicle Register (ECVVR)⁽²⁾.

2.5. Links to other registers and databases

When developing ERATV, the Agency shall take full account of the interfaces, including coordinated transitional periods, to the following registers and databases:

- National vehicle registers⁽³⁾ (NVR) and ECVVR: the format of data on the type of vehicle in ECVVR shall have a one-to-one correspondence with the designation of types and, where applicable, versions of type in ERATV.
- Register of infrastructure (RINF)⁽⁴⁾: the lists of parameters and the data format of RINF and ERATV shall correspond to each other, including any updates or amendments of the RINF and ERATV specifications.
- Reference document of national rules (Article 27 of Directive 2008/57/EC): once the reference document is available, the list of parameters for which the conformity assessment is done against national rules indicated in ERATV shall have one-to-one correspondence with the list of parameters indicated in the reference document. ERATV must not allow referring to any parameter not included in the reference document.

2.6. Availability

As a general rule, ERATV shall be available 24 hours a day, 7 days a week, 365 days a year with a target system availability of 98 %. However, in the case of a failure occurring out of normal working hours of the Agency, the restoration of the service shall be handled the next working day of the Agency after the failure. The unavailability of the system shall be minimal during the maintenance.

2.7. Security

The user accounts and passwords created by the Agency must not be disclosed to any third party and must be used in accordance with this specification only.

3. TECHNICAL ARCHITECTURE

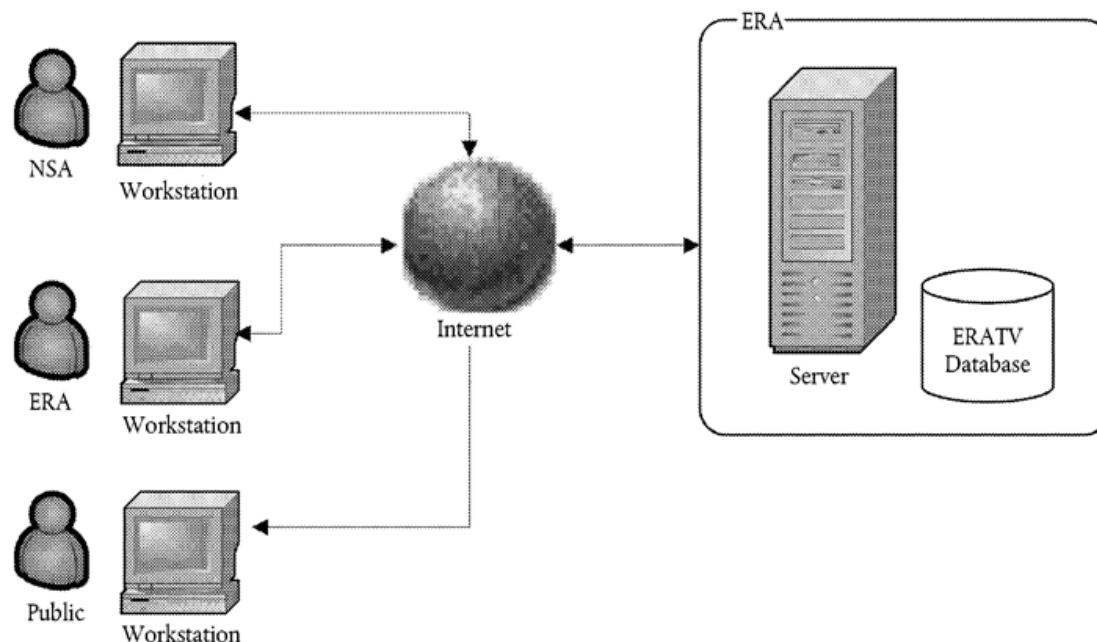
3.1. System architecture

ERATV shall be a web-based application hosted and managed by the Agency.

ERATV shall be capable of containing complete information for 35 000 types of vehicle.

The users shall have the possibility to connect to ERATV by means of a standard Internet connection.

ERATV architecture shall be as shown on the following figure:



3.2. System requirements

For having connection to ERATV, an Internet browser and access to Internet shall be required.

4. OPERATING MODE

ERATV shall have the following operating modes:

- Normal mode. During the normal operating mode all functionalities shall be available.
- Maintenance mode. During the maintenance mode ERATV may not be available for users.

5. RULES FOR DATA INPUT AND CONSULTATION

5.1. General principles

Every national safety authority shall submit information related to the authorisations of types of vehicle it has granted.

ERATV shall include a web based tool for exchange of information between the national safety authorities and the Agency. This tool shall allow the following exchanges of information:

- (1) submission of data for the register by a national safety authority to the Agency including:
 - (a) data related to granting an authorisation for a new type of vehicle (in this case the national safety authority shall provide the full set of data as set out in Annex II);
 - (b) data related to granting an authorisation for a type of vehicle previously registered in ERATV (in this case the national safety authority shall only

- provide data related to the authorisation itself, i.e. fields in Section 3 of the list set out in Annex II);
- (c) data related to modification of an existing authorisation (in this case the national safety authority shall only provide data related to the fields that need to be modified; this may not include modification of data related to the characteristics of the vehicle);
 - (d) data related to suspension of an existing authorisation (in this case the national safety authority shall only provide the date of suspension);
 - (e) data related to reactivation of an existing authorisation (in this case the national safety authority shall only provide data related to the fields that need to be modified), distinguishing between
 - reactivation without modification of data,
 - reactivation with modification of data (these data may not be related to the characteristics of the vehicle).
 - (f) data related to withdrawal of an authorisation;
 - (g) data related to correction of an error.
- (2) sending of requests for data clarification and/or correction by the Agency to a national safety authority;
 - (3) sending of answers by a national safety authority to the requests of clarification and/or correction done by the Agency.

