

AS ADOPTED BY THE EU ART. 21 COMMITTEE ON 24.06.2005

ANNEX P: VEHICLE IDENTIFICATION

General remarks:

- 1 – This annex describes the number and linked marking applied in a visible manner on the vehicle to identify it uniquely in operation. It does not describe other numbers or markings eventually engraved or fixed in a permanent manner on the chassis or the main components of the vehicle during its construction.
- 2 – The conformity of the number and linked marking with the indications described in this annex is not mandatory for:
 - vehicles that are only used on networks to which this TSI does not apply;
 - heritage vehicles, in a historical guise;
 - vehicles that are not normally used or transported i on the networks to which this TSI applies.
 Nevertheless, these vehicles must receive a temporary number permitting their operation.
- 3 – This annex is subject to changes due to the future evolution of RIC and future implementation of the TAF TSI.

Standard number and linked abbreviations

Each railway vehicle receives a number consisting of 12 figures (called standard number) with the following structure:

Types of rolling stock	Type of vehicle and indication of the interoperability [2 figures]	Country in which the vehicle is registered [2 figures]	Technical characteristics [4 figures]	Serial number [3 figures]	Self-checking digit [1 figure]
Wagons	00 to 09 10 to 19 20 to 29 30 to 39 40 to 49 80 to 89 <i>[details in annex P.6]</i>	01 to 99 <i>[details in annex P.4]</i>	0000 to 9999 <i>[details in annex P.9]</i>	001 to 999	0 to 9 <i>[details in annex P.3]</i>
Hauled passenger vehicles	50 to 59 60 to 69 70 to 79 <i>[details in annex P.7]</i>		0000 to 9999 <i>[details in annex P.10]</i>	001 to 999	
Tractive rolling stock	90 to 99 <i>[details in annex P.8]</i>		0000001 to 8999999 <i>[the meaning of these figures is defined by the Member States, eventually by bilateral or multilateral agreement]</i>		
Special vehicles			9000 to 9999 <i>[details in annex P.11]</i>	001 to 999	

In a given country, the 7 digits of technical characteristics and serial number are sufficient to identify uniquely a vehicle inside each group of wagons, hauled passenger vehicles, tractive rolling stock¹ and special vehicles².

Alphabetical markings complete the number:

- a) markings linked to the interoperability ability (*details in annex P.5*);
- b) abbreviation of the country in which the vehicle is registered (*details in annex P.4*);
- c) keeper's³ abbreviation (*details in annex P.1*);
- d) abbreviation of the technical characteristics (*details in annex P.13 for the hauled passenger vehicles, annex P.12 for the wagons, annex P.14 for the special vehicles*).

Technical characteristics, codes and abbreviations are managed by one or more bodies (hereafter designed as "central body") to be proposed by ERA (European Railway Agency) as a result of activity N° 15 of its work programme 2005.

Allocation of number

The rules for the management of the numbers will be proposed by the ERA as part of the activity N°15 of its work programme 2005.

¹ For tractive rolling stock, the number has to be unique in a given country with 6 digits.

² 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.

³ A vehicle keeper is the person, who being the owner or having the right to dispose of it, exploits a vehicle economically in a permanent manner as a means of transport and is registered as such in the Rolling Stock Register.

KEEPER'S ABBREVIATION MARKING

Definition of the Vehicle Keeper Marking (VKM)

A Vehicle Keeper Marking (VKM) is an alphanumeric code, consisting of 2 to 5 letters⁴. A VKM is inscribed on each rail vehicle, near the vehicle number. The VKM denominates the Vehicle Keeper as registered in the Rolling Stock Register.

A VKM is unique in all countries covered by this TSI and all countries that enter into an agreement that involves the application of the system of vehicle numbering and vehicle keeper marking as described in this TSI.

Format of the Vehicle Keeper Marking

The VKM is representation of the full name or abbreviation of the vehicle keeper, if possible in a recognisable manner. All 26 letters of the Latin alphabet may be used. The letters in the VKM are 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 written name will be ignored.

Letters may contain diacritical signs⁵. Diacritical signs used by these letters are ignored for checking uniqueness.

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 is disregarded for data-processing purposes.

Exemptions for using a Vehicle Keeper Marking

Member States may decide to apply the following exemptions.

A VKM is not required for the vehicles whose numbering system does not follow the present annex (*cf.* general remark, point 2). Nevertheless, adequate information about the identity of the vehicle keeper has to be provided to the organisations involved in their operation over networks to which this TSI applies.

When the full name and address information is inscribed on the vehicle, a VKM is not required for:

- vehicles of keepers with such a limited vehicle fleet that this does not warrant the use of a VKM;
- specialised vehicles for infrastructure maintenance.

A VKM is not required for locomotives, multiple units and passenger vehicles used in national traffic only, when:

- they carry their keeper's logo and that logo contains the same and well recognisable letters as the VKM;
- they carry a well recognisable logo that has been accepted by the competent national authority as an adequate equivalent for the VKM.

When a company logo is applied in addition to the application of a VKM, only the VKM is valid and the logo is disregarded.

Provisions about allocation of Vehicle Keeper Markings

A vehicle keeper can be issued more than one VKM, in case:

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

A single VKM can be issued for a group of companies:

- that belong to single corporate structure that has appointed and mandated one organisation within this structure to handle all issues on behalf of all others;

⁴ For NMBS/SNCB, the use of an encircled single letter B can be continued

⁵ 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.

