

Organisation intergouvernementale pour les transports internationaux ferroviaires

Zwischenstaatliche Organisation für den internationalen Eisenbahnverkehr

Intergovernmental Organisation for International Carriage by Rail

# Uniform Technical Prescription

Applicable to Vehicle Numbers and linked alphabetical marking on the bodywork:

RAILWAY VEHICLE MARKING

# UTP MARKING 2015

Applicable from 1.1.2015

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#### **Amendments record**

<u>Reference</u>	<u>Date</u>	Description and comments
Version 1	7.8.2019	First draft for review by WG TECH 38. Modifications are in track changes
Version 2	22.10.2019	Draft for review by WG TECH 39. Modifications include:         - Editorial changes         Modifications in track changes and text highlighted in vellow compared to version 1



# APTU Uniform Rules (Appendix F to COTIF 1999)

# Uniform Technical Prescriptions (UTP) applicable to Vehicle Numbers and linked alphabetical marking on the bodywork:

# THE RAILWAY VEHICLE MARKING - (UTP MARKING)

This UTP has been developed in accordance with COTIF in the version as amended by the OTIF Revision Committee in February 2018 and which entered into force on 1 March 2019, in particular with Article 8 of APTU (Appendix F to COTIF). For definitions see also Article 2 of APTU and Article 2 of ATMF (Appendix G to COTIF).

These regulations have been developed in accordance with the provisions of APTU, in particular Article 8, in the version as amended by the OTIF Revision Committee in 2009, which entered into force on 1 December 2010. For definitions and terms, see also Article 2 of ATMF (Appendix G) and Article 2 of APTU (Appendix F), both Appendices to the 1999 version of the COTIF Convention as applicable since 1 December 2010. Footnotes include both explanatory information (which is not part of the regulations), and references to other regulations.

#### Explanatory note:

The texts of this UTP which appear across two columns are identical <u>in substance to corresponding</u> texts of the European Union regulations. Texts which appear in two columns differ; the left hand column contains the UTP regulations<u>text</u>, the right hand column shows the text in the corresponding EU regulations. The text in the right hand column is for information only and is not part of the OTIF regulations. <u>Texts in the right hand column which are not quoted from the OPE TSI, but from other</u> <u>EU regulations</u> are in italics.

## 0. EQUIVALENCE AND TRANSITIONAL PROVISIONS

This UTP does not follow the standard structure for UTPs as referred to in APTU Article 8 §4. Instead:

- Sections 1 to 6 of this UTP are equivalent to Appendix P-H\_of OPE TSI (<u>Commission</u> <u>Implementing Regulation (EU) No</u> 2019/773 of 16 May 2019<u>Annex I</u> of Decision 2012/757/EU).
- Sections 7 to 18 are equivalent to Appendix 6 of EU NVR <u>Specification</u> (Decision 2007/756/EC as last amended by <u>Commission</u> Implementing Decision (EU) <u>2012/757/EU2018/1614</u> of 25

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#### October 2018).

- The tables associated with standard numerical markings of wagons, as described in section 14, are published on the <u>European Union's</u> <u>Agency for Railways ERA</u> website.
- The tables and detailed information provided in sections 15 to 18 are equivalent to the documents which were published on the ERA website at the time of adoption of this specification.

In addition to these specifications, the UTPs applicable to vehicles include voluntary and mandatory specifications related to external markings, such as:

UTP WAG sections: 4.2.2.2, 4.2.4.3.2.2, 7.1.2 and appendix C

UTP LOC&PAS sections: 4.2.2.6.

The objectives and scope of COTIF and the EU law concerning railways are not identical and it has therefore been necessary to use different terminology for concepts that have a similar but not identical meaning. The following table lists the terms used in this UTP and the corresponding terms used in the relevant EU law:

<u>This UTP</u>	<u>EU law</u>
Uniform Technical Prescriptions (UTP)	<u>Technical</u> <u>Specification of</u> <u>Interoperability (TSI)</u>
<u>Unique Vehicle</u> <u>Number (EVN)</u>	European Vehicle Number (EVN)
Contracting State	Member State
Vehicle admission	Vehicle authorisation for placing on the market
Competent Authority	NSA

Where provisions in this UTP and the EU provisions differ in substance, the respective texts are in a 2-column format. The left-hand column and the full width texts show the UTP provisions (OTIF regulations) and the right-hand column

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shows the European Union texts. Texts in the right-hand column are strictly for information only. For EU law consult the Official Journal of the European Union. Where differences between texts of this UTP and the European Union texts are either editorial, or not substantive, or concern the list of terms quoted above, the EU texts are generally not reproduced. The EU texts may however be reproduced to improve clarity and readability.

#### **1.** GENERAL PROVISIONS ON THE VEHICLE NUMBER

This UTP applies to all vehicles used in international traffic and may also be applied to domestic traffic.

The Unique Vehicle Number (EVN) is assigned according to the codes defined in section 7 of this document.

The European Vehicle Number (EVN) is assigned in accordanceing to the codes as defined in with Appendix 6 of Annex II to Commission Implementing Decision (EU) 2018/1614<sup>2</sup>2007/756/EC, Appendix 6.

The EVN

Unique Vehicle Number

European Vehicle Number

shall be changed when it does not reflect the interoperability capability or technical characteristics in accordanceing to this with

 $(^{1})$ 

Sections 7 to 18

due to technical modifications of the vehicle. Such technical modifications may require a new

admission to operation (to international traffic) as defined in Articles 3 and 4 of ATMF (Appendix G to the Convention).

authorisation for placing on the marketin service and, where appropriate, a new vehicle type authorisation, in accordanceing to with Articles 201 to and 254 of Directive (EU) 2016/7972008/57/EC.

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Appendix 6

<sup>&</sup>lt;sup>1</sup> The vehicle marking specifications apply to the scope of application of Appendix PH of the TSI for COMMISSION <u>IMPLEMENTING REGULATION (EU) 2019/773 of 16 May 2019</u> <u>2012/757/EU of 14 November 2012</u> concerning the technical specification for interoperability relating to the 'operation and traffic management' subsystem of the rail system <u>with</u>in the European Union and <u>repealing Decision 2012/757/EU</u>amending Decision 2007/756/EC.

<sup>&</sup>lt;sup>2</sup> Commission Implementing Decision (EU) 2018/1614 of 25 October 2018 laying down specifications for the vehicle registers referred to in Article 47 of Directive (EU) 2016/797 of the European Parliament and of the Council and amending and repealing Commission Decision 2007/756/EC (OJ L 268, 26.10.2018, p. 53).

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The keeper shall inform the Registration Entity (RE) of the Contracting State where the vehicle is registered of those changes and, if applicable, of the new

admission to operation.

authorisation for placing on the market.

That RE shall assign to the vehicle a new EVN.

The change of EVN consists of a new registration of the vehicle and subsequent withdrawal of the old registration.

The EVN may be changed at the request of the keeper through a new registration of the vehicle by a different Contracting State in the area of use and subsequent withdrawal of the old registration.

#### 2. GENERAL ARRANGEMENTS FOR EXTERNAL MARKINGS

The capital letters and figures making up the marking inscriptions shall be at least 80 mm in height, in a sans serif font type of correspondence quality. A smaller height may only be used where there is no option but to place the marking on the sole bars.

The marking is put not higher than 2 metres above rail level.

The keeper can-may add, in letters of larger size than the EVN,

Unique Vehicle Number (EVN)

European Vehicle Number

an own number marking (consisting generally of digits of the serial number supplemented by alphabetical coding) useful in operations. The place where the own number is marked is left to the choice of the keeper; however it <u>must-shall</u> always be possible to <u>distinguish identify</u> easily the EVN from the keeper's own number marking.

## 3. WAGONS

The marking shall be inscribed on the wagon bodywork in the following manner:

23	TEN	31	TEN	33	TEN
80	D-RFC	80	D-DB	84	NL-ACTS
7369 5	553-4	06912	235-2	4796	100-8
Zcs		Tanoo	0S	Slpss	

Where in the examples

D and NL stand for the registering Contracting Member State as set out in

part 10 of this document.

NVR-dDecision (EU) 2018/16142007/756/EC, Appendix 6, part 4.

RFC, DB and ACTS stand for the keeper marking as set out in

part 8 of this document.

<u>NVR dD</u>ecision <u>(EU)</u> <u>2018/1614</u>2007/756/EC, Appendix 6, part 1.

For wagons whose bodywork does not offer a large enough area for this type of arrangement, particularly in the case of flat wagons, the marking shall be arranged as follows:

01_87 3320	) — 644-7
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TEN \_\_\_\_\_F-SNCF \_\_\_\_\_Ks

When one or more index letters with aof national definition significance are inscribed on a wagon, this national marking must shall be shown after the international letter marking and separated from it by a hyphen as follows:

0187	3320	644-7
TEN	F-SNCF	Ks-xy

#### 4. COACHES AND HAULED PASSENGER STOCK

The number shall be applied to each sidewall of the vehicle in the following manner:

F-SNCF 61 87  $\frac{20 - 72\ 021}{B^{10}\ tu} - 7$ 

The marking of the country in which the vehicle is registered and of the technical characteristics are printed directly in front of, behind or under the <u>twelve digits of the vehicle</u> <u>number</u>.

Unique Vehicle Number.

European Vehicle Number.

In case of coaches with driver's cabin, the EVN

Unique Vehicle Number

European Vehicle Number

is also written inside the cabin.

## 5. LOCOMOTIVES, POWER CARS AND SPECIAL VEHICLES

The EVN

Unique Vehicle Number

European Vehicle Number

must shall be marked on each sidewall of the tractive stock in the following manner:

92 10 1108 062-6

The EVR

**Unique Vehicle Number** 

European Vehicle Number

is also written inside each cabin of the tractive rolling stock.

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## 6. ALPHABETICAL MARKING OF THE INTEROPERABILITY CAPABILITY

The marking "TEN" may be inscribed on a vehicle<sup>3</sup> only when it:

- fully<sup>4</sup> complies with all relevant UTPs (and RID if applicable) in the versions in force at the time<sup>5</sup> of its technical admission, and which is admitted in all OTIF Contracting States<sup>6</sup> in accordance with ATMF Articles 3 § 2 and 6 § 3,
  - or
- 2) is subject to ATMF Article 3a § 1 (i.e. authorised according to Articles 22(1) and 23(1) of EU Directive 2008/57/EC).

'TEN': Vehicle which: •complies with all relevant TSIs which are in force at the moment of placing in service and has been authorised to be placed in service according to Article 22(1) of **Directive** 2008/57/E C. and

is provided with an authorisation valid <u>for an</u> <u>area of use coveringin</u> all Member States<del>in</del> <del>accordance with Article 23(1) of Directive 2008/57/EC.</del>

'PPV/PPW': Vehicle which complies with PPV/PPW or PGW agreement (inside OSJD States). (original: PPV/PPW: ППВ (Правила пользования вагонами в международном сообщении); PGW: Правила Пользования Грузовыми Вагонами).

Vehicles which are not admitted to international operation in all Contracting States

eligible for a "TEN" marking

authorised to be placed in service in all Member States in accordance with Article 23(1) of Directive 2008/57/EC

need a marking indicating the Contracting

Contracting

Member

States which are part of the area of use of the vehicle.where the vehicle is

<sup>&</sup>lt;sup>3</sup> Additional marking may be affixed to wagons in accordance with the provisions set out in section 5 of Appendix C to the UTP WAG.

<sup>&</sup>lt;sup>4</sup> If the UTP contains "open points" relating to the vehicles compatibility with infrastructure or if the vehicle is subject to a derogation or a specific case or not fully UTP compliant, it shall be admitted according to ATMF Article 6 § 4; instead of TEN, it will need the grid marking to indicate the States which have admitted the vehicle.

<sup>&</sup>lt;sup>5</sup> The date of admission is the date on which the certificate is issued.

<sup>&</sup>lt;sup>6</sup> A Contracting State is an OTIF Member State that applies APTU and ATMF

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#### admitted to operation.