The national safety authority shall submit the data for updating the register electronically by means of a web based application and using the standard web based electronic form with the relevant fields filled in as set out in Annex II.

The Agency shall check the data submitted by the national safety authority regarding their compliance with this specification, and either validate them or request a clarification.

If the Agency considers that the data submitted by the national safety authority are not in compliance with this specification, the Agency shall send the national safety authority a request for correction or clarification of the submitted data.

Upon each update of data regarding a type of vehicle the system shall generate a confirmation message, which shall be sent by e-mail to the users of the national safety authority that submitted the data, to the national safety authority of all other Member States where the type is authorised and to the Agency.

5.2. Submission of data by national safety authority

5.2.1. Granting an authorisation to a new type of vehicle

The national safety authority shall inform the Agency of any authorisation of a new type of vehicle within 20 working days following the issue of the authorisation.

The Agency shall check the information submitted by the national safety authority and within 20 working days following the receipt of this information either validate it and assign a type of vehicle number as set out in Annex III or request its correction or clarification. In particular, in order to prevent an unintended duplication of types in ERATV, the Agency shall check, as far as the data available in ERATV allows, that this type has not been registered before by another Member State.

After validation of the information submitted by the national safety authority, the Agency shall assign the new type of vehicle its number. The rules for assigning the type of vehicle number are set out in Annex III.

5.2.2. *Granting an authorisation to a type of vehicle previously registered in ERATV*

The national safety authority shall inform the Agency of any authorisation of a type of vehicle already registered in ERATV (such as a type authorised by another Member State) within 20 working days following the issue of the authorisation.

The Agency shall check the information submitted by the national safety authority and, within 10 working days following the receipt of this information, shall either validate it or request its correction or clarification.

After validation of the information submitted by the national safety authority, the Agency shall complement the data related to this type of vehicle by the data related to the authorisation in the Member State of the national safety authority that granted this authorisation.

5.2.3. *Modification on an existing authorisation*

The national safety authority shall inform the Agency of any modification to an existing authorisation for a type of vehicle within 20 working days following the issue of the modification to the authorisation.

The Agency shall check the information submitted by the national safety authority and, within 10 working days following the receipt of this information, shall either validate it or request its correction or clarification. In particular, the Agency shall check that the requested changes actually consist of a modification of an authorisation of an existing type (e.g. amendment of conditions of the authorisation, amendments of the type examination certificate) and do not constitute a new type of vehicle.

After validation of the information submitted by the national safety authority, the Agency shall publish the information.

5.2.4. *Suspension*

The national safety authority shall inform the Agency of any suspension of an existing authorisation for a type of vehicle within 5 working days following the issue of the suspension of the authorisation.

The Agency shall check the information submitted by the national safety authority and, within 5 working days following the receipt of this information, shall either validate it or request its correction or clarification.

5.2.5. *Reactivation without modification*

The national safety authority shall inform the Agency of a reactivation of an authorisation for a type of vehicle previously suspended within 20 working days following the issue of the reactivation of the authorisation. The national safety authority shall confirm that the original authorisation is reactivated without any modifications.

The Agency shall check the information submitted by the national safety authority and, within 10 working days following the receipt of this information, shall either validate it or request its correction or clarification.

5.2.6. *Reactivation with modification*

The national safety authority shall inform the Agency of a reactivation of an authorisation for a type of vehicle previously suspended within 20 working days following the issue of the reactivation of the authorisation. The national safety authority shall indicate that the reactivation is accompanied by a modification of the original authorisation. The national safety authority shall submit information regarding this modification.

The process indicated in clause 5.2.3 above for modification of an authorisation shall apply.

5.2.7. *Withdrawal*

The national safety authority shall inform the Agency of any withdrawal of an existing authorisation for a type of vehicle within 5 working days following the withdrawal of the authorisation.

The Agency shall check the information submitted by the national safety authority and, within 5 working days following the receipt of this information, shall either validate it or request its correction or clarification.

In the cases where an authorisation has a validity term, the IT system shall automatically change the status of the authorisation to 'expired' according to the validity term indicated by the relevant national safety authority.

5.2.8. *Modification of an authorisation which may lead to a modification of a registered type of vehicle*

Before requesting a modification of an authorisation which may lead to a modification of a registered type of vehicle, the national safety authority shall coordinate with national safety authorities who have granted authorisation for this registered type, and in particular the authority who has registered the type in ERATV.

5.3. **Entry or modification of data by the Agency**

Normally, the Agency shall not introduce any data into the register. The data shall be submitted by the national safety authority and the role of the Agency consists of validation and publication only.

In exceptional circumstances, such as technical impossibility of following the normal procedure, the Agency may, following a request from a national safety authority, enter or modify data in ERATV. In this case, the national safety authority that requested the entry or modification of data shall confirm the data entered or modified by the Agency and the Agency shall duly document the process. The timescales for entering data in ERATV as indicated in Section 5.2 shall apply.