- that has mandated a separate, single legal entity for handling all issues on their behalf, in which event the legal entity is the keeper.

Register of Vehicle Keeper Markings and procedure for allocation

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

An application for a VKM is filed with the applicant's competent national authority and forwarded to the central body. A VKM can be used only after publication by the central body.

The holder of a VKM must inform the competent national authority when he ends the use of a VKM, and the competent national authority will forward the information to the central body. A VKM will then be revoked once the keeper has proved that the marking has been changed on all vehicles concerned. It will 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 stays valid when the holder changes his name to a name that does not bear resemblance to the VKM.

The first list of VKM will be drafted using existing railway company abbreviations.

The VKM will be applied to all new build wagons after entry into force of the relevant TSIs. Existing wagons will have until end 2014 to comply with VKM marking.

INSCRIPTION OF THE NUMBER AND LINKED ALPHABETICAL MARKING ON THE BODYWORK**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.

Wagons

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

23	TEN	31	TEN	33	TEN	43	(In this case without VKM, full name and address information is inscribed on the vehicle)	
80	<u>D</u> -RFC	80	<u>D</u> -DB	84	<u>NL</u> -ACTS	87		<u>F</u>
7369	553-4	0691	235-2	4796	100-8	4273		361-3
Zcs		Tanoos		Slpss		Laeks		

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
TEN	<u>F</u> -SNCF	Ks

When one or more index letters of national significance are inscribed on a wagon, this national marking must be shown after the international letter marking and separated from it by a hyphen.

Coaches and hauled passenger stock

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

<u>F</u> -SNCF	61 87	<u>20 - 72 021 - 7</u>
		B ¹⁰ tu

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 twelve digits of the vehicle number.

In case of coaches with driver's cabin, the number is also written inside the cabin.

Locomotives, power cars and special vehicles

The standard 12-digit number must be marked on each sidewall of the tractive stock used in international service in the following manner:

91 88 0001323-0

The standard 12-digit number is also written inside each cabin of the tractive rolling stock.

The keeper can add, in letters of larger size than the standard 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.

Examples	SP 42037	ES 64 F4 - 099	88 - 1323	473011
	92 51 0042037-9	94 80 0189 999 - 6	91 88 0001323-0	92 87 473011-0 94 79 2 642 185-5

These rules may be altered in bilateral agreements for vehicles existing when the TSI comes into force and assigned to a specific service and where there is no risk of confusion between different stocks operating on the rail networks concerned. The exemption is valid for a period decided upon by the competent national authorities.

The national authority can prescribe that the alphabetic country code and the VKM be recorded additional to the 12 digit vehicle number.

RULES FOR THE DETERMINATION OF THE CHECK-DIGIT (DIGIT 12)

The check-digit is 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: $6 + 3 + 1 + 6 + 4 + 8 + 7 + 1 + 8 + 6 + 2 + 0 + 0 = 52$

The units digit of this sum is 2.

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

2 -	Let the basic number be	3 1 5 1 3 3 2 0 1 9 8
	Multiplication factor	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 units digit of this sum is 0.

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

CODING OF THE COUNTRIES IN WHICH THE VEHICLES ARE REGISTERED (DIGITS 3-4 AND ABBREVIATION) “Information relating to third countries given for information purposes only.”

Countries	Alphabetical country code ³	Numerical country code	Companies concerned by the square brackets in annexes P.6 and P.7 ⁴
Albania	AL	41	HSh
Algeria	DZ	92	SNTF
Armenia	AM ¹	58	ARM
Austria	A	81	ÖBB
Azerbaijan	AZ	57	AZ
Belarus	BY	21	BC
Belgium	B	88	SNCB/NMBS
Bosnia-Herzegovina	BIH	44	ŽRS
		50	ŽFBH
Bulgaria	BG	52	BDZ, SRIC
China	RC	33	KZD
Croatia	HR	78	HŽ
Cuba	CU ¹	40	FC
Cyprus	CY		
Czech Republic	CZ	54	ČD
Denmark	DK	86	DSB, BS
Egypt	ET	90	ENR
Estonia	EST	26	EVR
Finland	FIN	10	VR, RHK
France	F	87	SNCF, RFF
Georgia	GE	28	GR
Germany	D	80	DB, AAE ²
Greece	GR	73	CH
Hungary	H	55	MAV, GySEV/ROeEE ²
Iran	IR	96	RAI
Iraq	IRQ ¹	99	IRR
Ireland	IRL	60	CIE
Israel	IL	95	IR
Italy	I	83	FS, FNME ²
Japan	J	42	EJRC
Kazakhstan	KZ	27	KZH
Kyrgyzstan	KS	59	KRG
Latvia	LV	25	LDZ