# authorised to be placed in service.

This marking shall be according to one of the following drawings, where D stands for the Contracting

Member

#### Contracting

State who has granted

the first admission

the first authorisation

(in the given example, Germany) and F stands for the second authorising Contracting State

#### **Contracting State**

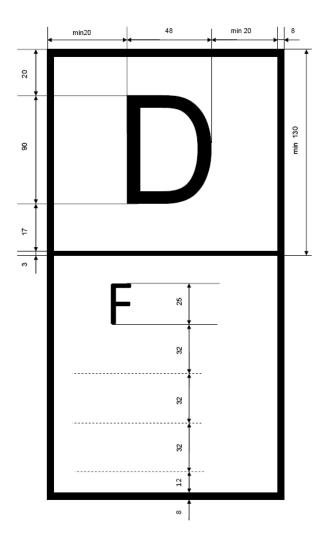
<del>MS</del>

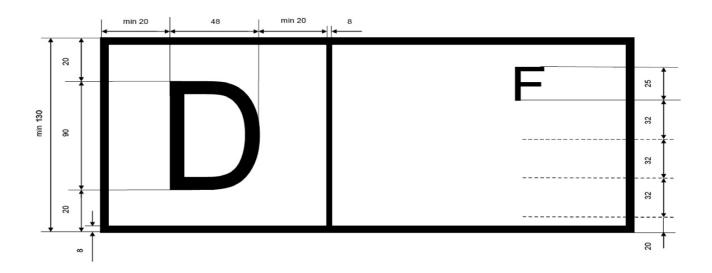
(in the given example, France). The

Country codes shall be in accordance with part 10 of this document.

MS	are	codified	in	accordance	with
Com	missic	<del>n</del>	-Dec	ision	<u>(EU)</u>
2018	/1614	2007/756/E	<del>C</del> , A	ppendix 6, pa	rt 4.

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7.	VEHICLE	IDENTIFI	CATION	VEHICLE R	EIFICATION <u>EGISTERS</u> : 4 – VEHICLE ATION	APPENDIX	
	General rema	rks					
	This section describes the Unique VehicleThis appendix describes the EuropNumber (EVN)Number						
	vehicle to ide describe other	ntify it unique numbers or m	ely and in a pe arkings eventua	d marking applie ermanent manner lly engraved or f hicle during its co	during operation	on. It does not	
	<b>Unique</b>			<b>European</b>			
	Vehicle numb	<mark>er<u>EVN</u> and lir</mark>	nked abbreviatio	ons			
	[called Unique	e Vehicle Num		consisting of 12	figures an Vehicle Numl	ber (EVN)]	
	with the follow	ving structure:					

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Rolling stock group	Interoperability capability and vehicle type [2 figures]	Country in which the vehicle is registered [2 figures]	Technical characteristics [4 figures]	Serial number [3 figures]	Check digit [1 figure]
Wagons	00 to 09 10 to 19 20 to 29 30 to 39 40 to 49 80 to 89 [details in section <sup>7</sup> 11]		0000 to 9999 [details in section 14]	000 to 999	
Hauled passenger vehicles	50 to 59 60 to 69 70 to 79 [details in section 12]	01 to 99 [details in section 10]	0000 to 9999 [details in section 15]	000 to 999	0 to 9 [details in section. 9]
Tractive rolling stock and units in a trainset in fixed or pre-defined formation	90 to 99 [details in section 13]	•	0000000 to 8999999 [the meaning of these figures is define by the <u>Contracting</u> States, eventually by bilateral or multilateral agreement		
Special vehicles			9000 to 9999 [details in section 16]	000 to 999	

In a given country, the 7 digits of technical characteristics and serial number are sufficient to identify uniquely a vehicle inside the groups of hauled passenger vehicles and special vehicles<sup>8</sup>.

Alphabetical markings complete the number:

• abbreviation of the country in which the vehicle is registered

	(details in section 10 of this UTP)	(details in part 4 of NVR-Decision 756/2007/EC)
•	Vehicle Keeper Marking	
	(details in section 8 of this UTP)	(details in part 1 of NVR-Decision 756/2007/EC)
٠	abbreviations of the technical character	ristics
	(details for the wagons in section 17 and for the hauled passenger vehicles in section 18 of this UTP).	(details in part 12 of NVR-Decision 756/2007/EC for the wagons, part 13 of NVR- Decision 756/2007/EC for the hauled passenger vehicles).
The		
Uniqu	ue Vehicle Number (EVN)	European Vehicle Number

<sup>&</sup>lt;sup>7</sup> The word 'section' is referred to as 'part' in the corresponding EU regulation.

<sup>&</sup>lt;sup>8</sup> For special vehicles, the number has to be unique in a given country with the first digit and the 5 last digits of the technical characteristics and serial number.

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shall be changed when it does not reflect the interoperability capability or technical characteristics according to this Appendix due to technical modifications of the vehicle. Such technical modifications may require a new

Admission to operation (to international traffic) as defined in Articles 3 and 4 of ATMF (Appendix G to the Convention).

placing in service according to Articles 20 to 25 of Directive 2008/57/EC.

# 8. VEHICLE KEEPER MARKING NVR-SPECIFICATION FOR VEHICLE REGISTERS: APPENDIX 6 PART 1 – VEHICLE KEEPER MARKING

#### Definition of the Vehicle Keeper Marking (VKM)

A Vehicle Keeper Marking (VKM) is an alphabetic code, consisting of 2 to 5 letters<sup>9</sup>. A VKM is inscribed on each rail vehicle, near the <u>EVN</u>.

Unique Vehicle Number (EVN).

European Vehicle Number.

The VKM shall identifyies the Vehicle Kkeeper as registered in a National Vehicle Register.

the Vehicle Register.

the EVR.

A VKM is shall be unique and valid in all countries covered by

this UTP

TSI OPE and NVR this Decision

and all countries that enter into an agreement that involves the application of the system of vehicle numbering and VKM as described in

this UTP.

TSI OPE and NVRthis Decision.

<u>A VKM for a keeper which has its main place of business in a non-EU OTIF Contracting</u> <u>State is to be requested from the Secretary General of OTIF.</u>

#### Format of the Vehicle Keeper Marking

The VKM is-shall be a representation of the full name or abbreviation of the vehicle-keeper, if possible in a recognisable manner. Any of theAll 26 letters of ISO 8859-1the Latina alphabet may be used. The letters in the VKM are shall be written in capitals. Letters that do not stand for first letters of words in the keeper's name may be written in lower case. For checking uniqueness, the letters written in lower case will shall be taken as written in capitals.

Letters may contain diacritical signs<sup>10</sup>. Diacritical signs used by these letters are <u>shall be</u> ignored for checking uniqueness.

<sup>&</sup>lt;sup>9</sup> For NMBS/SNCB, the use of an encircled single letter B can be continued.

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For vehicles of keepers that reside in a country that does not use the Latin alphabet, a translation of the VKM in its own alphabet may be applied behind the VKM separated from it by a slash-sign ('/'). This translated VKM <u>shall be is</u>-disregarded for data-processing purposes.

#### Provisions about allocation of Vehicle Keeper Markings

A vehicle keeper can be issued mM ore than one VKM may be assigned to a keeper, in case:

- (1) the vehicle keeper has a formal name in more than one language;
- (2) a vehicle keeper has good cause to distinguish between separate vehicle fleets within his organisation.

A single VKM <u>can-may</u> be issued for a group of companies:

- (3) that-which belong to single corporate structure (e.g. holding structure);
- (4) <u>which that</u> belong to a single corporate structure that has appointed and mandated one organisation within this structure to handle all issues on behalf of all others;
- (5) <u>which that haves</u> mandated a separate, single legal entity for handling all issues on their behalf, in <u>which that event case</u> the legal entity <u>is shall be</u> the keeper.

#### Register of Vehicle Keeper Markings and procedure for allocation

The register of VKM is shall be public and updated on a real time basis.

An applicantion shall request for a VKM to the competent authority of the Contracting State where the applicant has its main place of business. That competent authority shall check the application and then is filed with the applicant's competent national authority and forwarded it to the

Secretar<u>y General of OTIF</u>iat. ERA.

A VKM <u>can-may</u> be used only after publication by the

Secretary General of OTIFiat. ERA.

The holder of a VKM <u>must shall</u> inform the competent national authority when <u>he it</u> ends the use of a VKM, and the competent national authority <u>will shall</u> forward the information to the

ERA.

Secretary General of OTIFiat.

A VKM <u>will-shall</u> then be revoked once the keeper has proved that the marking has been changed on all vehicles concerned. It <u>will-shall</u> not be reissued for 10 years, unless it is reissued to the original holder or at his request to another holder.

A VKM can be transferred to another holder, which is the legal successor to the original holder. A VKM <u>shall</u> stays valid when the VKM's holder changes his name to a name that does not bear resemblance to the VKM.

<sup>10</sup> Diacritical marks are 'accent-signs', such as in À, Ç, Ö, Č, Ž, Å etc. Special letters such as Ø and Æ will be represented by a single letter; in tests for uniqueness Ø is treated as O and Æ as A.

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In case of a change of keeper which entails a change of VKM, the vehicles concerned must be marked with the new VKM within three months from the date of registration of the change of keeper in the

#### Vehicle Register.

EVR.

National Vehicle Register. In case of inconsistency between the VKM marked on the vehicle and the data registered in the

Vehicle Register, the vehicle register– E registration shall prevail.

EVR, the EVR-registration supersedes.

NVR, the NVR-registration supersedes.

NVR-SPECIFICATION FOR VEHICLE REGISTERS: APPENDIX 6 Part 2 – Not used

# 9. RULES FOR THE NVR-SPECIFICATION FOR DETERMINATION OF THE VEHICLE REGISTERS: APPENDIX CHECK-DIGIT (DIGIT 12) 6 PART 3 – RULES FOR THE DETERMINATION OF THE CHECK-DIGIT (DIGIT 12)

The check-digit is shall be determined in the following manner:

- the digits in the even positions of the basic number (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

1 -	Let the basic number be	3	3	8	4	4	7	9	6	1	0	0
	Multiplication factor	2	1	2	1	2	1	2	1	2	1	2
		6	3	16	4	8	7	18	6	2	0	0
	Sum: 6 + 3 + 1 + 6 + 4 + 8 + 7 + 1 +	8+6	5+2	+ 0 +	0 = 3	52						

The unit\_s digit of this sum is 2.

The check-digit number will therefore be 8 and the basic number thus becomes the registration number 33 84 4796 100 - 8.

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2 -	Let the basic nu	mber be		3	1	5	1	3	3	2	0	1	9	8	
	Multiplication fa	actor		2	1	2	1	2	1	2	1	2	1	2	
				6	1	10	1	6	3	4	0	2	9	16	
Sum: $6 + 1 + 1 + 0 + 1 + 6 + 3 + 4 + 0 + 2 + 9 + 1 + 6 = 40$															

The unit\_s digit of this sum is 0.

The check-digit number will therefore be 0 and the basic number thus becomes the registration number  $31\ 51\ 3320\ 198-0$ .