5.4. **Publication of data by the Agency**

The Agency shall make publicly available the data that has been validated.

5.5. **Error handling in submitted data**

ERATV shall allow correcting errors in the recorded data. In the cases when an error has been corrected, ERATV shall indicate the date of correction.

5.6. **Possible searches and reports**

ERATV shall allow the following reports:

- (1) For a national safety authority and the Agency:
 - information as indicated in Annex II submitted by any national safety authority and not validated by the Agency for any type of vehicle for

- which the authorisation is active, suspended or withdrawn (including expired authorisations) as far as this information is kept in historical records, any of the reports available to public.

(2) For the public:

- information as indicated in Annex II submitted by any national safety authority and validated by the Agency for any type of vehicle for which the authorisation is active, suspended or withdrawn (including expired authorisations) as far as this information is kept in historical records.

ERATV shall allow the public to perform searches at least by the following criteria and any combination of them:

- by type code,
- by type name or part of it,
- by manufacturer's name or part of it,
- by vehicle category/subcategory,
- by TSI(s) the type is in conformity with,
- by Member State or combination of Member States where the type of vehicle is authorised,
- by status of the authorisation,
- by any of the technical characteristics.

Where appropriate the search criteria shall allow indicating a range for a technical characteristic.

5.7. Historical records

ERATV shall retain the complete historical record of all the modifications, including correction of errors, requests for clarifications and answers, related to a registered type of vehicle for 10 years from the date of withdrawal of the authorisation in all the Member States and for 10 years from the date of withdrawal of the registration from any NVR of the last vehicle of this type, whatever occurs later.

5.8. Automatic notification of changes

Following a modification, suspension, reactivation or withdrawal of an authorisation of a vehicle type, the IT system shall send the national safety authority of any Member State where the vehicle types is authorised an automatic e-mail informing about the change.

In the cases where an authorisation has a validity term, the IT system shall send the relevant national safety authority an automatic e-mail informing about the forthcoming expiry date 3 months before this date.

6. GLOSSARY

Term or abbreviation	Definition
Vehicle	Railway vehicle as defined in Article 2(c) of Directive 2008/57/EC.
Type	Vehicle type as defined in Article 2(w) of Directive 2008/57/EC. Type must reflect the unit that has been subject of the conformity assessment and authorisation. This unit may be a single vehicle, a rake of vehicles or a trainset.

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Version	Version of a type as covered by the type examination certificate.
Manufacturer	Any natural or legal person who manufactures a vehicle or has a vehicle designed or manufactured, and markets that vehicle under his name or trademark. The indication of manufacturer in ERATV is for reference only; it is without prejudice to the intellectual property rights, contractual responsibilities or civil liability.
Authorisation holder	Entity that applied for and received the authorisation of type of vehicle.
Restriction	Any condition or limitation indicated in the authorisation of type of vehicle that applies to placing in service or use of any vehicle in conformity with this type. Restrictions do not include technical characteristics that are included in Section 4 of Annex II (List and format of parameters).
Modification of authorisation	Decision taken by a national safety authority according to which certain conditions of an authorisation for a type of vehicle previously issued by this national safety authority need to be changed. Modification of authorisation may include, but is not limited to, restrictions, modification of validity date, renewal of authorisation after a change in the rules.
Suspension of authorisation	Decision taken by a national safety authority according to which an authorisation for a vehicle type is temporarily not valid and no vehicle may be authorised to be placed in service on the basis of its conformity to the given type, until the causes that motivated the suspension have not been analysed. Suspension of authorisation for a vehicle type does not apply to the vehicles already in service.
Reactivation of authorisation	Decision taken by a national safety authority according to which a suspension of authorisation it previously issued no longer applies.
Withdrawal of authorisation	Decision taken by a national safety authority according to which an authorisation for a vehicle type is no longer valid and no vehicle may be authorised to be placed in service on the basis of its conformity to the given type. Withdrawal of authorisation for a vehicle

	type does not apply to the vehicles already in service.
Error	Transmitted or published data that do not correspond to the given authorisation for type of vehicle. Modification of authorisation does not fall under this definition.

ANNEX II

DATA TO BE REGISTERED AND FORMAT

For each authorised type of vehicle ERATV shall include the following data:

- identification of the type,
- manufacturer,
- conformity with the TSIs,
- authorisations granted in different Member States, including general information about these authorisations, their status (active, suspended or withdrawn), list of parameters for which conformity with national rules has been checked,
- technical characteristics.

The data to be registered in ERATV for each type of vehicle and their format shall be as indicated below. The data to be registered depend on the category of the vehicle as indicated below.

The values indicated for the parameters related to the technical characteristics shall be those recorded in the technical documentation accompanying the type examination certificate.

In the cases where possible values for a parameter are limited to a predefined list, these lists shall be maintained and updated by the Agency.

For the types of vehicle that are not in conformity with all the relevant TSIs in force, the national safety authority that has granted the type authorisation may limit the information to be provided on the technical characteristics indicated in Section 4 below to the parameters that have been checked according to the applicable rules.