Countries	Alphabetical country code ³	Numerical country code	Companies concerned by the square brackets in annexes P.6 and P.7 ⁴
Lebanon	RL	98	CEL
Liechtenstein	LIE ¹		
Lithuania	LT	24	LG
Luxembourg	L	82	CFL
Macedonia (Former Yugoslav Republic of)	MK	65	CFARYM (MŽ)
Malta	M		
Moldova	MD ¹	23	CFM
Monaco	MC		
Mongolia	MGL	31	MTZ
Morocco	MA	93	ONCFM
Netherlands	NL	84	NS
North Korea	PRK ¹	30	ZC
Norway	N	76	NSB, JBV
Poland	PL	51	PKP
Portugal	P	94	CP, REFER
Romania	RO	53	CFR
Russia	RUS	20	RZD
Serbia-Montenegro	SCG	72	JŽ
Slovakia	SK	56	ŽSSK, ŽSR
Slovenia	SLO	79	SŽ
South Korea	ROK	61	KNR
Spain	E	71	RENFE
Sweden	S	74	GC, BV
Switzerland	CH	85	SBB/CFE/FFS, BLS ²
Syria	SYR	97	CFS
Tajikistan	TJ	66	TZD
Tunisia	TN	91	SNCFT
Turkey	TR	75	TCDD
Turkmenistan	TM	67	TRK
Ukraine	UA	22	UZ
United Kingdom	GB	70	BR
Uzbekistan	UZ	29	UTI
Vietnam	VN ¹	32	DSVN

- (1) Codes to be confirmed.
- (2) Until the evolutions indicated in point 3 of the general remarks come into force, these companies can use the codes 43 (GySEV/ROeEE), 63 (BLS), 64 (FNME), 68 (AAE). The period of updating will then be defined together with the concerned Member States.
- (3) 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.
- (4) Companies who, at the time of coming into force, were members of UIC or OSJD and used the described country code as company code.

ALPHABETICAL MARKING OF THE INTEROPERABILITY CAPABILITY

TEN: Vehicle which complies with Rolling Stock TSI

RIV: Wagon, which complies with the RIV regulations at the date of their abolishment

PPW: Wagon which complies with PPW agreement (inside OJSD States)

RIC: Coach which complies/complied with RIC regulations

The alphabetical marking of the interoperability capability concerning special vehicles is described in annex P.14.

INTEROPERABILITY CODES USED FOR WAGONS (DIGITS 1-2).

		2 nd digit		0	1	2	3	4	5	6	7	8	9	2 nd digit	
		1 st digit		fixed or variable	fixed	variable	fixed	variable	fixed	variable	fixed	variable	fixed or variable	1 st digit	
		Gauge		fixed or variable	fixed	variable	fixed	variable	fixed	variable	fixed	variable	fixed or variable	Gauge	
TSI ^a and/or COTIF ^b and/or PPW	0	with axles	Spare	Wagons used by industry	TSI and/or COTIF wagons ^b <i>[of which keeper is a railway undertaking listed in annex P.4]</i>		Not to be used pending further decision						PPW wagons (variable gauge)	with axles	0
	1	with bogies												with bogies	1
	2	with axles	Spare	TSI and/or COTIF wagon ^b <i>[of which keeper is a railway undertaking listed in annex P.4]</i>	TSI and/or COTIF wagons ^b PPW wagons			Others TSI and/or COTIF wagons ^b PPW wagons			PPW wagons (fixed gauge)	with axles	2		
	3	with bogies										with bogies	3		
Non TSI and non COTIF ^b and non PPW	4	with axles ^c	Service wagons	Others wagons <i>[of which keeper is a railway undertaking listed in annex P.4]</i>		Others wagons						Wagons with special numbering for technical characteristics	with axles ^c	4	
	8	with bogies ^c											with bogies ^c	8	
		Traffic		Domestic traffic or international traffic by special agreement	International traffic by special agreement	Domestic traffic	International traffic by special agreement	Domestic traffic	International traffic by special agreement	Domestic traffic	International traffic by special agreement	Domestic traffic	Domestic traffic or international traffic by special agreement	Traffic	
		1 st digit	2 nd digit	0	1	2	3	4	5	6	7	8	9	1 st digit	2 nd digit

- a. Compliance at least with Rolling Stock TSI.
- b. Including vehicles, which according to existing regulations carry these digits at the time of coming into force of these new regulations.
- c. Fixed or variable gauge.
- d. Excepted for wagons in category I (temperature-controlled wagons).

INTERNATIONAL TRAFFIC ABILITY CODES USED FOR HAULED PASSENGER VEHICLES (DIGITS 1-2)

Warning:

The conditions between square brackets are transitional and will be deleted with the evolutions of RIC (see general remarks, point 3).

	Domestic traffic	TSI ^a and/or RIC/COTIF ^b and/or PPW				Domestic traffic or international traffic by special agreement	TSI ^a and/or RIC/COTIF ^b	PPW		
2 nd digit 1 st digit	0	1	2	3	4	5	6	7	8	9
5	Vehicles for domestic traffic <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Fixed-gauge non air-conditioned vehicles (including car-carrying wagons) <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Gauge-adjustable (1435/1520) non air-conditioned vehicles <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Reserved	Gauge-adjustable (1435/1672) non air-conditioned vehicles <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Vehicles with special numbering for technical characteristics	Fixed-gauge vehicles	Fixed-gauge vehicles	Gauge-adjustable (1435/1520) vehicles with change of bogies	Gauge-adjustable (1435/1520) vehicles with gauge-adjustable axles
6	Service vehicles not run in revenue-earning service	Fixed-gauge air-conditioned vehicles <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Gauge-adjustable (1435/1520) air-conditioned vehicles <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Service vehicles not run in revenue-earning service <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Gauge-adjustable (1435/1672) air-conditioned vehicles <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Car-carrying wagons	Gauge-adjustable vehicles			
7	Air-conditioned and pressure-tight vehicles <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Reserved	Reserved	Pressure-tight fixed-gauge air-conditioned vehicles <i>[of which keeper is a RIC railways undertaking listed in annex P.4]</i>	Reserved	Other vehicles	Reserved	Reserved	Reserved	Reserved

- a. Compliance at least with future TSI on hauled passenger vehicles.
- b. Compliance with RIC or COTIF according to the regulation in force.