# 10.CODING OF THE COUNTRIESNVR-SPECIFICATION FORIN WHICH THE VEHICLESVEHICLE REGISTERS: APPENDIXARE REGISTERED (DIGITS 3-46 PART 4 - CODING OF THEAND ABBREVIATION)COUNTRIES IN WHICH THEVEHICLES ARE REGISTERED

The Information relating to third countries is given for information purposes only

(DIGITS 3-4 AND ABBREVIATION)

Countries	Alphabetical	Numerical
	country	country
	code <sup>1</sup>	code
Albania	AL	41
Algeria	DZ	92
Armenia	AM	58
Austria	A	81 <u>(6)</u>
Azerbaijan	AZ	57
Belarus	BY	21
Belgium	В	88
Bosnia-Herzegovina	BIH <sup>(2)</sup>	50 and 44
Bulgaria	BG	52
China	RC	33
Croatia	HR	78
Cuba	CU <sup>1</sup>	40
Cyprus	CY	
Czech Republic	CZ	54
Denmark	DK	86
Egypt	ET	90
Estonia	EST	26
Finland	FIN	10
France	F	87

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Georgia	GE	28
Germany	D	80 <sup>(7)</sup>
Greece	GR	73
Hungary	Н	55 <u>(5)</u>
Iran	IR	96
Iraq	IRQ <sup>1</sup>	99
Ireland	IRL	60
Israel	IL	95
Italy	Ι	83 <u>(3)</u>
Japan	J	42
Kazakhstan	KZ	27
Kyrgyzstan	KS	59
Latvia	LV	25
Lebanon	RL	98
Liechtenstein	FL	
Lithuania	LT	24
Luxembourg	L	82
Macedonia	MK	65
Malta	М	
Moldova	MD <sup>1</sup>	23
Monaco	MC	
Mongolia	MGL	31
Montenegro	MNE	62
Morocco	МА	93
Netherlands	NL	84
North Korea	PRK <sup>1</sup>	30
Norway	Ν	76
Poland	PL	51
Portugal	Р	94
Romania	RO	53
Russia	RUS	20
Serbia	SRB	72
Slovakia	SK	56
Slovenia	SLO	79
South Korea	ROK	61
Spain	Е	71
Sweden	S	74
Switzerland	СН	85 <u>(4)</u>
Syria	SYR	97
Tajikistan	TJ	66
Tunisia	TN	91
Turkey	TR	75
Turkmenistan	ТМ	67
Ukraine	UA	22
United Kingdom	GB	70
Uzbekistan	UZ	29
Vietnam	VN <sup>1</sup>	32

(1) According to the alphabetical coding system described in Appendix 4 to the 1949 convention and Article 45(4) of the 1968 convention on road traffic.

(2) Bosnia-Herzegovina uses 2 specific railway codes. A numerical country code 49 is reserved.

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(3) And specific code (\*) 64 for FNME (Ferrovie Nord Milano Esercizio)

(4) And specific code (\*) 63 for BLS (Bern–Lötschberg–Simplon Eisenbahn) was used for vehicles authorised before 2007.

(5) (6) And specific code (\*) 43 for GySEV/ROeEE (Győr-Sopron- Ebenfurti Vasút Részvénytársaság/Raab-Ödenburg-Ebenfurter Eisenbahn) was used for vehicles authorised before 2007.

(7) And specific code (\*) 68 for AAE (Ahaus Alstätter Eisenbahn).

(\*) Any new vehicles registered in EVR for AAE, BLS, FNME or GySEV/ROeEE are to be given the standard country code. The EVR IT system shall consider both codes (main country code and specific code) as relating to the same country.

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# 11. INTEROPERABILITY CODES<br/>USED FOR WAGONS (DIGITS 1-2)NVR-SPECIFICATION FOR VEHICLE REGISTERS:<br/>APPENDIX 6 PART 6 – INTEROPERABILITY<br/>CODES USED FOR WAGONS (DIGITS 1-2)

	1 <sup>st</sup> digit ↓	$2^{nd}$ digit $\rightarrow$	0	1	2	3	4	5	6	7	8	9	$2^{nd}$ digit $\leftarrow$	1 <sup>st</sup> digit ↓
		Track Gauge	fixed or variable	fixed	variable	fixed	variable	fixed	variable	fixed	variable	fixed or variable	Track Gauge	
Wagons	0	with axles		Wegen	.(b)			not to b	a vood (#0)			<mark>₽₽₩/₽<u>G</u>₽₩</mark> wagons	with axles	0
conform to the present UTP/TSI WAG <sup>(a)</sup>	1	with bogies	Not to be used	Wagons <sup>(b)</sup> not to be used ( <sup>d</sup> <sup>c</sup> )						(variable gauge)	with bogies	1		
including 7.1.2 and all conditions of	2	with axles	Not to be used				waaand	ъ				PPV/PPW-PGW wagons	with axles	2
Appendix C <sup>(a)</sup>	3	with bogies		wagons <sup>(b)</sup>						(fixed gauge)	with bogies	3		
	4	with axles (eb)												4
Other wagons	8	with bogies (eb)	maintenance related wagons		Other wagons				numbering for technical characteristics not placed in service inside EU or a COTIF Contracting State	with bogies (eb)	8			
	↑ 1 <sup>st</sup> digit	$\rightarrow$ 2 <sup>nd</sup> digit	0	1	2	3	4	5	6	7	8	9	$\underset{2^{nd} \text{ digit}}{\leftarrow}$	↑ 1 <sup>st</sup> digit
(b) Including (eb) Fixed or	<mark>wagons, whi</mark> variable gau	<mark>ich according to p</mark> ge.		EU) No 321/2013 s carry the digits do wagons), not to be				d in service.						

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# 12. INTERNATIONAL TRAFFIC ABILITY CODES FOR HAULED PASSENGER NVR-SPECIFICATION\_FOR VEHICLE REGISTERS: APPENDIX 6 PART 7 – INTERNATIONAL TRAFFIC ABILITY CODES FOR HAULED PASSENGER VEHICLES (DIGITS 1-2)

	Domestic traffic	TEN <sup>(a)</sup> and/or COTIF <sup>(a,b)</sup> and/or PPV/PPW				Domestic traffic or International traffic by special agreement	TEN <sup>(a)</sup> and/or COTIF <sup>(b)</sup>		PPV/PPW			
→ 2 <sup>nd</sup> digit 1 <sup>st</sup> digit ↓	0	1	2	3	4	5	6	7	8	9		
5	Vehicles for domestic traffic	Fixed-gauge non- air-conditioned vehicles (including car-carrying wagons)	Gauge-adjustible (1435/1520) non- air-conditioned vehicles	Not to be used	Gauge- adjustible (1435/1668) non-air- conditioned vehicles	Historical vehicles	Not to be used <sup>(c)</sup>	Fixed-gauge		Fixed-gauge		Gauge- adjustible (1435/1520) vehicles with
6	Service vehicles	Fixed-gauge air- conditioned vehicles	Gauge-adjustible (1435/1520) air- conditioned vehicles	Service vehicles	Gauge- adjustible (1435/1668)air- conditioned vehicles	Car-carrying wagons	Not to be used <sup>(c)</sup>	vehicles	vehicles with change of bogies	gauge- adjustible axles		
7	Air- conditioned and pressure tight vehicles	Not to be used	Not to be used	Pressure- tight fixed- gauge air- conditioned vehicles	Not to be used	Other vehicles	Not to be used	Not to be used	Not to be used	Not to be used		

(b) Including vehicles, which according to existing previous regulations carry the digits defined in the present table. COTIF: vehicle compliant with COTIF regulation in force at the moment of placing in service (c) Excepted for coaches with fixed gauge (56) and adjustable gauge (66) already in service, not to be used for new vehicles

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	AIN-SET I	TRACTIVE AND UNITS N FIXED OR FORMATION	REGISTE TYPES O STOCK A IN FIXED	<mark>RS</mark> : Append f tractive	N A TRAIN-SET FINED		

The first digit is shall be '9'.

If the second digit <u>shall</u> describes the type of tractive stock, following coding is mandatory:

Code	General vehicle type
0	Miscellaneous
1	Electric locomotive
2	Diesel locomotive
3	Electric multiple-unit set (high speed) [power car or trailer]
4	Electric multiple-unit set (except high speed) [power car or trailer]
5	Diesel multiple-unit set [power car or trailer]
6	Specialised trailer,
7	Electric shunting engine
8	Diesel shunting engine
9	Special vehicle

# 14. STANDARD NUMERICAL MARKING OF WAGONS (DIGITS 5 TO 8)

NVR-SPECIFICATION FOR VEHICLE REGISTERS: APPENDIX 6 PART 9 - STANDARD NUMERICAL MARKING OF WAGONS (DIGITS 5 TO 8)

Digits 5 to 8 indicate the main technical characteristics of the wagon. A list with numbers is published on the ERA website (www.era.europa.eu).

The Agency shall manage the numerical marking associated to the main technical characteristics of the wagon and publish them on its website (www.era.europa.eu).

Digits 5 to 8 indicate the main technical characteristics of the wagon. A list with numbers is published on the ERA website (<u>www.era.europa.eu</u>).

An application for a new code <u>is shall be</u> filed with the regist<u>rationering</u> entity, which shall send it to

(as referred to in the National Vehicle Register specifications A 94-20/2.2012) and sent to ERA or the Secretary General. A new code can may be used only after publication by ERA<sup>11</sup>.

(as referred to in Decision 2007/756/EC) and sent to the ERAAgency. A new code can-may be used only after publication by the ERAAgency.

<sup>&</sup>lt;sup>11</sup> For EU Member States the applications should be sent to ERA.

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# 15. CODES FOR THE TECHNICAL NVR-SPECIFICATION FOR VEHICLE REGISTERS: CHARACTERISTICS OF THE HAULED APPENDIX 6 PART 10 – CODES FOR THE TECHNICAL PASSENGER STOCK (DIGITS 5-6) CHARACTERISTICS OF THE HAULED PASSENGER CHARACTERISTICS OF THE HAULED PASSENGER

An application for a new code <u>is-shall be</u> filed with the regist<u>rationering</u> entity (as referred to in the National Vehicle Register specifications A 94 20/2.2012) and which shall send it to ERA or the Secretary General. A new code <u>can-may</u> be used only after publication by ERA<sup>12</sup>.

The tables in this section are copied from the 'Part 10" document as published on the ERA website<sup>13</sup>. The "Part 10" document consists of two tables:

- Codes for the technical characteristics of the hauled passenger stock (digits 5-6)
- Codes for the general characteristics of the hauled passenger stock (digits 7-8)

The Agency shall manage the codes for the technical characteristics of the hauled passenger stock Part 10 isand published them on the ERA-its website

(<u>www.era.europa.eu</u>). An application for a new code <u>is-shall be</u> filed with the regist<u>rationering</u> entity<u>.</u>

An application for a new code <u>s-snall be</u> filed with the regist<u>rationeting</u> entity (as referred to in Decision 2007/756/EC) and which shall send it to the <u>ERAAgency</u>. A new code <u>can may</u> be used only after publication by the <u>ERAAgency</u>.

	6th digit	0	1	2	3	4
	5th digit				_	
Reserved	0	Reserved	Reserved	Reserved	Reserved	Reserved
Vehicles with 1st		10 side-corridor compartments or	$\geq$ 11 side-corridor compartments or			
class seats	1	equivalent open-saloon space with centre	equivalent open-saloon space with	Reserved	Reserved	Two or three axles
class seats		aisle	centre aisle			
Vehicles with 2 <sup>nd</sup>		10 side-corridor compartments or	11 side-corridor compartments or	$\geq$ 12 side-corridor compartments		
	2	equivalent open-saloon space with centre	equivalent open-saloon space with	or equivalent open-saloon space	Three axles	Two axles
class seats		aisle	centre aisle	with centre aisle		
Vehicles with 1st		10 side-corridor compartments or	11 side-corridor compartments or	$\geq$ 12 side-corridor compartments		
or 1 <sup>st</sup> /2 <sup>nd</sup> class	3	equivalent open-saloon space with centre	equivalent open-saloon space with	or equivalent open-saloon space	Reserved	Two or three axles
seats		aisle	centre aisle	with centre aisle		
1st or 1st/2nd class	4	10.1st/2nd -1	December	Deserved	December	$\leq 9 \ 1^{\text{st}}/2^{\text{nd}} \text{ class}$
couchette cars	4	10 1 <sup>st</sup> /2 <sup>nd</sup> class compartments	Reserved	Reserved	Reserved	compartments
2 <sup>nd</sup> class	F	10	11	> 12	Decembed	December
couchette cars	5	10 compartments	11 compartments	$\geq$ 12 compartments	Reserved	Reserved
Reserved	6	Reserved	Reserved	Reserved	Reserved	Reserved

<sup>&</sup>lt;sup>12</sup> For EU Member States the applications should be sent to ERA.

<sup>&</sup>lt;sup>13</sup> Table equivalent to the one published on ERA website on 1<u>18.0312</u>.2014.