Parameter		Data format	Applicability to vehicle categories (Yes, No, Optional, Open Point)			
			1. Traction vehicles	2. Hauled passenger vehicles	3. Freight wagons	4. Special vehicles
0	Identification of the type	Heading (no data)				
0.1	TYPE ID	[number] XX-XXX-XXXX-X (according to Annex III)	Y	Y	Y	Y

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0.2	Versions included in this type	[number] XXX + [character string] (according to Annex III)	Y	Y	Y	Y
0.3	Date of record in ERATV	[date] DD-MM-YYYY	Y	Y	Y	Y
1	General information	Heading (no data)				
1.1	Type name	[character string] (max 256 characters)	O	O	O	O
1.2	Alternative type name	[character string] (max 256 characters)	O	O	O	O
1.3	Manufacturer name	[character string] (max 256 characters) Selection from a predefined list, possibility to add new manufacturers	Y	Y	Y	Y
1.4	Category	[character string] Selection from a predefined list (according to Annex III)	Y	Y	Y	Y
1.5	Subcategory	[character string] Selection from a predefined list (according	Y	Y	Y	Y

		to Annex III)				
2	Conformity with TSIs	Heading (no data)				
2.1	Conformity with TSI	For each TSI: [character string] Y/N/ Partial/Not applicable Selection from a predefined list of vehicle related TSIs (both in force and those that were previously in force) (multiple selection possible)	Y	Y	Y	Y
2.2	Reference of 'EC type examination certificates' (if module SB applied) and/or 'EC design examination certificates' (if module SH1 applied)	[character string] (possibility to indicate several certificates, e.g. certificate for rolling stock subsystem, certificate for CCS, etc.)	Y	Y	Y	Y
2.3	Applicable specific cases (specific cases conformity with which has been assessed)	[character string] Selection from a predefined list (multiple selection possible) based on TSIs (for	Y	Y	Y	Y

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		each TSI marked as Y or P)				
2.4	Sections of TSI not complied with	[character string] Selection from a predefined list (multiple selection possible) based on TSIs (for each TSI marked as P)	Y	Y	Y	Y
3	Authorisation	Heading (no data)				
3.1	Authorisation in	Heading (no data)				
3.1.1	Member State of authorisation	[character string] Selection from a predefined list Codes are those officially published and updated on the European website in the Interinstitutional style guide	Y	Y	Y	Y
3.1.2	Current status	Heading (no data)				
3.1.2.1	Status	[character string] + [date]Field automatically filled in by the system. Possible options: ActiveSuspended DD-MM-	Y	Y	Y	Y

		YYYY, Withdrawn DD-MM- YYYY, Expired DD-MM- YYYY				
3.1.2.2	Validity of authorisation (if defined)	[date] DD-MM- YYYY	Y	Y	Y	Y
3.1.2.3	Coded restrictions	[character string] Code assigned by the Agency	Y	Y	Y	Y
3.1.2.4	Non-coded restrictions	[character string]	Y	Y	Y	Y
3.1.3	Historical	Heading (no data)				
3.1.3.1	Original authorisation	Heading (no data)	Y	Y	Y	Y
3.1.3.1.1	Date	[date] DD-MM- YYYY	Y	Y	Y	Y
3.1.3.1.2	Authorisation holder	[character string] (max 256 characters) Selection from a predefined list, possibility to add new organisations	Y	Y	Y	Y
3.1.3.1.3	Authorisation document reference	[character string] (EIN)	Y	Y	Y	Y
3.1.3.1.4	National certificate references (if applicable)	[character string]	Y	Y	Y	Y
3.1.3.1.5	Parameters for which conformity to	[character string] Selection from a	Y	Y	Y	Y

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	applicable national rules has been assessed	predefined list (multiple selection possible) based on Commission Decision 2009/965/EC				
3.1.3.1.6	Comments	[character string] (max 1 024 characters)	O	O	O	O
3.1.3.X	Modification of authorisation	<i>Heading (no data) (X is progressive from 2 onwards, as many times as modifications of the authorisation of type have been issued)</i>	Y	Y	Y	Y
3.1.3.X.1	Type of modification	[character string] Text from a predefined list (modification, suspension, reactivation, withdrawal)	Y	Y	Y	Y
3.1.3.X.2	Date	[date] DD-MM-YYYY	Y	Y	Y	Y
3.1.3.X.3	Authorisation holder (if applicable)	[character string] (max 256 characters) Selection from a predefined list, possibility	Y	Y	Y	Y

		to add new organisations				
3.1.3.X.4	Authorisation modification document reference	[character string]	Y	Y	Y	Y
3.1.3.X.5	National certificate references (if applicable)	[character string]	Y	Y	Y	Y
3.1.3.X.6	Applicable national rules (if applicable)	[character string] Selection from a predefined list (multiple selection possible) based on Commission Decision 2009/965/EC	Y	Y	Y	Y
3.1.3.X.7	Comments	[character string] (max 1 024 characters)	O	O	O	O
3.X	Authorisation in	<i>Leading (no data) (X is progressive incremented by one unit from 2 onwards each time an authorisation for this type has been granted (including the suspended and withdrawn ones)). This Section</i>	Y	Y	Y	Y