TYPES OF TRACTIVE STOCK (DIGITS 1-2)

The first digit is “9”.

The second digit is defined by each Member State. It can for example fit with the self-checking digit if this digit is also calculated with the serial number.

If the second digit describes the type of tractive stock, following coding is mandatory:

<i>Code</i>	<i>General vehicle type</i>
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	Maintenance vehicle

STANDARD NUMERICAL MARKING OF WAGONS (DIGITS 5 TO 7)

This annex indicates in tables the numerical marking in 4 figures associated to the main technical characteristics of the wagon.

This Annex is distributed on a separate medium (electronic file).

CODES FOR THE TECHNICAL CHARACTERISTICS OF THE HAULED PASSENGER STOCK (DIGITS 5-6)

	6 th digit 5 th digit	0	1	2	3	4
Reserved	0	Reserved	Reserved	Reserved	Reserved	Reserved
Vehicles with 1 st class seats	1	10 side-corridor compartments or equivalent open-saloon space with centre aisle	≥ 11 side-corridor compartments or equivalent open-saloon space with centre aisle	Reserved	Reserved	Two or three axles
Vehicles with 2 nd class seats	2	10 side-corridor compartments or equivalent open-saloon space with centre aisle	11 side-corridor compartments or equivalent open-saloon space with centre aisle	≥ 12 side-corridor compartments or equivalent open-saloon space with centre aisle	Three axles	Two axles
Vehicles with 1st or 1 st /2 nd class seats	3	10 side-corridor compartments or equivalent open-saloon space with centre aisle	11 side-corridor compartments or equivalent open-saloon space with centre aisle	≥ 12 side-corridor compartments or equivalent open-saloon space with centre aisle	Reserved	Two or three axles
1 st or 1 st /2 nd class couchette cars	4	10 1 st /2 nd class compartments	Reserved	Reserved	Reserved	≤ 9 1 st /2 nd class compartments
2 nd class couchette cars	5	10 compartments	11 compartments	≥ 12 compartments	Reserved	Reserved
Reserved	6	Reserved	Reserved	Reserved	Reserved	Reserved
Sleeping cars	7	10 compartments	11 compartments	12 compartments	Reserved	Reserved
Vehicles of special design and vans	8	Driving trailer with seats, all classes, with or without luggage compartment, with driving cab for reversible working	Vehicles with 1 st or 1 st /2 nd class seats with luggage or mail compartment	Vehicles with 2 nd class seats with luggage or mail compartment	Reserved	Vehicles with seats, all classes with specially-fitted areas, e.g. children's play area
	9	Mail vans	Luggage vans with mail compartment	Luggage vans	Luggage vans and two or three-axle 2nd 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.

Annex P.10 (CONTINUATION)

CODES FOR THE TECHNICAL CHARACTERISTICS OF THE HAULED PASSENGER STOCK (DIGITS 5-6)

	6 th digit 5 th digit	5	6	7	8	9
Reserved	0	Reserved	Reserved	Reserved	Reserved	Reserved
Vehicles with 1 st 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 nd 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 st or 1 st /2 nd 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 st or 1 st /2 nd class couchette cars	4	Reserved	Reserved	Reserved	Reserved	≤ 9 1 st class compartments
2 nd class couchette cars	5	Reserved	Reserved	Reserved	Reserved	≤ 9 compartments
Reserved	6	Reserved	Reserved	Reserved	Reserved	Reserved
Sleeping cars	7	> 12 compartments	Reserved	Reserved	Reserved	Reserved
Vehicles of special design and vans	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)
	9	Two or three-axle luggage vans with mail compartment	Reserved	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.

Annex P.10 (CONTINUATION)

CODES FOR THE GENERAL CHARACTERISTICS OF HAULED PASSENGER STOCK (DIGITS 7-8)

Energy supply	8 th digit	0	1	2	3	4	5	6	7	8	9
Maximum speed	7 th digit										
< 120 km/h	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
	1	All tensions * + Steam ¹	1000 V~ + Steam ¹	1000 V~ + Steam ¹	1000 V~ + Steam ¹	1000 V~ + Steam ¹	1000 V~ + Steam ¹	Reserved	1500 V~ + 1500 V= + Steam ¹	3000 V= + Steam ¹	3000 V= + Steam ¹
	2	Steam ¹	Steam ¹	3000 V~ + 3000 V= + Steam ¹	Steam ¹	3000 V~ + 3000 V= + Steam ¹	Steam ¹	3000 V~ + 3000 V= + Steam ¹	1500 V~ + Steam ¹	1500 V~ + Steam ¹	A ¹
121 to 140 km/h	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=
	4	All tensions * + Steam ¹	All tensions + Steam ¹	All tensions + Steam ¹	1000 V~ * ¹ + Steam ¹	1500 V~ + 1500 V=	1000 V~ + Steam ¹	3000 V~ + 3000 V=	1500 V~ + 1500 V= + Steam ¹	3000 V= + Steam ¹	Reserved
	5	All tensions * + Steam ¹	All tensions + Steam ¹	All tensions + Steam ¹	1000 V~ + Steam ¹	Reserved	1500 V~ + Steam ¹	Other tensions than 1000 V, 1500 V, 3000 V	1500 V~ + 1500 V= + Steam ¹	Reserved	Reserved
	6	Steam ¹	Reserved	3000 V~ + 3000 V=	Reserved	3000 V~ + 3000 V=	Reserved	Steam ¹	Reserved	Reserved	A ¹
141 to 160 km/h	7	All tensions *	All tensions	1500 V~ ¹ + 3000 V= ¹ All tensions ²	1000 V~ *	1500 V~ + 1500 V=	1000 V~	1500 V~	1500 V~ + 1500 V=	3000 V=	3000 V=
	8	All tensions * + Steam ¹	All tensions + Steam ¹	3000 V~ + 3000 V=	Reserved	All tensions * + Steam ¹	1000 V~ + Steam ¹	3000 V~ + 3000 V=	Other tensions than 1000 V, 1500 V, 3000 V	All tensions * + Steam ¹	A ¹ G ²
> 160 km/h	9	All tensions * ²	All tensions	All tensions + Steam ¹	1000 V~ + 1500 V~	1000 V~	1000 V~	Reserved	1500 V~ + 1500 V=	3000 V=	A ¹ G ²