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Sleeping cars	7	10 compartments	11 compartments	12 compartments	< 10 2 <sup>nd</sup> class compartments	< 10 1 <sup>st</sup> class compartments
Vehicles of special design	8	Driving trailer with seats, all classes, with or without luggage compartment, with driving cab for reversible working	Vehicles with 1 <sup>st</sup> or 1 <sup>st</sup> /2 <sup>nd</sup> class seats with luggage or mail compartment	Vehicles with 2 <sup>nd</sup> class seats with luggage or mail compartment	Reserved	Vehicles with seats, all classes with specially-fitted areas, e.g. children's play area
and vans	9	Mail vans	Luggage vans with mail compartment	Luggage vans	Luggage vans and two or three-axle 2 <sup>nd</sup> class vehicles with seats, with luggage or mail compartment	Side-corridor luggage vans, with or without compartment under customs seal

Note: Fractions of a compartment are not considered. The equivalent accommodation in open saloon cars with centre aisle is obtained by dividing the number of available seats by 6, 8 or 10 depending on the construction of the vehicle.

	6th digit 5th digit	5	6	7	8	9
Reserved	0	Reserved	Reserved	Reserved	Reserved	Reserved
Vehicles with 1 <sup>st</sup> class seats	1	Reserved	Double-deck coaches	≥ 7 side-corridor compartments or equivalent open-saloon space with centre aisle	8 side-corridor compartments or equivalent open-saloon space with centre aisle	9 side-corridor compartments or equivalent open-saloon space with centre aisle
Vehicles with 2 <sup>nd</sup> class seats	2	Only for OSJD, double-deck coaches	Double-deck coaches	Reserved	≥ 8 side-corridor compartments or equivalent open-saloon space with centre aisle	9 side-corridor compartments or equivalent open-saloon space with centre aisle
Vehicles with 1 <sup>st</sup> or 1 <sup>st</sup> /2 <sup>nd</sup> class seats	3	Reserved	Double-deck coaches	Reserved	≥ 8 side-corridor compartments or equivalent open-saloon space with centre aisle	9 side-corridor compartments or equivalent open-saloon space with centre aisle
1 <sup>st</sup> or 1 <sup>st</sup> /2 <sup>nd</sup> class couchette cars	4	Reserved	Reserved	Reserved	Reserved	$\leq$ 9 1 <sup>st</sup> class compartments
2 <sup>nd</sup> class couchette cars	5	Reserved	Reserved	Reserved	Reserved	$\leq$ 9 compartments
Reserved	6	Reserved	Reserved	Reserved	Reserved	Reserved
Sleeping cars	7	> 12 compartments	< 10 compartmentsReserved	Reserved	Reserved	Reserved
Vehicles of special design	8	Coaches with seats and couchette cars, all classes, with bar or buffet area	Double-deck driving coach with seats, all classes, with or without luggage compartment, with driving cab for reversible working	Dining cars or coaches with bar or buffet area, with luggage compartment	Dining cars	Other special coaches (conference, disco, bar, cinema, video, ambulance coaches)
and vans	9	Two or three-axle luggage vans with mail compartment	Other vans	Two or three-axle car-carrying wagons	Car-carrying wagons	Service vehicles

Note: Fractions of a compartment are not considered. The equivalent accommodation in open saloon cars with centre aisle is obtained by dividing the number of available seats by 6, 8 or 10 depending on the construction of the vehicle.

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#### NVR Specification: Appendix 6 Part 10 – Codes for the general characteristics of the hauled passenger stock (digits 7-8)

Energy supply Maximum speed	8th digit 7th digit		1	2	3	4	5	6 6	7	8	9
	0	All tensions*	Reserved	3000 V~ + 3000 V=	1000 V~ *	Reserved	1500 V~	Other tensions than 1000 V, 1500 V, 3000 V	1500 V~ + 1500 V=	3000 V=	Reserved
< 120 km/h	1	All tensions* + Steam <sup>1</sup>	1000 V~ + Steam <sup>1</sup>	1000 V~ + Steam <sup>1</sup>	1000 V~ + Steam <sup>1</sup>	1000 V~ + Steam <sup>1</sup>	1000 V~ + Steam <sup>1</sup>	Reserved	$1500 V \sim$ + 1500 V= + Steam <sup>1</sup>	3000 V= + Steam <sup>1</sup>	3000 V= + Steam1
	2	Steam <sup>1</sup>	Steam <sup>1</sup>	3000 V~ + 3000 V= + Steam <sup>1</sup>	Steam <sup>1</sup>	3000 V~ + 3000 V= + Steam <sup>1</sup>	Steam <sup>1</sup>	3000 V~ + 3000 V= 1500 V~ + Steam <sup>1</sup>	1500 V~ + Steam <sup>1</sup>	1500 V~ + Steam <sup>1</sup>	A <sup>1</sup>
	3	All tensions	Reserved	1000 V~ + 3000 V=	1000 V~ *1	1000 V~ *1	1000 V~	1000 V~ + 1500 V~ + 1500 V=	1500 V~ + 1500 V=	3000 V=	3000 V=
121 to 140 km/h	4	All tensions * + Steam <sup>1</sup>	All tensions + Steam <sup>1</sup>	All tensions + Steam <sup>1</sup>	1000 V~ * <sup>1</sup> + Steam <sup>1</sup>	1500 V~ + 1500 V=	1000 V~ + Steam1	3000 V~ + 3000 V=	$1500 V \sim$ + 1500 V= + Steam <sup>1</sup>	3000 V= + Steam <sup>1</sup>	Reserved
	5	All tensions * + Steam <sup>1</sup>	All tensions $+$ Steam <sup>1</sup>	All tensions + Steam <sup>1</sup>	1000 V~ + Steam <sup>1</sup>	Reserved	1500 V~ + Steam <sup>1</sup>	Other tensions than 1000 V, 1500 V, 3000 V	1500 V~ + 1500 V= + Steam1	Reserved	Reserved
	6	Steam <sup>1</sup>	Reserved	3000 V~ + 3000 V=	Reserved	3000 V~ + 3000 V=	Reserved	Steam <sup>1</sup>	Reserved	Reserved	$A^1$
141 to 160 km/b	7	All tensions *	All tensions	$1500 \text{ V} \sim {}^{1}$ + 3000 V= ${}^{1}$ All tensions <sup>2</sup>	1000 V~ *	1500 V~ + 1500 V=	1000 V~	1500 V~	1500 V~ + 1500 V=	3000 V=	3000 V=
141 to 160 km/h	8	All tensions * + Steam <sup>1</sup>	All tensions + Steam <sup>1</sup>	3000 V~ + 3000 V=	Reserved	All tensions * + Steam <sup>1</sup>	1000 V~ + Steam <sup>1</sup>	3000 V~ + 3000 V=	Other tensions than 1000 V, 1500 V, 3000 V	All tensions * + Steam <sup>1</sup>	$\begin{array}{c} \mathbf{A}^1\\ \mathbf{G}^2 \end{array}$
> 160 km/h	9	All tensions *2	All tensions	All tensions + Steam <sup>1</sup>	1000 V~ + 1500 V~	1000 V~	1000 V~	Reserved	1500 V~ + 1500 V=	3000 V=	$A^1$ , $A^2$ , $G^2$

Notes:

<sup>1</sup> Only for domestic traffic vehicles <sup>2</sup> Only for vehicles able to internation

Only for vehicles able to international traffic

All tensions Single phase alternating current 1000 V 51 to 15 Hz, single phase alternating current 1500 V 50 Hz, direct current 1500 V, direct current 3000 V. Can include single phase alternating current 3000 V 50 Hz

\* For certain vehicles with 1000V single phase alternating current, only one frequency, either 16 2/3 or 50 Hz, is permitted

A Autonomous heating, without train bus electricity supply line

G Vehicles with train bus electricity supply line for all voltages, but requiring a generator van to supply air-conditioning

**Steam** Steam heating only. If tensions are written, the code is also available for vehicles without steam heating.

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16.	CODES FO CHARACT SPECIAL V (DIGITS 6-	ERISTICS /EHICLES		VEHICLE Part 11 - TECHNICA	- CODES FO AL CHARAC	APPENDIX 6
	<ul> <li>An application for a new code is shall be filed with the registrationering entity, (as referred to in the National Vehicle Register specifications A 94-20/2.2012) and which shall sendt it to ERA or the Secretary General. A new code can-may be used only after publication by ERA<sup>14</sup>.</li> <li>The tables in this section are copied from the 'Part 11" document as published on the ERA website<sup>15</sup>. The "Part 11" document consists of two tables:</li> <li>Authorised speed for special vehicles (digit 6)</li> <li>Type and sub-type of special vehicle (digits 7-8)</li> </ul>			technical cha Part 11 is put (www.era.euro An application with the regination of the	racteristics of sp plish <del>ed them on a ppa.eu</del> ). on for a new const <u>rationering</u> ent 007/756/EC) and Agency. A new	the codes for the becial vehicles and the ERAits website de is-shall be filed ity, (as referred to d-which shall sentd v code can-may be v the ERAAgency.

	Self-pro	Self-propelled travelling speed			
	≥ 100 km/h	< 100 km/h	0 km/h		
	V > 1001 /1	Self-propelled	1	2	
Can be put into a	$V \ge 100 \text{ km/h}$	Non self-propelled			3
train	train V < 100 km/h			4	
	and/or restrictions <sup>a</sup>	Non self-propelled			5
Cannot ha	put the a train	Self-propelled		6	
Cannot be	put life a train	Non self-propelled			7
Se	elf-propelled rail/road	vehicle		8	
1	than can be put into a t	rain <sup>b</sup>	0		
Se		9			
th		3			
Non	self-propelled rail/road	l vehicle <sup>b</sup>			0

#### Authorised speed for special vehicles (digit 6)

**a** By restriction is meant a special position in a train (e.g. at the rear), an obligatory protection wagon, etc.

**b** Special conditions concerning inclusion in a train must be complied with.

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<sup>&</sup>lt;sup>14</sup> For EU Member States the applications should be sent to ERA.

<sup>&</sup>lt;sup>15</sup> Table equivalent to the one published on ERA website on 20.01.2014.

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#### Type and sub-type of special vehicle (digits 7-8)

7th digit	8th digit	Vehicles / machines		
	1	Track laying and renewal train		
_	2	Switches and crossing laying equipment		
	3	Track rehabilitation train		
1 Infrastructure	4	Ballast cleaning machine		
and	5	Earthworks machine		
superstructure	6			
	7			
-	8			
	9	Rail-mounted crane (excl. re-railing)		
	0	Other or general		
	1	High capacity plain track tamping machine		
	2	Other plain track tamping machines		
_	3	Tamping machine with stabilisation		
2	4	Tamping machine for switches and crossings		
Track	5	Ballast plough		
	6	Stabilisation machine		
	7	Grinding and welding machine		
	8	Multi-purpose machine		
	9	Track inspection car		
	0	Other		
	1	Multi-purpose machine		
	2	Rolling and unrolling machine		
	3	Mast installation machine		
	4	Drum carrier machine		
3	5	Overhead line tensioning machine		
Overhead line	6	Machine with elevating work platform and machine with scaffold		
	7	Cleaning train		
	8	Greasing train		
	9	Overhead line inspection car		
	0	Other		
	1	Deck laying machine		
	2	Bridge inspection platform		
	3	Tunnel inspection platform		
4	4	Gas purification machine		
Structures	5	Ventilation machine		
	6	Machine with elevating work		
		platform or with scaffold		
F	7	Tunnel lighting machine		
	8			



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7th digit	8th digit	Vehicles / machines
	9	
	0	Other
	1	Rail loading/unloading and transport machine
	2	
	3	Loading/unloading and transport
5	4	machine for ballast, gravel, etc.
Loading,	5	
unloading and various	6	Sleeper loading/unloading and
transport	7	transport machine
	8	Loading/unloading and transport machine for switchgear, etc.
	9	Loading/unloading and transport machine for other materials
F	0	Other
	1	Earthworks recording car
F	2	Track recording car
F	3	Overhead line recording car
	4	Gauge recording car
6	5	Signalling recording car
Measuring	6	Telecommunications recording car
	7	
	8	
	9	
	0	Other
	1	Emergency crane
	2	Emergency haulage car
	3	Emergency tunnel train
	4	Emergency car
7	5	Fire car
Emergency	6	Sanitary vehicle
	7	Equipment car
	8	
	9	
	0	Other
	1	Tractive units
	2	
	3	Transport car (excl. 59)
8	4	Power car
Traction,	5	- Track car / powered car
transport,	6	_
energy, etc.	7	Concreting car
	8	
Ļ	9	
	0	Other
	1	Self-propelled snow plough
9	2	Hauled snow plough
Environment	3	Snow broom
	4	De-icing machine
	5	Weed-killing machine



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7th digit	8th digit	Vehicles / machines	
	6	Rail cleaning machine	
	7		
	8		
	9		
	0	Other	
	1	Catagoria 1 mil/mod modeling	
	2	Category 1 rail/road machine	
	3	Category 2 rail/road machine	
	4		
0	5	Cata agenta 2 mail/maid marshing	
ail/road	6	Category 3 rail/road machine	
	7	Catagory 4 mil/mod moshing	
	8	Category 4 rail/road machine	
	9		
	0	Other	

# 17. LETTER MARKING FOR WAGONS EXCLUDING ARTICULATED AND MULTIPLE WAGONS

Version 2

An application for a new code is shall be filed with the registregistrationering entity, (as referred to in the National Vehicle Register specifications A 94-20/2.2012) and which shall sendt it to ERA or the Secretary General. A new code can-may be used only after publication by ERA<sup>16</sup>.