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		<i>contains same fields as 3.1</i>				
4	Technical characteristics of the vehicle	Heading (no data)				
4.1	General technical characteristics	Heading (no data)				
4.1.1	Number of driving cabs	[Number] 0/1/2	Y	Y	Y	Y
4.1.2	Speed	Heading (no data)				
4.1.2.1	Maximum design speed	[Number] km/h	Y	Y	Y	Y
4.1.2.2	Maximum speed when empty	[Number] km/h	N	N	Y	N
4.1.3	Wheel set gauge	[character string] Selection from predefined list	Y	Y	Y	Y
4.1.4	Conditions of use regarding train formation	[character string] Selection from a predefined list	Y	Y	N	Y
4.1.5	Maximum number of trainsets or locomotives coupled together in multiple operation.	[number]	Y	N	N	N
4.1.6	Number of elements in the rake of freight wagons (only for	[number]	N	N	Y	N

	subcategory 'rake of freight wagons')					
4.1.7	Letter marking	[character string] Selection from a predefined list (according to Annex P of OPE TSI)	N	N	Y	N
4.1.8	Type meets the requirements necessary for validity of the vehicle authorisation granted by one Member State in other Member States	[character string] Selection from a predefined list	Y	Y	Y	Y
4.1.9	Dangerous goods for which the vehicle is suitable (tank code)	[character string] Tank code	N	N	Y	N
4.1.10	Structural category	[character string] Selection from a predefined list	Y	Y	Y	Y
4.2	Vehicle kinematic gauge	Heading (no data)				
4.2.1	Vehicle kinematic gauge (interoperable gauge)	[character string] Selection from predefined list (more	Y	Y	Y	Y

Status: This is the original version (as it was originally adopted).

		than one possible) (the list will be different for different categories depending on the applicable TSI)				
4.2.2	Vehicle kinematic gauge (other gauges assessed using the kinematic method)	[character string] Selection from predefined list (more than one possible)	O	O	O	O
4.3	Environmental conditions	Heading (no data)				
4.3.1	Temperature range	[character string] Selection from a predefined list (more than one possible)	Y	Y	Y	Y
4.3.2	Altitude range	[character string] Selection from a predefined list	Y	Y	N	Y
4.3.3	Snow, ice and hail conditions	[character string] Selection from a predefined list	Y	Y	N	Y
4.3.4	Ballast pick up (for $v \geq 190$ km/h vehicles only)	Open point	OP	OP	N	N

4.4	Fire safety	Heading (no data)				
4.4.1	Fire safety category	[character string] Selection from a predefined list	Y	Y	N	Y
4.5	Design mass and loads	Heading (no data)				
4.5.1	Permissible payload for different line categories	[number] t for line category [character string]	OP	OP	Y	OP
4.5.2	Design mass	Heading (no data)				
4.5.2.1	Design mass in working order	[number] kg	Y	Y	O	Y
4.5.2.2	Design mass under normal payload	[number] kg	Y	Y	O	Y
4.5.2.3	Design mass under exceptional payload	[number] kg	Y	Y	N	Y
4.5.3	Static axle load	Heading (no data)				
4.5.3.1	Static axle load in working order	[number] kg	Y	Y	O	Y
4.5.3.2	Static axle load under normal payload/ maximum payload for freight wagons	[number] kg	Y	Y	O	Y
4.5.3.3	Static axle load under	[number] kg	Y	Y	N	Y

Status: This is the original version (as it was originally adopted).

	exceptional payload					
4.5.4	Quasi-static guiding force (if exceeds the limit defined in TSI or not defined in the TSI)	[number] kN	Y	Y	N	Y
4.6	Rolling stock dynamic behaviour	Heading (no data)				
4.6.1	Cant deficiency (maximum uncompensated lateral acceleration) for which the vehicle has been assessed	[number] mm For dual gauge vehicles, values for each gauge shall be indicated	Y	Y	O	Y
4.6.2	Vehicle equipped with a cant deficiency compensation system (tilting vehicle)	[Boolean] Y/N	Y	Y	Y	Y
4.6.3	In service limits of equivalent conicity (or worn wheel profile) for which the vehicle has been tested	Open point	OP	OP	OP	OP
4.7	Braking	Heading (no data)				
4.7.1	Maximum train deceleration	[number] m/s ²	Y	N	N	Y

4.7.2	Service braking	Heading (no data)				
4.7.2.1	Brake performance on steep gradients with normal payload	Heading (no data)				
4.7.2.1.1	Reference case of TSI	[character string] from a predefined list	Y	Y	Y	Y
4.7.2.1.2	Speed (if no reference case is indicated)	[number] km/h	Y	Y	Y	Y
4.7.2.1.3	Gradient (if no reference case is indicated)	[number] ‰ (mm/m)	Y	Y	Y	Y
4.7.2.1.4	Distance (if no reference case is indicated)	[number] km	Y	Y	Y	Y
4.7.2.1.5	Time (if distance is not indicated) (if no reference case is indicated)	[number] min	Y	Y	Y	Y
4.7.3	Parking brake	Heading (no data)				
4.7.3.1	All vehicles of this type must be equipped with a parking brake (parking brake)	[Boolean] Y/N	N	N	Y	Y

Status: This is the original version (as it was originally adopted).