¹ Only for domestic traffic vehicles

² 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.

CODES FOR THE TECHNICAL CHARACTERISTICS OF THE SPECIAL VEHICLES (DIGIT 6 TO 8)**Authorised speed for special vehicles (digit 6)**

Classification		Self-propelled travelling speed			
		≥ 100 km/h	< 100 km/h	0 km/h	
Can be put into a train	V ≥ 100 km/h	Self-propelled	1	2	
		Non self-propelled			3
	V < 100 km/h and/or restrictions ^a	Self-propelled		4	
		Non self-propelled			5
Cannot be put into a train		Self-propelled		6	
		Non self-propelled			7
Self-propelled rail/road vehicle than can be put into a train ^b			8		
Self-propelled rail/road vehicle than cannot be put into a train ^b			9		
Non self-propelled rail/road vehicle ^b				0	

- 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.

Annex P.11 (CONTINUATION)

TYPE AND SUB-TYPE OF SPECIAL VEHICLE (DIGITS 7-8)

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

7th digit	8th digit	Vehicles / machines
6 Measuring	1	Earthworks recording car
	2	Track recording car
	3	Overhead line recording car
	4	Gauge recording car
	5	Signalling recording car
	6	Telecommunications recording car
	7	
	8	
	9	
	0	Other
7 Emergency	1	Emergency crane
	2	Emergency haulage car
	3	Emergency tunnel train
	4	Emergency car
	5	Fire car
	6	Sanitary vehicle
	7	Equipment car
	8	
	9	
	0	Other
8 Traction, transport, energy, etc.	1	
	2	Tractive units
	3	Transport car (excl. 59)
	4	Power car
	5	
	6	Track car / powered car
	7	Concreting train
	8	
	9	
	0	Other
9 Environment	1	Self-propelled snow plough
	2	Hauled snow plough
	3	Snow broom
	4	De-icing machine
	5	Weed-killing machine
	6	Rail cleaning machine
	7	
	8	
	9	
	0	Other
0 Rail/road	1	
	2	Category 1 rail/road machine
	3	
	4	Category 2 rail/road machine
	5	
	6	Category 3 rail/road machine
	7	
	8	Category 4 rail/road machine
	9	
	0	Other

LETTER MARKING FOR WAGONS EXCLUDING 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);
- 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 under "s" conditions (see annex B of Rolling Stock TSI)
- ss wagons authorised to run under "ss" conditions (see annex B of Rolling Stock TSI)

3. Index letters with an national value

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

The value of these letters is defined by each Member State.

CATEGORY LETTER: E - OPEN HIGH-SIDED WAGON

Reference wagon	of ordinary type, with side and end tipping, with flat floor with 2 axles: $lu \geq 7,70$ m; $25 t \leq tu \leq 30 t$ with 4 axles: $lu \geq 12$ m; $50 t \leq tu \leq 60 t$ with 6 axles or more: $lu \geq 12$ m; $60t \leq tu \leq 75 t$	
Index letters	a	with 4 axles
	aa	with 6 axles or more
	c	with floor traps ^a
	k	with 2 axles: $tu < 20 t$ with 4 axles: $tu < 40 t$ with 6 axles or more: $tu < 50 t$
	kk	with 2 axles: $20 t \leq tu < 25 t$ with 4 axles: $40 t \leq tu < 50 t$ with 6 axles or more: $50 t \leq tu < 60 t$
	l	without side tipping
	ll	without floor traps ^b
	m	with 2 axles: $lu < 7,70$ m with 4 axles or more: $lu < 12$ m
	mm	with 4 axles or more: $lu > 12$ m ^b
	n	with 2 axles: $tu > 30 t$ with 4 axles: $tu > 60 t$ with 6 axles or more: $tu > 75 t$
	o	without end tipping
p	with station for brakeman ^b	
<p>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.</p> <p>b. Only applicable to wagons with gauge of 1520 mm.</p>		