The tables in this section are copied from the 'Part 12" document as published on the ERA website<sup>17</sup>. The "Part 12" document consists of 10 tables:

- CATEGORY LETTER: **E** OPEN HIGH-SIDED WAGON
- CATEGORY LETTER: **F** OPEN HIGH-SIDED WAGON
- CATEGORY LETTER: **G** COVERED WAGON
- CATEGORY LETTER: **H** COVERED WAGON
- CATEGORY LETTER: I –

NVR-SPECIFICATION FOR VEHICLE REGISTERS: APPENDIX 6 PART 12 — LETTER MARKING FOR WAGONS EXCLUDING ARTICULATED AND MULTIPLE WAGONS

Part 12 is The Agency shall manage the codes for letter marking for wagons (except articulated and multiple wagons) and published on them on its the ERA website (www.era.europa.eu).

An application for a new code is shall be filed with the registrationering entity, (as referred to in Decision 2007/756/EC) and which shall sendt it to the ERAAgency. A new code can may be used only after publication by the ERAAgency.

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<sup>&</sup>lt;sup>16</sup> For EU Member States the applications should be sent to ERA.

<sup>&</sup>lt;sup>17</sup> Table equivalent to the one published on ERA website on 206.401.20174.

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<ul> <li>WAGON</li> <li>CATEGO WAGON</li> <li>CATEGO</li> <li>WAGON</li> <li>CATEGO</li> <li>CATEGO</li> <li>WAGON</li> <li>CATEGO</li> <li>CATEGO</li> <li>WAGON</li> <li>CATEGO</li> <li>CATEGO</li> <li>WAGON</li> <li>CATEGO</li> </ul>	DRY LETTER: N DRY LETTER: N DRY LETTER: PEN HIGH-SID DRY LETTER: N DRY LETTER: N DRY LETTER: N DRY LETTER: N DRY LETTER: N ORY	K – 2-AXLE FLAT L – 2-AXLE FLAT O – MIXED FLAT ED WAGON R –FLAT BOGIES S –FLAT BOGIES T – WAGON F U - SPECIAL Z - TANK F - OPEN HIGH- ts) H - COVERED I - TROLLED L - FLAT RATE AXLES (2 S - FLAT BOGIE T - WAGON F (2 units) U - SPECIAL		

#### 1. Important notes

In the attached tables:

- the information given in meters refers to the inside length of the wagons (lu);
- the information given in tonnes (tu) corresponds to the highest load limit shown in the loading table for the wagon in question, this limit being determined in accordance with the procedures laid down.

#### 2. Index letters with an international value common to all categories

- **q** pipe for electric heating which can be supplied by all accepted currents
- qq pipe and installation for electric heating which can be supplied by all accepted currents
- s wagons authorised to run <u>under "s" conditionsat speeds up to100 km/h</u>-(see Annex B of Rolling Stock TSI/UTP WAG)

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ss wagons authorised to run <u>at speeds up to 120 km/h</u>under "ss" conditions (see Annex B of Rolling Stock TSI / UTP WAG)

#### 3. Index letters with a national value

t, u, v, w, x, y, z

The value of these letters is defined by each <u>Contracting State</u>

Contracting State.

Member State.

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#### **CATEGORY LETTER: E - OPEN HIGH-SIDED WAGON**

Reference wagon		of ordinary type,
		with side and end tipping, with flat floor
		with 2 axles: $lu \ge 7,70m$ ; $25t \le tu \le 30t$
		with 4 axles: $lu \ge 12m$ ; $50t \le tu \le 60t$
		with 6 axles or more: $lu \ge 12m$ ; $60t \le tu \le 75t$
	а	with 4 axles
	aa	with 6 axles or more
	с	with floor traps <sup>a</sup>
		with 2 axles: tu < 20t
	k	with 4 axles: $tu < 40t$
		with 6 axles or more: $tu < 50t$
	kk	with 2 axles: $20t \le tu < 25t$
		with 4 axles: $40t \le tu < 50t$
		with 6 axles or more: $50t \le tu < 60t$
Index letters	1	without side tipping
	11	without floor traps <sup>b</sup>
	m	with 2 axles: lu < 7,70m
		with 4 axles or more: $lu < 12m$
	mm	with 4 axles or more: lu > 12m <sup>b</sup>
		with 2 axles: $tu > 30t$
	n	with 4 axles: $tu > 60t$
		with 6 axles or more: $tu > 75t$
	0	without end tipping
р		with station for brakeman <sup>b</sup>

- **a** This concept only applies to open high-sided wagons with a flat floor, and provided with a device enabling them to be used, either as ordinary wagons with a flat bottom, or for gravity unloading of certain goods by suitable positioning of the traps.
- **b** Only applicable to wagons with gauge of 1520 mm.

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#### CATEGORY LETTER: F - OPEN HIGH-SIDED WAGON

Reference wagon		of special type,			
		with 2 axles: $25t \le tu \le 30t$			
		with 3 axles: $25t \le tu \le 40t$			
		with 4 axles: $50t \le tu \le 60t$			
		with 6 axles or more: $60t \le tu \le 75t$			
	а	with 4 axles			
	aa	with 6 axles or more			
	b	high capacity with axles (volume > $45m^3$ )			
	с	with controlled gravity unloading, on both sides, alternately, at the top <sup>a</sup>			
	сс	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a</sup>			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
		with 2 or 3 axles: $tu < 20t$			
	k	with 4 axles: $tu < 40t$			
		with 6 axles or more: tu < 50t			
		with 2 or 3 axles: $20t \le tu \le 25t$			
Index letters	kk	with 4 axles: $40t \le tu < 50t$			
		with 6 axles or more: $50t \le tu \le 60t$			
	1	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a</sup>			
	11	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a</sup>			
		with 2 axles: $tu > 30t$			
		with 3 axles: $tu > 40t$			
	n	with 4 axles: $tu > 60t$			
-		with 6 axles or more: $tu > 75t$			
	0	with axial bulk gravity unloading, at the top <sup>a</sup>			
	00	with axial bulk gravity unloading, at the bottom <sup>a</sup>			
	р	with axial controlled gravity unloading, at the top <sup>a</sup>			
ľ	рр	with axial controlled gravity unloading, at the bottom <sup>a</sup>			
	ppp	with station for brakeman <sup>b</sup>			

- **a** Wagons with gravity unloading in category F are open wagons, which do not have a flat floor and have no tipping facility either at the end or the side.
- **b** Only applicable to wagons with gauge of 1520 mm.

The method of unloading these wagons is defined by a combination of the following characteristics:

Arrangement of the unloading apertures:

- axial: Apertures situated above the centre of the track
  - bilateral: Apertures on either side of the track, outside the rails
    - (For these wagons, unloading is:
    - simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides,
    - alternate, if complete emptying of the wagon can take place by opening the apertures on one side only)
- top: The lower edge of the discharge through (without taking into account mobile devices which may extend this through) is situated at least 0.700 m above the rail, and allows for the use of a conveyor belt to take away the goods
- bottom: The position of the lower edge of the discharge through does not allow for the use of a conveyor belt to take away the goods

Rate of unloading:

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- bulk: Once the apertures are open for unloading, they cannot be closed again until the wagon is empty

- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped



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#### **CATEGORY LETTER: G - COVERED WAGON**

Reference wagon		of ordinary type,	
		with at least 8 ventilation apertures	
		with 2 axles: $9m \le lu \le 12m$ ; $25t \le tu \le 30t$	
		with 4 axles: $15m \le lu < 18m$ ; $50t \le tu \le 60t$	
		with 6 axles or more: $15m \le lu < 18m$ ; $60t \le tu \le 75t$	
	а	with 4 axles	
	aa	with 6 axles or more	
	1	high capacity: - with 2 axles: $lu \ge 12m$ and payload capacity $\ge 70m^3$	
	b	- with 4 axles or more: $lu \ge 18 m$	
	bb	with 4 axles or more: lu > 18m <sup>a</sup>	
	сŋ	for grain	
	h	for fruits and vegetables <sup>b</sup>	
		with 2 axles: tu < 20t	
	k	with 4 axles: $tu < 40t$	
		with 6 axles or more: $tu < 50t$	
To 1. Letters	kk	with 2 axles: $20t \le tu < 25t$	
Index letters		with 4 axles: $40t \le tu < 50t$	
		with 6 axles or more: $50t \le tu < 60t$	
	1	with less than 8 ventilation apertures	
	11	with enlarged doors apertures <sup>a</sup>	
	m	with 2 axles: lu < 9m	
		with 4 axles or more: lu < 15m	
	n	with 2 axles: $tu > 30t$	
		with 4 axles: $tu > 60t$	
		with 6 axles or more: $tu > 75t$	
	0	with 2 axles: $lu < 12m$ and payload capacity $\ge 70m^3$	
	р	with station for brakeman <sup>a</sup>	

- **a** Only applicable to wagons with gauge of 1520 mm.
- ${f b}$  The concept "for fruits and vegetables" applies only to wagons provided with additional ventilation apertures at the floor level.



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#### **CATEGORY LETTER: H – COVERED WAGON**

		of special type,			
Reference wagon		with 2 axles: $9m \le lu \le 12m$ ; $25t \le tu \le 28t$			
		with 4 axles: $15m \le lu < 18m$ ; $50t \le tu \le 60t$			
		with 6 axles or more: $15m \le lu < 18m$ ; $60t \le tu \le 75t$			
	а	with 4 axles			
	aa	with 6 axles or more			
		- with 2 axles: $12m \le lu \le 14m$ and payload capacity $\ge 70m^{3a}$			
	b	- with 4 axles or more: $18m \le lu \le 22m$			
		with 2 axles: $lu \ge 14m$			
	bb	with 4 axles or more: $lu \ge 22m$			
	с	with end doors			
	сс	with end doors and fitted internally for the transport of motor cars			
	d	with floor traps			
	dd	with tipping body <sup>b</sup>			
	e	with 2 floors			
	ee	with 3 floors or more			
	f	suitable for traffic with Great Britain <sup>a</sup>			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively) <sup>a</sup>			
	g	for grain			
	gg	for cement <sup>b</sup>			
	h	for fruits and vegetables <sup>c</sup>			
Index letters	hh	for mineral fertilizer <sup>b</sup>			
	i	with opening or shunt walls			
	ii	with very robust opening or shunt walls <sup>d</sup>			
	k	with 2 axles: tu < 20t			
		with 4 axles: tu < 40t			
		with 6 axles or more: $tu < 50t$			
	kk	with 2 axles: $20t \le tu \le 25t$			
		with 4 axles: $40t \le tu < 50t$			
		with 6 axles or more: $50t \le tu < 60t$			
	1	with movable partitions <sup>e</sup>			
	11	with lockable movable partitions <sup>e</sup>			
	m	with 2 axles: $lu < 9m$			
	111	with 4 axles or more: lu < 15m			
	mm	with 4 axles or more: lu > 18m <sup>b</sup>			
		with 2 axles: $tu > 28t$			
	n	with 4 axles: $tu > 60t$			
		with 6 axles or more: $tu > 75t$			
	0	with 2 axles: $12m < lu < 14m$ and payload capacity $\ge 70m^3$			
1	р	with station for brakeman <sup>b</sup>			

**a** 2-axle wagons bearing the index letters "f", "fff" can have a payload capacity less than 70 m3.

- **b** Only applicable to wagons with gauge of 1520 mm.
- c The concept "for fruits and vegetables" applies only to wagons provided with additional ventilation apertures at the floor level.
- **d** Only applicable to wagons with gauge of 1435 mm.
- e Movable partitions may be dismounted temporarily.