	mandatory for vehicles of this type)					
4.7.3.2	Parking brake type (if the vehicle is fitted with it)	[character string] from a predefined list	Y	Y	Y	Y
4.7.3.3	Maximum gradient on which the unit is kept immobilised by the parking brake alone (if the vehicle is fitted with it)	[number] % (mm/m)	Y	Y	Y	Y
4.7.4	Braking systems fitted on the vehicle	Heading (no data)				
4.7.4.1	Eddy current brake	Heading (no data)				
4.7.4.1.1	Eddy current brake fitted	[Boolean] Y/N	Y	Y	N	Y
4.7.4.1.2	Possibility of preventing the use of the eddy current brake (only if fitted with eddy current brake)	[Boolean] Y/N	Y	Y	N	Y
4.7.4.2	Magnetic brake	Heading (no data)				
4.7.4.2.1	Magnetic brake fitted	[Boolean] Y/N	Y	Y	N	Y

4.7.4.2.2	Possibility of preventing the use of the magnetic brake (only if fitted with magnetic brake)	[Boolean] Y/N	Y	Y	N	Y
4.7.4.3	Regenerative brake (only for vehicles with electrical traction)	Heading (no data)				
4.7.4.3.1	Regenerative brake fitted	[Boolean] Y/N	Y	N	N	Y
4.7.4.3.2	Possibility of preventing the use of the regenerative brake (only if fitted with regenerative brake)	[Boolean] Y/N	Y	N	N	Y
4.8	Geometrical characteristics	Heading (no data)				
4.8.1	Vehicle length	[number] m	Y	Y	Y	Y
4.8.2	Minimum in-service wheel diameter	[number] mm	Y	Y	Y	Y
4.8.3	Shunting restrictions	[Boolean] Y/N	N	N	Y	N
4.8.4	Minimum horizontal curve radius capability	[number] m	Y	Y	Y	Y
4.8.5	Minimum vertical convex	[number] m	O	O	O	O

Status: This is the original version (as it was originally adopted).

	curve radius capability					
4.8.6	Minimum vertical concave curve radius capability	[number] m	O	O	O	O
4.8.7	Height of loading platform (for flat wagons and combined transport)	[number] mm	N	N	Y	N
4.8.8	Suitability for transport on ferries	[Boolean] Y/N	Y	Y	Y	Y
4.9	Equipment	Heading (no data)				
4.9.1	Type of end coupling (indicating tensile and compressive forces)	[Character string] From a predefined list (multiple selection possible)	Y	Y	Y	Y
4.9.2	Axle bearing condition monitoring (hot axles box detection)	[Character string] From a predefined list (multiple selection possible)	Y	Y	Y	Y
4.9.3	Flange lubrication	Heading (no data)				
4.9.3.1	Flange lubrication fitted	[Boolean] Y/N	Y	Y	N	Y
4.9.3.2	Possibility of preventing the use of the	[Boolean] Y/N	Y	N	N	Y

	lubrication device (only if fitted with flange lubrication)					
4.10	Energy supply	Heading (no data)				
4.10.1	Energy supply system	[Character string] From a predefined list (multiple selection possible)	Y	Y	N	Y
4.10.2	Maximum power (to be indicated for each energy supply system the vehicle is equipped for)	[Number] kW for [energy supply system automatically prefilled in]	O	O	N	O
4.10.3	Maximum rated current from the catenary (to be indicated for each electrical energy supply system the vehicle is equipped for)	[Number] A for [Voltage automatically prefilled in]	Y	Y	N	Y
4.10.4	Maximum current at standstill per pantograph (to be indicated for each	[Number] A for [Voltage automatically prefilled in]	Y	Y	N	Y

Status: This is the original version (as it was originally adopted).

	DC systems the vehicle is equipped for)					
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)	[Number] From [m] to [m] (with two decimals)	Y	Y	N	Y
4.10.6	Pantograph head (to be indicated for each energy supply system the vehicle is equipped for)	[Character string] for [energy supply system automatically prefilled in] From a predefined list (multiple selection possible)	Y	Y	N	Y
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)	[Number]	Y	Y	N	Y

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)	[Number] [m]	Y	Y	N	Y
4.10.9	Type of OCL used for the test of current collection performance (to be indicated for each energy supply system the vehicle is equipped for) (only if number of raised pantographs is more than 1)	[Character string] for [energy supply system automatically prefilled in] From a predefined list (multiple selection possible)	Y	N	N	Y
4.10.10	Material of pantograph contact	[Character string] for [energy	Y	Y	N	Y

Status: This is the original version (as it was originally adopted).

	strip the vehicle may be equipped with (to be indicated for each energy supply system the vehicle is equipped for)	supply system automatically prefilled in] From a predefined list (multiple selection possible)				
4.10.11	Automatic dropping device (ADD) fitted (to be indicated for each energy supply system the vehicle is equipped for)	[Boolean] Y/N	Y	Y	N	Y
4.10.12	TSI conform energy meter for billing purposes installed on board	[Boolean] Y/N	Y	Y	N	Y
4.11	Noise related characteristics	Heading (no data)				
4.11.1	Pass-by noise level (dB(A))	[Number] (dB(A))	O	O	O	O
4.11.2	Pass-by noise level was measured under reference conditions	[Boolean] Y/N	Y	Y	Y	Y