CATEGORY LETTER: F - OPEN HIGH-SIDED WAGON

<i>Reference wagon</i>	Of special type with 2 axles: 25 t ≤ tu ≤ 30 t with 3 axles: 25 t ≤ tu ≤ 40 t with 4 axles: 50 t ≤ tu ≤ 60 t with 6 axles or more: 60 t ≤ tu ≤ 75 t	
Index letters	a	with 4 axles
	aa	with 6 axles or more
	b	high capacity with axles (volume > 45 m ³)
	c	with controlled gravity unloading, on both sides, alternately, at the top ^a
	cc	with controlled gravity unloading, on both sides, alternately, at the bottom ^a
	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)
	k	with 2 or 3 axles: tu < 20 t with 4 axles: tu < 40 t with 6 axles or more: tu < 50 t
	kk	with 2 or 3 axles: 20 t ≤ tu < 25 t with 4 axles: 40 t ≤ tu < 50 t with 6 axles or more: 50 t ≤ tu < 60 t
	l	with bulk gravity unloading, on both sides, simultaneously, at the top ^a
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^a
	n	with 2 axles: tu > 30 t with 3 axles or more: tu > 40 t with 4 axles: tu > 60 t with 6 axles or more: tu > 75 t
	o	with axial bulk gravity unloading, at the top ^a
	oo	with axial bulk gravity unloading, at the bottom ^a
p	with axial controlled gravity unloading, at the top ^a	
pp	with axial controlled gravity unloading, at the bottom ^a	
ppp	with station for brakeman ^b	
<p>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.</p> <p>b. Only applicable to wagons with gauge of 1520 mm.</p>		
<p>The method of unloading these wagons is defined by a combination of the following characteristics:</p> <p><i>Arrangement of the unloading apertures:</i></p> <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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 <p><i>Rate of unloading:</i></p> <ul style="list-style-type: none"> - 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: G - COVERED WAGON

<i>Reference wagon</i>		Of ordinary type with at least 8 ventilation apertures with 2 axles: $9\text{ m} \leq lu < 12\text{ m}$; $25\text{ t} \leq tu \leq 30\text{ t}$ with 4 axles: $15\text{ m} \leq lu < 18\text{ m}$; $50\text{ t} \leq tu \leq 60\text{ t}$ with 6 axles or more: $15\text{ m} \leq lu < 18\text{ m}$; $60\text{ t} \leq tu \leq 75\text{ t}$
Index letters	a	with 4 axles
	aa	with 6 axles or more
	b	high capacity: - with 2 axles: $lu \geq 12\text{ m}$ and payload capacity $\geq 70\text{ m}^3$ - with 4 axles or more: $lu \geq 18\text{ m}$
	bb	with 4 axles: $lu > 18\text{ m}$ ^a
	g	for grain
	h	for fruits and vegetables ^b
	k	with 2 axles: $tu < 20\text{ t}$ with 4 axles: $tu < 40\text{ t}$ with 6 axles or more: $tu < 50\text{ t}$
	kk	with 2 axles: $20\text{ t} \leq tu < 25\text{ t}$ with 4 axles: $40\text{ t} \leq tu < 50\text{ t}$ with 6 axles or more: $50\text{ t} \leq tu < 60\text{ t}$
	l	with less than 8 ventilation apertures
	ll	with enlarged doors apertures ^a
	m	with 2 axles: $lu < 9\text{ m}$ with 4 axles or more: $lu < 15\text{ m}$
	n	with 2 axles: $tu > 30\text{ t}$ with 4 axles: $tu > 60\text{ t}$ with 6 axles or more: $tu > 75\text{ t}$
	o	with 2 axles: $lu < 12\text{ m}$ and payload capacity $\geq 70\text{ m}^3$
p	with station for brakeman ^a	
<p>a. Only applicable to wagons with gauge of 1520 mm.</p> <p>b. The concept "for fruits and vegetables" applies only to wagons provided with additional ventilation apertures at the floor level.</p>		

CATEGORY LETTER: H - COVERED WAGON

<i>Reference wagon</i>	of special type with 2 axles: $9\text{ m} \leq lu \leq 12\text{ m}$; $25\text{ t} \leq tu \leq 28\text{ t}$ with 4 axles: $15\text{ m} \leq lu < 18\text{ m}$; $50\text{ t} \leq tu \leq 60\text{ t}$ with 6 axles or more: $15\text{ m} \leq lu < 18\text{ m}$; $60\text{ t} \leq tu \leq 75\text{ t}$	
Index letters	a	with 4 axles
	aa	with 6 axles or more
	b	with 2 axles: $12\text{ m} \leq lu \leq 14\text{ m}$ and payload capacity $\geq 70\text{ m}^3$ ^a with 4 axles or more: $18\text{ m} \leq lu < 22\text{ m}$
	bb	with 2 axles: $lu \geq 14\text{ m}$ with 4 axles or more: $lu \geq 22\text{ m}$
	c	with end doors
	cc	with end doors and fitted internally for the transport of motor cars
	d	with floor traps
	dd	with tipping body ^b
	e	with 2 floors
	ee	with 3 floors or more
	f	suitable for traffic with Great Britain ^a
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively) ^a
	g	for grain
	gg	for cement ^b
	h	for fruits and vegetables ^c
	hh	for mineral fertilizer ^b
	i	with opening or shunt walls
	ii	with very robust opening or shunt walls ^d
	k	with 2 axles: $tu < 20\text{ t}$ with 4 axles: $tu < 40\text{ t}$ with 6 axles or more: $tu < 50\text{ t}$
kk	with 2 axles: $20\text{ t} \leq tu < 25\text{ t}$ with 4 axles: $40\text{ t} \leq tu < 50\text{ t}$ with 6 axles or more: $50\text{ t} \leq tu < 60\text{ t}$	
l	with movable partitions ^e	
ll	with lockable movable partitions ^e	
m	with 2 axles: $lu < 9\text{ m}$ with 4 axles or more: $lu < 15\text{ m}$	
mm	with 4 axles or more: $lu > 18\text{ m}$ ^b	
n	with 2 axles: $tu > 28\text{ t}$ with 4 axles: $tu < 60\text{ t}$ with 6 axles or more: $tu > 75\text{ t}$	
o	with 2 axles: $lu\ 12\text{ m} < 14\text{ m}$ et volume utile $\geq 70\text{ m}^3$	
p	with station for brakeman ^b	
<p>a. 2-axle wagons bearing the index letters "f", "fff" can have a payload capacity less than 70 m^3.</p> <p>b. Only applicable to wagons with gauge of 1520 mm.</p> <p>c. The concept « for fruits and vegetables » applies only to wagons provided with additional ventilation apertures at the floor level.</p> <p>d. Only applicable to wagons with gauge of 1435 mm.</p> <p>e. Movable partitions may be dismantled temporarily.</p>		