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#### CATEGORY LETTER: I – TEMPERATURE-CONTROLLED WAGON

Reference wagon		refrigerator wagon,				
		with class IN thermal insulation,				
		with motor-driven ventilation, with gratings and ice bunker $\geq 3,5m^3$				
		with 2 axles: $19m^2 \le \text{floor}$ area $< 22m^2$ ; $15t \le tu \le 25t$				
		with 4 axles: floor area $\ge 39m^2$ ; $30t \le tu \le 40t$				
	а	with 4 axles				
	b	with 2 axles and large floor area: $22m^2 \le \text{floor}$ area $\le 27m^2$				
	bb	with 2 axles and very large floor area: floor area $> 27 \text{m}^2$				
	с	with meat hooks				
	d	for fish				
	e	with electric ventilation				
	f	suitable for traffic with Great Britain				
	ff	suitable for traffic with Great Britain (by tunnel exclusively)				
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)				
	g	with mechanical refrigeration <sup>a b</sup>				
	gg	refrigerator with liquefied gas <sup>a</sup>				
	h	with class IR thermal insulation				
Index letters	i	mechanically refrigerated by the machinery of an accompanying technical wagon <sup>a b c</sup>				
	ii	accompanying technical wagon <sup>a c</sup>				
	k	with 2 axles: $tu > 15t$				
		with 4 axles: $tu < 30t$				
	1	insulated without ice bunkers <sup>a d</sup>				
	m	with 2 axles: floor area $< 19m^2$				
-		with 4 axles: floor area $< 39m^2$				
	mm	with 4 axles: floor area $\geq 39m^{2e}$				
	n	with 2 axles: $tu > 25t$				
		with 4 axles: $tu > 40t$				
	0	with ice bunkers of capacity less than 3,5m <sup>3 d</sup>				
р		without gratings				

- a The index letter "l" shall not be marked on wagons bearing the index letters "g", "gg", "i" or "ii".
- **b** Wagons bearing both the index letters "g" and "i" can be used individually or in a mechanically refrigerated raft.
- **c** The concept of "accompanying technical wagon" applies at the same time to factory wagons, workshop wagons (both with or without sleeping accommodation) and dormitory wagons.
- **d** The index letter "o" shall not be marked on wagons bearing the index letter "l".
- e Only applicable to wagons with gauge of 1520 mm.

Note: The floor area of covered refrigerator wagons is always determined taking into account the use of ice bunkers.

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#### **CATEGORY LETTER: K – 2-AXLE FLAT WAGON**

Referen	ce wagon	of ordinary type,	
Reference	ce wagon	with drop sides and short stanchions	
		$lu \ge 12m; 25t \le tu \le 30t$	
	b	with long stanchions	
	50	fitted for the transport of containers <sup>a</sup>	
	i	with removable cover and non-removable ends <sup>b</sup>	
	j	with shock-absorbing device	
	k	tu < 20t	
	kk	$20t \le tu < 25t$	
Index letters	1	without stanchions	
	m	$9m \le lu < 12m$	
	mm	lu < 9m	
	n	tu > 30t	
0	0	with non-removable sides	
	р	without sides <sup>b</sup>	
	pp	with removable sides	

- **a** Index letter "g" may be used together with category letter K exclusively for ordinary wagons which have only been additionally fitted out for the transport of containers. Wagons fitted out solely for the transport of containers must be classified in category L.
- **b** The index letter "p" shall not be marked on wagons bearing index letter "i".

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#### **CATEGORY LETTER: L – 2-AXLE FLAT WAGON**

Reference wagon		of special type,
	U	$lu \ge 12m; 25t \le tu \le 30t$
	b	with special fittings for securing purposes for medium-sized containers (pa) <sup>a</sup>
	с	with swivelling bolster <sup>a</sup>
	d	fitted out for the transport of motor cars, without deck <sup>a</sup>
	e	with decks for the transport of motor cars <sup>a</sup>
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	g	fitted for the transport of containers (except pa) <sup>ab</sup>
	h	fitted out for the transport of steel coils, eye to side <sup>a c</sup>
Index letters	hh	fitted out for the transport of steel coils, eye to sky <sup>a c</sup>
Index letters	i	with removable cover and non-removable ends <sup>a</sup>
	ii	With very robust removable metallic cover <sup>d</sup> and non-removable ends <sup>a</sup>
	j	with shock-absorbing device
	k	tu < 20t
	kk	$20t \le tu < 25t$
	1	without stanchions <sup>a</sup>
	m	$9m \le lu < 12m$
	mm	lu < 9m
	n	tu > 30t
	р	without sides <sup>b</sup>

- **a** The inscription of the index letters "l" or "p" is optional for wagons bearing the index letters "b", "c", "d", "e", "g", "h", "hh", "i" or "ii". But numerical codes must always correspond to letter markings on wagons.
- **b** Wagons used solely for the transport of containers (except pa).
- c Wagons used solely for the transport of steel coils.
- **d** Only applicable to wagons with gauge of 1435 mm.

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#### CATEGORY LETTER: O – MIXED FLAT AND OPEN HIGH-SIDED WAGON

		of ordinary type,
Reference wagon		with 2 or 3 axles; with drop sides or ends and stanchions
		with 2 axles: $lu \ge 12m$ ; $25t \le tu \le 30t$
		with 3 axles: $lu \ge 12m$ ; $25t \le tu \le 40t$
	а	with 3 axles
	f	suitable for traffic with Great Britain
	ff fff k	suitable for traffic with Great Britain (by tunnel exclusively)
		suitable for traffic with Great Britain (by train-ferry exclusively)
		tu < 20t
Index letters	kk	$20t \le tu < 25t$
	1	without stanchions
	m	$9m \le lu < 12m$
	mm	lu < 9m
	n	with 2 axles: $tu > 30t$
	n	with 3 axles: $tu > 40t$

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#### CATEGORY LETTER: R -FLAT BOGIES WAGON

Poforonco	wagon	of ordinary type,	
Reference wagon		with drop ends and stanchions	
		$18m \le lu < 22m; \ 50t \le tu \le 60t$	
	b	$lu \ge 12m$	
	e	with drop sides	
	g	fitted for the transport of containers <sup>a</sup>	
	h	fitted out for the transport of steel coils, eye to side <sup>b</sup>	
	hh	fitted out for the transport of steel coils, eye to sky <sup>b</sup>	
	i	with removable cover and non-removable ends <sup>c</sup>	
	j	with shock-absorbing device	
	k	tu < 40t	
Index letters	kk	$40t \le tu < 50t$	
	1	without stanchions	
	m	$15m \le lu < 18m$	
	mm	lu < 15m	
	n	tu > 60t	
	0	with non-removable ends less than 2 m in height	
	00	with non-removable ends, 2 m or more in height <sup>c</sup>	
	р	without drop ends <sup>c</sup>	
	pp	with removable sides	

- **a** The use of the index letter "g" associated with the category letter R is only possible in the case of ordinary wagons which have only been additionally fitted out for the transport of containers. Wagons fitted out solely for the transport of containers must be classified in category S.
- **b** The use of the index letter "h" or "hh" together with the category letter R is only possible in the case of ordinary wagons which have only been additionally fitted out for the transport of containers. Wagons fitted out solely for the transport of containers must be classified in category S.
- c The index letters "oo" and/or "p" shall not be marked on wagons bearing index letter "i".

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#### **CATEGORY LETTER: S –FLAT BOGIES WAGON**

Reference wagon		of special type, with 4 axles: $lu \ge 18m$ ; $50t \le tu \le 60t$ with 6 axles or more: $lu \ge 22m$ ; $60t \le tu \le 75t$			
	а	with 6 axles (2 bogies of 3 axles) with 6 axles (2 bogies of 3 axles)			
	aa	with 8 axles or more			
	aaa	with 4 axles (2 bogies of 2 axles) <sup>a</sup>			
	b	with special fittings for securing purposes for medium-sized containers (pa) <sup>b</sup>			
	с	with swivelling bolster <sup>b</sup>			
	d	fitted out for the transport of motor cars, without deck <sup>b c</sup>			
	e	with decks for the transport of motor cars <sup>b</sup>			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
	g	fitted for the transport of containers, total loading length $\leq 60^{\circ}$ (except pa) $^{b c d}$			
	gg	fitted for the transport of containers, total loading length $> 60'$ (except pa) <sup>b c d</sup>			
	h	fitted out for the transport of steel coils, eye to side be			
	hh	fitted out for the transport of steel coils, eye to sky be			
	<u>hhh</u>	fitted out for the transport of steel coils, eye longitudinal			
Index letters	i	with removable cover and non-removable ends <sup>b</sup>			
	ii	With very robust removable metallic cover <sup>f</sup> and non-removable ends <sup>b</sup>			
	j	with shock-absorbing device			
	k	with 4 axles: $tu < 40t$			
	ĸ	with 6 axles or more: $tu < 50t$			
	kk	with 4 axles: $40t \le tu < 50t$			
	KK	with 6 axles or more: $50t \le tu < 60t$			
	1	without stanchions <sup>b</sup>			
	m	with 4 axles: $15m \le lu < 18m$			
		with 6 axles or more: $18m \le lu < 22m$			
	mm	with 4 axles: $lu < 15m$			
		with 6 axles or more: lu < 18m			
	mmm	with 4 axles: $lu \ge 22m^{a}$			
	n	with 4 axles: $tu > 60t$			
		with 6 axles or more: $tu > 75t$			
	р	without sides <sup>b</sup>			

- **a** Only applicable to wagons with gauge of 1520 mm.
- **b** The inscription of the index letters "l" or "p" is optional for wagons bearing the index letters "b", "c", "d", "e", "g", "gg", "h", "hh", "i" or "ii". But numerical codes must always correspond to letter markings on wagons.
- **c** Wagons which in addition to the transport of containers and swap bodies are used to transport vehicles shall be marked with the index letters "g" or "gg" and the letter "d".
- **d** Wagons used solely for the transport of containers or for transport of swap bodies for grab handling and spreader gripping.
- e Wagons used solely for the transport of steel coils.
- f Only applicable to wagons with gauge of 1435 mm.