4.11.3	Stationary noise level (dB(A))	[Number] (dB(A))	O	O	O	O
4.11.4	Starting noise level (dB(A))	[Number] (dB(A))	O	N	N	O
4.12	Passenger related characteristics	Heading (no data)				
4.12.1	General passenger related characteristics	Heading (no data)				
4.12.1.1	Number of fixed seats	From [Number] to [Number]	O	O	N	N
4.12.1.2	Number of toilets	[Number]	O	O	N	N
4.12.1.3	Number of sleeping places	From [Number] to [Number]	O	O	N	N
4.12.2	PRM related characteristics	Heading (no data)				
4.12.2.1	Number of priority seats	From [Number] to [Number]	Y	Y	N	N
4.12.2.2	Number of wheelchair spaces	From [Number] to [Number]	Y	Y	N	N
4.12.2.3	Number of PRM accessible toilets	[Number]	Y	Y	N	N
4.12.2.4	Number of wheelchair accessible sleeping places	From [Number] to [Number]	Y	Y	N	N
4.12.3	Passenger access and egress	Heading (no data)				

Status: This is the original version (as it was originally adopted).

4.12.3.1	Platform heights for which the vehicle is designed.	[Number] from predefined list (multiple selection possible)	Y	Y	N	N
4.12.3.2	Description of any integrated boarding aids (if provided)	[Character string] Selection from a predefined list (multiple selection possible)	Y	Y	N	N
4.12.3.3	Description of any portable boarding aids if considered in the design of the vehicle for meeting the PRM TSI requirements	[Character string] Selection from a predefined list (multiple selection possible)	Y	Y	N	N
4.13	On-board CCS equipment (for vehicles with a driving cab only)	Heading (no data)				
4.13.1	Signalling	Heading (no data)				
4.13.1.1	ETCS equipment on-board and its level	[Character string] From a predefined list	Y	Y	Y	Y
4.13.1.2	ETCS baseline version (x.y). If the version is not fully	[Character string] From a predefined list	Y	Y	Y	Y

	compatible it shall be indicated in brackets					
4.13.1.3	ETCS on-board equipment for reception of infill- function information via loop or GSM-R	[Character string] From a predefined list (more than one option possible)	Y	Y	Y	Y
4.13.1.4	ETCS national applications implemented (NID_XUSE of Packet 44)	[Number] From a predefined list According to the List of ETCS Variables (more than one option possible)	Y	Y	Y	Y
4.13.1.5	Class B or other train protection, control and warning systems installed (system and, if applicable, version)	[Character string] From a predefined list (more than one option possible)	Y	Y	Y	Y
4.13.1.6	Special conditions implemented on-board to switch over between different train protection, control and warning systems.	[Character string] From combination of systems installed on board (‘System XX’/‘System YY’) (more than one option possible)	Y	Y	Y	Y

Status: This is the original version (as it was originally adopted).

4.13.2	Radio	Heading (no data)				
4.13.2.1	GSM-R equipment on board and its version (FRS and SRS)	[Character string] From a predefined list	Y	Y	Y	Y
4.13.2.2	Number of GSM-R mobile sets in driving cab for data transmission	[Number]: 0, 1, 2 or 3	Y	Y	Y	Y
4.13.2.3	Class B or other radio systems installed (system and, if applicable, version)	[Character string] From a predefined list (more than one option possible)	Y	Y	Y	Y
4.13.2.4	Special conditions implemented on-board to switch over between different radio systems.	[Character string] From combination of systems installed on board ('System XX'/'System YY') (more than one option possible)	Y	Y	Y	Y
4.14	Compatibility with train detection systems	Heading (no data)				
4.14.1	Type of train detection systems for which the vehicle has been designed	[Character string] From a predefined list (more than one option possible)	Y	Y	Y	Y

	and assessed					
4.14.2	Detailed vehicle characteristics related to compatibility with train detection systems	Heading (no data)	Y	Y	Y	Y
4.14.2.1	Maximum distance between consecutive axles	[Number] mm	Y	Y	Y	Y
4.14.2.2	Minimum distance between consecutive axles	[Number] mm	Y	Y	Y	Y
4.14.2.3	Distance between the first and the last axle	[Number] mm	Y	Y	Y	Y
4.14.2.4	Maximum length of the vehicle nose	[Number] mm	Y	Y	Y	Y
4.14.2.5	Minimum wheel rim width	[Number] mm	Y	Y	Y	Y
4.14.2.6	Minimum wheel diameter	[Number] mm	Y	Y	Y	Y
4.14.2.7	Minimum flange thickness	[Number] mm	Y	Y	Y	Y
4.14.2.8	Minimum flange height	[Number] mm	Y	Y	Y	Y
4.14.2.9	Maximum flange height	[Number] mm	Y	Y	Y	Y
4.14.2.10	Minimum axle load	[Number] t	Y	Y	Y	Y

Status: This is the original version (as it was originally adopted).