CATEGORY LETTER: I - TEMPERATURE-CONTROLLED WAGON

Reference wagon	refrigerator wagon with class IN thermal insulation, with motor-driven ventilation, with gratings and ice bunker $\geq 3,5 \text{ m}^3$ with 2 axles: $19 \text{ m}^2 \leq \text{floor area} < 22 \text{ m}^2$; $15 \text{ t} \leq \text{tu} \leq 25 \text{ t}$ with 4 axles: floor area $\geq 39 \text{ m}^2$; $30 \text{ t} \leq \text{tu} \leq 40 \text{ t}$	
Index letters	a	with 4 axles
	b	with 2 axles and large floor area: $22 \text{ m}^2 \leq \text{floor area} \leq 27 \text{ m}^2$
	bb	with 2 axles and very large floor area: floor area $> 27 \text{ m}^2$
	c	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 ^{a b}
	gg	refrigerator with liquefied gas ^a
	h	with class IR thermal insulation
	i	mechanically refrigerated by the machinery of an accompanying technical wagon ^{a b c}
	ii	accompanying technical wagon ^{a c}
	k	with 2 axles: tu $> 15 \text{ t}$ with 4 axles: tu $< 30 \text{ t}$
	l	insulated without ice bunkers ^{a d}
m	with 2 axles: floor area $< 19 \text{ m}^2$ with 4 axles: floor area $< 39 \text{ m}^2$	
mm	with 4 axles: floor area $\geq 39 \text{ m}^2$ ^e	
n	with 2 axles: tu $> 25 \text{ t}$ with 4 axles; tu $> 40 \text{ t}$	
o	with ice bunkers of capacity less than $3,5 \text{ m}^3$ ^d	
p	without gratings	
<p>a. The index letter "l" shall not be marked on wagons bearing the index letters "g", "gg", "i" or "ii".</p> <p>b. Wagons bearing both the index letters "g" and "i" can be used individually or in a mechanically refrigerated raft.</p> <p>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.</p> <p>d. The index letter "o" shall not be marked on wagons bearing the index letter "l".</p> <p>e. Only applicable to wagons with gauge of 1520 mm.</p> <p>Note: The floor area of covered refrigerator wagons is always determined taking into account the use of ice bunkers.</p>		

CATEGORY LETTER: K - 2-AXLE FLAT WAGON

Reference wagon		Of ordinary type with drop sides and short stanchions $lu \geq 12 \text{ m}; 25 \text{ t} \leq tu \leq 30 \text{ t}$
Index letters	b	with long stanchions
	g	fitted for the transport of containers ^a
	i	with removable cover and non-removable ends ^b
	j	with shock-absorbing device
	k	$tu < 20 \text{ t}$
	kk	$20 \text{ t} \leq tu < 25 \text{ t}$
	l	without stanchions
	m	$9 \text{ m} \leq lu < 12 \text{ m}$
	mm	$lu < 9 \text{ m}$
	n	$tu > 30 \text{ t}$
	o	with non-removable sides
	p	without sides ^b
	pp	with removable sides
<p>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.</p> <p>b. The index letter "p" shall not be marked on wagons bearing index letter "i".</p>		

CATEGORY LETTER: L - 2-AXLE FLAT WAGON

Reference wagon	of special type $lu \geq 12 \text{ m}; 25 \text{ t} \leq tu \leq 30 \text{ t}$	
Index letters	b	with special fittings for securing purposes for medium-sized containers (pa) ^a
	c	with swivelling bolster ^a
	d	fitted out for the transport of motor cars, without deck ^a
	e	with decks for the transport of motor cars ^a
	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) ^{a b}
	h	fitted out for the transport of steel coils, eye to side ^{a c}
	hh	fitted out for the transport of steel coils, eye to sky ^{a c}
	i	with removable cover and non-removable ends ^a
	ii	with very robust removable metallic cover ^d and non-removable ends ^a
	j	with shock-absorbing device
	k	$tu < 20 \text{ t}$
	kk	$20 \text{ t} \leq tu < 25 \text{ t}$
	l	without stanchions ^a
	m	$9 \text{ m} \leq lu < 12 \text{ m}$
	mm	$lu < 9 \text{ m}$
n	$tu > 30 \text{ t}$	
p	without sides ^a	
<p>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.</p> <p>b. Wagons used solely for the transport of containers (except pa).</p> <p>c. Wagons used solely for the transport of steel coils.</p> <p>d. Only applicable to wagons with gauge of 1435 mm.</p>		