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#### **CATEGORY LETTER: T – WAGON WITH OPENING ROOF**

Reference		with 2 axles: $9m \le lu < 12m$ ; $25t \le tu \le 30t$			
wagon		with 4 axles: $15m \le lu < 18m$ ; $50t \le tu \le 60t$			
unugon		with 6 axles or more: $15m \le lu < 18m$ ; $60t \le tu \le 75t$			
	а	with 4 axles			
	aa	with 6 axles or more			
	b	high capacity: with 2 axles: $lu \ge 12m$			
	U	with 4 axles or more: $lu \ge 18m^{ab}$			
	с	with end doors			
	d	with controlled gravity unloading, on both sides, alternately, at the top <sup>a b c</sup>			
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a b c</sup>			
	e	with unobstructed height of the doors $> 1,90$ m <sup> a b c</sup>			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
	g	for grain			
•	h	fitted out for the transport of steel coils, eye to side			
•	hh	fitted out for the transport of steel coils, eye to sky			
•	i	with opening walls <sup>a</sup>			
•	j	with shock-absorbing device			
Index letters		with 2 axles: $tu < 20t$			
	k	with 4 axles: $tu < 40t$			
		with 6 axles or more: $tu < 50t$			
		with 2 axles: $20t \le tu < 25t$			
	kk	with 4 axles: $40t \le tu < 50t$			
		with 6 axles or more: $50t \le tu < 60t$			
	1	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a b c</sup>			
	11	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a b c</sup>			
		with 2 axles: $lu < 9m$			
	m	with 4 axles or more: $lu < 15m^{b}$			
		with 2 axles: $tu > 30t$			
	n	with 4 axles: $tu > 60t$			
		with 6 axles or more: $tu > 75t$			
	0	with axial bulk gravity unloading, at the top <sup>a b c</sup>			
	00	with axial bulk gravity unloading, at the bottom <sup>abc</sup>			
	р	with axial controlled gravity unloading, at the top <sup>a b c</sup>			
	pp	with axial controlled gravity unloading, at the bottom <sup>a b c</sup>			

**a** Index letter "e":

- is optional on wagons bearing the index letter "b" (but numerical codes must always correspond to letter markings on wagons),
- shall not be marked on wagons bearing the index letters "d", "dd", "i", "l", "l", "o", "oo", "p" ou "pp".
- **b** Index letter "b" and "m" shall not be marked on wagons bearing the index letters "d", "dd", "l", "l", "o", "oo", "p" or "pp".
- **c** Wagons with gravity unloading in category T are wagons fitted with an opening roof giving access to a loading hatch over the complete length of the body; these wagons do not have a flat floor and are not designed for end or side tipping.

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The method of unloading these wagons is defined by a combination of the following characteristics:

Arrangement of the unloading apertures:

- axial: Apertures situated above the centre of the track
  - bilateral: Apertures on either side of the track, outside the rails
    - (For these wagons, unloading is:
      - simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides,
    - alternate, if complete emptying of the wagon can take place by opening the apertures on one side only)
- top: The lower edge of the discharge through (without taking into account mobile devices which may extend this through) is situated at least 0.700 m above the rail, and allows for the use of a conveyor belt to take away the goods
- bottom: The position of the lower edge of the discharge through does not allow for the use of a conveyor belt to take away the goods

#### Rate of unloading:

-

I

- bulk: Once the apertures are open for unloading, they cannot be closed again until the wagon is empty
- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped

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#### **CATEGORY LETTER: U - SPECIAL WAGONS**

		other than these in actagories E. H. L. S. or 7				
		other than those in categories F, H, L, S or Z with 2 axles: $25t \le tu \le 30t$				
Reference						
wagon		with 3 axles: $25t \le tu \le 40t$				
-	with 4 axles: $50t \le tu \le 60t$					
		with 6 axles or more: $60t \le tu \le 75t$				
	а	with 4 axles				
	aa	with 6 axles or more				
	с	with unloading under pressure				
	d	with controlled gravity unloading, on both sides, alternately, at the top <sup>a</sup>				
	dd	with controlled gravity unloading, on both sides, alternately, at the				
	uu	bottom <sup>a</sup>				
	f	suitable for traffic with Great Britain				
	ff	suitable for traffic with Great Britain (by tunnel exclusively)				
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)				
	g	for grain				
	i	fitted out for the transport objects which should exceed the gauge if				
		they were loaded on ordinary wagons <sup>b c</sup>				
	k	with 2 or 3 axles: tu < 20t				
		with 4 axles: $tu < 40t$				
Index letters		with 6 axles or more: $tu < 50t$				
	kk	with 2 or 3 axles: $20t \le tu < 25t$				
		with 4 axles: $40t \le tu < 50t$				
		with 6 axles or more: $50t \le tu < 60t$				
	1	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a</sup>				
	11	with bulk gravity unloading, on both sides, simultaneously, at the				
	11	bottom <sup>a</sup>				
		with 2 axles: tu > 30t				
		with 3 axles: $tu > 40t$				
	n	with 4 axles: $tu > 60t$				
		with 6 axles or more: tu > 75t $^{\circ}$				
	0	with axial bulk gravity unloading, at the top <sup>a</sup>				
	00	with axial bulk gravity unloading, at the bottom <sup>a</sup>				
	р	with axial bulk gravity unloading, at the contoin				
	pp	with axial bulk gravity unloading, at the top with axial bulk gravity unloading, at the bottom <sup>a</sup>				
	гг					

- **a** Wagons with gravity unloading in category U are closed wagons which can only be loaded through one or more loading apertures situated in at the top part of the body, and whose total opening dimensions are less than the length of the body; these wagons do not have a flat floor and are not designed for end or side tipping.
- **b** In particular:
  - well wagons
  - wagons with a central recess
  - wagons with an ordinary sloping diagonal permanent control desk
- c Index letter "n" shall not be marked on wagons bearing the index letter "i".

The method of unloading these wagons is defined by a combination of the following characteristics:

Arrangement of the unloading apertures:

- axial: Apertures situated above the centre of the track
- bilateral: Apertures on either side of the track, outside the rails

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- (For these wagons, unloading is:
  - simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides,
- alternate, if complete emptying of the wagon can take place by opening the apertures on one side only)
- top: The lower edge of the discharge through (without taking into account mobile devices which may extend this through) is situated at least 0.700 m above the rail, and allows for the use of a conveyor belt to take away the goods
- bottom: The position of the lower edge of the discharge through does not allow for the use of a conveyor belt to take away the goods

#### Rate of unloading:

- bulk: Once the apertures are open for unloading, they cannot be closed again until the wagon is empty
- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped-



#### **CATEGORY LETTER: Z - TANK WAGON**

		with metal shell, for the transport of liquids or gases			
Dí		with 2 axles: $25t \le tu \le 30t$			
Reference	with 3 axles: $25t \le tu \le 40t$				
wagon	with 4 axles: $50t \le tu \le 60t$				
	with 6 axles or more: $60t \le tu \le 75t$				
	а	with 4 axles			
	aa	with 6 axles or more			
	b	for oil products <sup>a</sup>			
	с	with unloading under pressure <sup>b</sup>			
	d	for food and chemical products <sup>a</sup>			
	e	fitted with heating devices			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
	g	for the transport of gases under pressure, liquefied or dissolved under pressur			
	i	tank of non-metallic material			
Index letters	j	with shock-absorbing device			
	k	with 2 or 3 axles: tu < 20t			
		with 4 axles: $tu < 40t$			
		with 6 axles or more: $tu < 50t$			
		with 2 or 3 axles: $20t \le tu < 25t$			
	kk	with 4 axles: $40t \le tu < 50t$			
		with 6 axles or more: $50t \le tu < 60t$			
		with 2 axles: $tu > 30t$			
	n	with 3 axles: $tu > 40t$			
	11	with 4 axles: $tu > 60t$			
		with 6 axles or more: $tu > 75t^{\circ}$			
	р	with station for brakeman <sup>a</sup>			

**a** Only applicable to wagons with gauge of 1520 mm.

b The index letter "c" shall not be marked on wagons bearing the index letter "g".

## LETTER MARKING FOR WAGONS FOR ARTICULATED AND MULTIPLE WAGONS

### DEFINITION OF THE CATEGORY AND INDEX LETTERS

#### 1. Important notes

In the attached tables, the information given in meters refers to the inside length of the wagons (lu).

#### 2. Index letters with an international value common to all categories

 $\mathbf{q}$  pipe for electric heating which can be supplied by all accepted currents

qq pipe and installation for electric heating which can be supplied by all accepted currents

s wagons authorised to run <u>at speeds up to 100 km/h</u>under "s" conditions (see annex B of rolling stock TSI/UTP WAG)

ss wagons authorised to run<u>at speeds up to 120km/h-under "ss" conditions (see annex B of rolling</u> stock TSI / UTP WAG)

#### 3. Index letters with a national value

t, u, v, w, x, y, z The value of these letters is defined by each<u>Contracting State</u>

Contracting State.

Member State.

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#### **CATEGORY LETTER: F - OPEN HIGH-SIDED WAGON**

Deferrence		Articulated or multiple wagon
Reference		with axles, with 2 units
wagon		$22m \le lu \le 27m$
	а	with bogies
	с	with controlled gravity unloading, on both sides, alternately, at the top <sup>a</sup>
	сс	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a</sup>
	e	with 3 units
	ee	with 4 units or more
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
Index letters	1	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a</sup>
muex letters	11	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a</sup>
	m	with 2 units: $lu \ge 27m$
	mm	with 2 units: lu < 22m
	0	with axial bulk gravity unloading, at the top <sup>a</sup>
	00	with axial bulk gravity unloading, at the bottom <sup>a</sup>
	р	with axial controlled gravity unloading, at the top <sup>a</sup>
	pp	with axial controlled gravity unloading, at the bottom <sup>a</sup>
	r	articulated wagon
	rr	multiple wagon

**a** Wagons with gravity unloading in category F are open wagons, which do not have a flat floor and are not designed for end or side tipping.

The method of unloading these wagons is defined by a combination of the following characteristics:

Arrangement of the unloading apertures:

- axial: Apertures situated above the centre of the track
- bilateral: Apertures on either side of the track, outside the rails
  - (For these wagons, unloading is:
    - simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides,
    - alternate, if complete emptying of the wagon can take place by opening the apertures on one side only)
- top: The lower edge of the discharge through (without taking into account mobile devices which may extend this through) is situated at least 0.700 m above the rail, and allows for the use of a conveyor belt to take away the goods
- bottom: The position of the lower edge of the discharge through does not allow for the use of a conveyor belt to take away the goods

#### Rate of unloading:

- bulk: Once the apertures are open for unloading, they cannot be closed again until the wagon is empty
- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped

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#### **CATEGORY LETTER: H - COVERED WAGON**

Deferreres		Articulated or multiple wagon			
Reference		with axles, with 2 units			
wagon	$22m \le lu \le 27m$				
	а	with bogies			
	с	with end doors			
	сс	with end doors and fitted internally for the transport of motor cars			
	d	with floor traps			
	e	with 3 units			
	ee	with 4 units or more			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
Index letters	g	for grain			
	h	for fruits and vegetables <sup>a</sup>			
	i	with opening or shunt walls			
	ii	with very robust opening or shunt walls <sup>b</sup>			
	1	with movable partitions <sup>c</sup>			
	11	with lockable movable partitions <sup>c</sup>			
	m	with 2 units: $lu \ge 27m$			
	mm	with 2 units: lu < 22m			
	r	articulated wagon			
	rr	multiple wagon			

- **a** The concept "for fruits and vegetables" applies only to wagons provided with additional ventilation apertures at the floor level.
- **b** Only applicable to wagons with gauge of 1435 mm.
- **c** Movable partitions may be dismounted temporarily.

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#### CATEGORY LETTER: I - TEMPERATURE CONTROLLED WAGON

		refrigerator wagon			
		with class IN thermal insulation,			
Reference		with motor-driven ventilation, with gratings and ice bunker $\ge 3,5m^3$			
wagon		articulated or multiple wagon			
		with axles, with 2 units			
		$22m \le lu \le 27m$			
	а	with bogies			
	с	with meat hooks			
	d	for fish			
	e	with electric ventilation			
	ee	with 4 units or more			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
	g	with mechanical refrigeration <sup>a</sup>			
	gg	refrigerator with liquefied gas <sup>a</sup>			
Index letters	h	with class IR thermal insulation			
	i	mechanically refrigerated by the machinery of an accompanying technical wagon <sup>a b</sup>			
	ii	accompanying technical wagon <sup>a b</sup>			
	1	insulated without ice bunkers <sup>a c</sup>			
	m	with 2 units: $lu \ge 27m$			
	mm	with 2 units: $lu < 22m$			
	0	with ice bunkers of capacity less than 3,5m <sup>3</sup> <sup>c</sup>			
	00	with 3 units			
	р	without gratings			
	r	articulated wagon			
	rr	multiple wagon			

- **a** The index letter "l" shall not be marked on wagons bearing the index letters "g", "gg", "i" or "ii".
- **b** The concept of "accompanying technical wagon" applies at the same time to factory wagons, workshop wagons (both with or without sleeping accommodation) and dormitory wagons.
- $c \;\;$  The index letter "o" shall not be marked on wagons bearing the index letter "l".