4.14.2.11	Metal and inductive components-free space between wheels	Open point	OP	OP	OP	OP
4.14.2.12	Wheel material is ferromagnetic	[Boolean] Y/N	Y	Y	Y	Y
4.14.2.13	Maximum sanding output	[Number] g per [Number] s	Y	N	N	Y
4.14.2.14	Possibility of preventing the use of sanding	Y/N	Y	N	N	Y
4.14.2.15	Vehicle metal mass	Open point	OP	OP	OP	OP
4.14.2.16	Maximum impedance between opposite wheels of a wheelset	[Number] Ω	Y	Y	Y	Y
4.14.2.17	Minimum vehicle impedance (between wheels and pantograph) (only for vehicles equipped for 1 500 V or 3 000 V DC)	[Number] Ω for [Number] Hz (more than one line is possible)	Y	N	N	Y
4.14.2.18	Electromagnetic interferences caused by return current in the rails	Open point	OP	OP	OP	OP
4.14.2.19	Electromagnetic emission of the train with respect to	Open point	OP	OP	OP	OP

compatibility with train detection systems					
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Notes:

1. Where a parameter is defined in the applicable TSI, the value indicated for the parameter shall be the one assessed in the verification procedure.
2. Predefined lists shall be maintained and kept updated by the Agency in accordance with the TSIs in force, including the TSIs that may be applied during a transitional period.
3. For parameters indicated as ‘open point’ no data shall be introduced until the ‘open point’ is not closed in the relevant TSI.
4. For parameters indicated as ‘optional’, indication of data shall be subject to the decision of the applicant for the type authorisation.
5. Fields 0.1-0.3 shall be filled in by the Agency.

ANNEX III

STRUCTURE OF TYPE NUMBER

Each type of vehicle shall receive a number consisting of 10 digits with the following structure:

<i>XX</i>	<i>XXX</i>	<i>XXXX</i>	<i>X</i>
Category —	Family (Platform)	Incrementa number	Check digit
Subcategory			
Field 1	Field 2	Field 3	Field 4

Where:

Field 1 (digits 1 and 2) is assigned according to category and subcategory of the vehicle type in accordance with the following table:

Code	Category	Subcategory
11	Traction vehicles	Locomotive
12		Reserved
13		Self-propelled passenger trainset (incl. railbuses)
14		Reserved
15		Self-propelled freight trainset
16		Reserved

Status: This is the original version (as it was originally adopted).

17		Shunter	
18		Reserved	
19		Other (tramways, light rail vehicles, etc.)	
31	Hauled passenger vehicles	Passenger coach (incl. sleeping cars, restaurant, etc.)	
32		Reserved	
33		Van	
34		Reserved	
35		Car carrier	
36		Reserved	
37		Vehicle for services (e.g. kitchen)	
38		Reserved	
39		Fixed rake of coaches	
40		Reserved	
41		Other	
42-49		Reserved	
51		Freight wagons (hauled)	Freight wagon
52			Reserved
53	Fixed rake of freight wagons		
54-59	Reserved		
71	Special vehicles	Self-propelled special vehicle	
72		Reserved	
73		Hauled special vehicle	
74-79		Reserved	

Field 2 (digits from 3 to 5) is assigned according to the family to which the type of vehicle belongs. For new families (i.e. families not yet registered in ERATV) digits are progressively incremented by one unit each time an application for registration of a vehicle type belonging to a new family is received by the Agency.

Field 3 (digits from 6 to 9) is a progressive number incremented by one unit each time an application for registration of a vehicle type belonging to a given family is received by the Agency.

Field 4 (digit 10) is a check digit determined in the following manner (Luhn algorithm or modulus 10):

- the digits in the even positions of the basic number (fields from 1 to 9 counting from the right) are taken at their own decimal value,

- the digits in the odd positions of the basic number (counting from the right) are multiplied by 2,
- the sum formed by the digits in even position and by all the digits which constitute the partial products obtained from the odd positions is then established,
- the units digit of this sum is retained,
- the complement required to bring the units digit to 10 forms the check-digit; should this units digit be nought, then the check-digit will also be nought.

Examples of determining the check digit:

1 —

Let the basic number be	3	3	8	4	4	7	9	6	1
Multiplication factor		1	2	1	2	1	2	1	2
	6	3	16	4	8	7	18	6	2

Sum: $6 + 3 + 1 + 6 + 4 + 8 + 7 + 1 + 8 + 6 + 2 = 52$

The units digit of this sum is 2.

The check-digit number will therefore be 8 and the basic number thus becomes the registration number 33 844 7961 — 8.

2 —

Let the basic number be	3	1	5	1	3	3	2	0	4
Multiplication factor		1	2	1	2	1	2	1	2
	6	1	10	1	6	3	4	0	8

Sum: $6 + 1 + 1 + 0 + 1 + 6 + 3 + 4 + 0 + 8 = 30$

The units digit of this sum is 0.

The check-digit number will therefore be 0 and the basic number thus becomes the registration number 31 513 3204 — 0.

If the type examination certificate or design examination certificate covers more than one version of the vehicle type, each of these versions shall be identified by an incremental three-digit number.

- (1) [OJ L 191, 18.7.2008, p. 1.](#)
- (2) As provided for in Commission Decision 2007/756/EC of 9 November 2007 adopting a common specification of the national vehicle register provided for under Article 14(4) and (5) of Directives 96/48/EC and 2001/16/EC ([OJ L 305, 23.11.2007, p. 30.](#))
- (3) As provided for in Decision 2007/756/EC.
- (4) As provided for in Commission Implementing Decision 2011/633/EU of 15 September 2011 on the common specifications of the register of railway infrastructure ([OJ L 256, 1.10.2011, p. 1.](#))