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#### CATEGORY LETTER: L - FLAT WAGON WITH SEPARATE AXLES

Reference		articulated or multiple wagon		
		with 2 units		
wagon	$22m \le lu \le 27m$			
	а	articulated wagon		
	aa	multiple wagon		
	b	with special fittings for securing purposes for medium-sized containers (pa) <sup>a</sup>		
	с	with swivelling bolster <sup>a</sup>		
	d	fitted out for the transport of motor cars, without deck <sup>a</sup>		
	e	with decks for the transport of motor cars <sup>a</sup>		
	f	suitable for traffic with Great Britain		
	ff	suitable for traffic with Great Britain (by tunnel exclusively)		
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)		
	g	fitted for the transport of containers <sup>a b</sup>		
Index letters	h	fitted out for the transport of steel coils, eye to side <sup>a c</sup>		
macx letters	hh	fitted out for the transport of steel coils, eye to sky <sup>a c</sup>		
	i	with removable cover and non-removable ends <sup>a</sup>		
	ii	with very robust removable metallic cover <sup>d</sup> and non-removable ends <sup>a</sup>		
	j	with shock-absorbing device		
	1	without stanchions <sup>a</sup>		
	m	with 2 units: $18m \le lu < 22m$		
	mm	with 2 units: lu < 18m		
	0	with 3 units		
	00	with 4 units or more		
	р	without sides <sup>a</sup>		
	r	with 2 units: $lu \ge 27m$		

- **a** The inscription of the index letters "l" or "p" is optional for wagons bearing the index letters "b", "c", "d", "e", "g", "h", "hh", "i" or "ii". But numerical codes must always correspond to letter markings on wagons.
- **b** Wagons used solely for the transport of containers (except pa).
- c Wagons used solely for the transport of steel coils.
- **d** Only applicable to wagons with gauge of 1435 mm.

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#### **CATEGORY LETTER: S - FLAT BOGIE WAGON**

Reference		articulated or multiple wagon			
wagon		with 2 units			
wagon	$22m \le lu \le 27m$				
	b	with special fittings for securing purposes for medium-sized containers (pa) <sup>a</sup>			
	с	with swivelling bolster <sup>a</sup>			
	d	fitted out for the transport of motor cars, without deck <sup>a b</sup>			
	e	with decks for the transport of motor cars <sup>a</sup>			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
	g	fitted for the transport of containers, total loading length $\leq 60$ ' (except pa) <sup>a b c</sup>			
	gg	fitted for the transport of containers, total loading length > 60' (except pa) $^{abc}$			
	h	fitted out for the transport of steel coils, eye to side <sup>a d</sup>			
	hh	fitted out for the transport of steel coils, eye to sky <sup>a d</sup>			
Index letters	<u>hhh</u>	fitted out for the transport of steel coils, eye longitudinal			
	i	with removable cover and non-removable ends <sup>a</sup>			
	ii	with very robust removable metallic cover en and non-removable ends ae			
	j	with shock-absorbing device			
	1	without stanchions <sup>a</sup>			
	m	with 2 units: $lu \ge 27m$			
	mm	with 2 units: $lu < 22m$			
	0	with 3 units			
	00	with 4 units or more			
	р	without sides <sup>a</sup>			
	r	articulated wagon			
	rr	multiple wagon			

- a The inscription of the index letters "l" or "p" is optional for wagons bearing the index letters "b", "c", "d", "e", "g", "gg", "h", "hh", "i" or "ii". But numerical codes must always correspond to letter markings on wagons.
- **b** Wagons which in addition to the transport of containers and swap bodies are used to transport vehicles shall be marked with the index letters "g" or "gg" and the letter "d".
- **c** Wagons used solely for the transport of containers or for transport of swap bodies for grab handling and spreader gripping.
- **d** Wagons used solely for the transport of steel coils.
- e Only applicable to wagons with gauge of 1435 mm.

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#### **CATEGORY LETTER: T - WAGON WITH OPENING ROOF**

Dí		articulated or multiple wagon			
Reference		with axles, with 2 units			
wagon	$22m \le lu \le 27m$				
	а	With bogies			
	b	with unobstructed height of doors > 1,90m <sup>a</sup>			
	с	with end doors			
	d	with controlled gravity unloading, on both sides, alternately, at the top <sup>b</sup>			
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a b</sup>			
	e	with 3 units			
	ee	with 4 units or more			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
	ъŋ	for grain			
	h	fitted out for the transport of steel coils, eye to side			
Index letters	hh	fitted out for the transport of steel coils, eye to sky			
	i	with opening walls <sup>a</sup>			
	j	with shock-absorbing device			
	1	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a b</sup>			
	11	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a b</sup>			
	m	with 2 units: $lu \ge 27m$			
	mm	with 2 units: lu < 22m			
	0	with axial bulk gravity unloading, at the top <sup>a b</sup>			
	00	with axial bulk gravity unloading, at the bottom <sup>a b</sup>			
	р	with axial controlled gravity unloading, at the top <sup>a b</sup>			
	pp	with axial controlled gravity unloading, at the bottom <sup>a b</sup>			
	r	articulated wagon			
	rr	multiple wagon			

**a** Index letter "b" shall not be marked on wagons bearing the index letters "d", "dd", "i", "l", "l", "o", "oo", "p" or "pp".

**b** Wagons with gravity unloading in category T are wagons fitted with an opening roof giving access to a loading hatch over the complete length of the body; these wagons do not have a flat floor and are not designed for end or side tipping.

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The method of unloading these wagons is defined by a combination of the following characteristics:

Arrangement of the unloading apertures:

- axial: Apertures situated above the centre of the track
  - bilateral: Apertures on either side of the track, outside the rails
    - (For these wagons, unloading is:
    - simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides, - alternate, if complete emptying of the wagon can take place by opening the apertures on one side
    - only)
- top: The lower edge of the discharge through (without taking into account mobile devices which may extend this through) is situated at least 0.700 m above the rail, and allows for the use of a conveyor belt to take away the goods
- bottom: The position of the lower edge of the discharge through does not allow for the use of a conveyor belt to take away the goods

#### Rate of unloading:

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- bulk: Once the apertures are open for unloading, they cannot be closed again until the wagon is empty
- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped

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#### **CATEGORY LETTER: U - SPECIAL WAGONS**

Defense		articulated or multiple wagon			
Reference		with axles, with 2 units			
wagon	$22m \le lu \le 27m$				
	а	With bogies			
	e	with 3 units			
	ee	with 4 units or more			
	с	with unloading under pressure			
	d	with controlled gravity unloading, on both sides, alternately, at the top <sup>a</sup>			
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a b</sup>			
	f	suitable for traffic with Great Britain			
	ff	suitable for traffic with Great Britain (by tunnel exclusively)			
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)			
	g	for grain			
Index letters	i	fitted out for the transport objects which should exceed the gauge if they were			
Index letters		loaded on ordinary wagons <sup>b</sup>			
	1	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a</sup>			
	11	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a</sup>			
	m	with 2 units: $lu \ge 27m$			
	mm	with 2 units: lu < 22m			
	0	with axial bulk gravity unloading, at the top <sup>a</sup>			
	00	with axial bulk gravity unloading, at the bottom <sup>a b</sup>			
	р	with axial controlled gravity unloading, at the top <sup>a</sup>			
	pp	with axial controlled gravity unloading, at the bottom <sup>a</sup>			
	r	articulated wagon			
	rr	multiple wagon			

- **a** Wagons with gravity unloading in category U are closed wagons which can only be loaded through one or more loading apertures situated in at the top part of the body, and whose total opening dimensions are less than the length of the body; these wagons do not have a flat floor and are not designed for end or side tipping.
- **b** In particular:

- well wagons
- wagons with a central recess
- wagons with an ordinary sloping diagonal permanent control desk

The method of unloading these wagons is defined by a combination of the following characteristics:

#### Arrangement of the unloading apertures:

- axial: Apertures situated above the centre of the track
  - bilateral: Apertures on either side of the track, outside the rails.
    - (For these wagons, unloading is:
      - simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides,
    - alternate, if complete emptying of the wagon can take place by opening the apertures on one side only)
- top: The lower edge of the discharge through (without taking into account mobile devices which may extend this through) is situated at least 0.700 m above the rail, and allows for the use of a conveyor belt to take away the goods
- bottom: The position of the lower edge of the discharge through does not allow for the use of a conveyor belt to take away the goods

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#### Rate of unloading:

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- bulk: Once the apertures are open for unloading, they cannot be closed again until the wagon is empty
- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped

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#### **CATEGORY LETTER: Z - TANK WAGON**

		with metal shell,				
Reference		for the transport of liquids or gases				
		articulated or multiple wagon				
wagon		with axles, with 2 units				
		$22m \le lu \le 27m$				
	а	With bogies				
	с	with unloading under pressure <sup>a</sup>				
	e	fitted with heating devices				
	f	suitable for traffic with Great Britain				
	ff	suitable for traffic with Great Britain (by tunnel exclusively)				
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)				
	g	for the transport of gases under pressure, liquefied or dissolved under pressure <sup>a</sup>				
Index letters	i	tank of non-metallic material				
	j	with shock-absorbing device				
	m	with 2 units: $lu \ge 27m$				
	mm	with 2 units: lu < 22m				
	0	with 3 units				
	00	with 4 units or more				
	r	articulated wagon				
	rr	multiple wagon				

**a** The index letter "c" shall not be marked on wagons bearing the index letter "g".



#### 18. LETTER **NVR** SPECIFICATION FOR MARKING FOR **VEHICLE REGISTERS**: APPENDIX 6 HAULED PASSENGER STOCK

An application for a new code is shall be filed with the registrationering entity, (as referred to in the National Vehicle Register specifications A 94-20/2.2012) and which shall sendt it to ERA or the Secretary General. A new code <u>can-may</u> be used only after publication by ERA<sup>18</sup>.

# PART 13 — LETTER MARKING FOR HAULED PASSENGER STOCK

Part 13 is The Agency shall manage the codes for letter marking for hauled passenger stock and publish\_ed-them\_on the ERAits website (www.era.europa.eu).

An application for a new code is shall be filed with the registrationering entity, which shall (as referred to in Decision 2007/756/EC) and sendt it to the **ERAAgency**. A new code can-may be used only after publication by the ERAAgency.

#### Serial letters with an international value:

٨	1st class coach with costs
A	1 <sup>st</sup> class coach with seats
В	2 <sup>nd</sup> class coach with seats
AB	1st /2 <sup>nd</sup> class coach with seats
WL	Sleeping-car with serial letter A, B or AB depending on the type of accommodation
	offered. The serial letters for sleeping-car with "special" compartments are supplemented
	with index-letter "S"
WR	Dining-car
R	Coach with dining-car, buffet or bar compartment (serial-letter used in addition)
D	Van
DD	Open, 2-tier car-carrier van
Post	Mail van
AS	
SR	Bar coach with dancing facilities
WG	
WSP	Pullman coach
Le	Open 2-axle 2-tier car-carrier wagon
Leq	Open 2-axle 2-tier car-carrier wagon fitted with train supply cable
Laeq	Open 3-axle 2-tier car-carrier wagon fitted with train supply cable

#### **Index letters with an international value:**

b h	Coach fitted out to carry disabled passengers
с	Compartments convertible into couchette accommodation
d v	Vehicle fitted to receive bicycles
ee z	Vehicle fitted with central power supply
f	Vehicle fitted with driver's cab (driving trailer)
p t	Centre-aisle coach with seats
m	Vehicle over 24,5 m in length
S	Centre-aisle in vans and coaches with luggage compartment

The number of compartments is shown in the form of an index (for example: Bc9) Serial letters and index letters with a national value

<sup>&</sup>lt;sup>18</sup> For EU Member States the applications should be sent to ERA.

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 The others serial letters and index letters have a national value, defined by each Contracting State.

 Contracting State.

 Member State.