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

Reference wagon	of ordinary type with 2 or 3 axles, with drop sides or ends and stanchions with 2 axles: $lu \geq 12$ m; 25 t $\leq tu \leq 30$ t with 3 axles: $lu \geq 12$ m; 25 t $\leq tu \leq 40$ t	
Index letters	a	with 3 axles
	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)
	k	$tu < 20$ t
	kk	20 t $\leq tu < 25$ t
	l	without stanchions
	m	9 m $\leq lu < 12$ m
	mm	$lu < 9$ m
	n	with 2 axles: $tu > 30$ t with 3 axles: $tu > 40$ t

CATEGORY LETTER: R - FLAT BOGIES WAGON

Reference wagon	of ordinary type with drop ends and stanchions $18\text{ m} \leq lu < 22\text{ m}$; $50\text{ t} \leq tu \leq 60\text{ t}$	
Index letters	b	$lu \geq 22\text{ m}$
	e	with drop sides
	g	fitted for the transport of containers ^a
	h	fitted out for the transport of steel coils, eye to side ^b
	hh	fitted out for the transport of steel coils, eye to sky ^b
	i	with removable cover and non-removable ends ^c
	j	with shock-absorbing device
	k	$tu < 40\text{ t}$
	kk	$40\text{ t} \leq tu < 50\text{ t}$
	l	without stanchions
	m	$15\text{ m} \leq lu < 18\text{ m}$
	mm	$lu < 15\text{ m}$
	n	$tu > 60\text{ t}$
	o	with non-removable ends less than 2 m in height
	oo	with non-removable ends, 2 m or more in height ^c
	p	without drop ends ^c
pp	with removable sides	
<p>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.</p> <p>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.</p> <p>c. The index letters "oo" and/or "p" shall not be marked on wagons bearing index letter "i".</p>		

CATEGORY LETTER: S - FLAT BOGIES WAGON

Reference wagon	of special type with 4 axles: $lu \geq 18$ m; 50 t \leq $tu \leq 60$ t with 6 axles or more: $lu \geq 22$ m; 60 t \leq $tu \leq 75$ t	
Index letters	a	with 6 axles (2 bogies of 3 axles)
	aa	with 8 axles or more
	aaa	with 4 axles (2 bogies of 2 axles) ^a
	b	with special fittings for securing purposes for medium-sized containers (pa) ^b
	c	with swivelling bolster ^b
	d	fitted out for the transport of motor cars, without deck ^{b c}
	e	with decks for the transport of motor cars ^b
	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 ≤ 60 ' (except pa) ^{b c d}
	gg	fitted for the transport of containers, total loading length > 60 ' (except pa) ^{b c d}
	h	fitted out for the transport of steel coils, eye to side ^{b e}
	hh	fitted out for the transport of steel coils, eye to sky ^{b e}
	i	with removable cover and non-removable ends ^b
	ii	with very robust removable metallic cover ^f and non-removable ends ^b
	j	with shock-absorbing device
	k	with 4 axles: $tu < 40$ t with 6 axles or more: $tu < 50$ t
	kk	with 4 axles: 40 t \leq $tu < 50$ t with 6 axles or more: 50 t \leq $tu < 60$ t
	l	without stanchions ^b
m	with 4 axles: 15 m \leq $lu < 18$ m; with 6 axles or more: 18 m \leq $lu < 22$ m	
mm	with 4 axles: $lu < 15$ m with 6 axles or more: $lu < 18$ m	
mmm	with 4 axles : $lu \geq 22$ m ^a	
n	with 4 axles: $tu > 60$ t with 6 axles or more: $tu > 75$ t	
p	without sides ^b	
<p>a. Only applicable to wagons with gauge of 1520 mm.</p> <p>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.</p> <p>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".</p> <p>d. Wagons used solely for the transport of containers or for transport of swap bodies for grab handling and spreader gripping.</p> <p>e. Wagons used solely for the transport of steel coils.</p> <p>f. Only applicable to wagons with gauge of 1435 mm.</p>		

CATEGORY LETTER: T - WAGON WITH OPENING ROOF

Reference wagon		with 2 axles: $9\text{ m} \leq lu < 12\text{ m}$; $25\text{ t} \leq tu \leq 30\text{ t}$ with 4 axles: $15\text{ m} \leq lu < 18\text{ m}$; $50\text{ t} \leq tu \leq 60\text{ t}$ with 6 axles or more: $15\text{ m} \leq lu < 18\text{ m}$; $60\text{ t} \leq tu \leq 75\text{ t}$
Index letters	a	with 4 axles
	aa	with 6 axles or more
	b	high capacity: with 2 axles: $lu \geq 12\text{ m}$ with 4 axles or more: $lu \geq 18\text{ m}$ ^{a b}
	c	with end doors
	d	with controlled gravity unloading, on both sides, alternately, at the top ^{a b c}
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom ^{a b c}
	e	with unobstructed height of the doors $> 1,90\text{ m}$ ^{a b c}
	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 ^a
	j	with shock-absorbing device
	k	with 2 axles: $tu < 20\text{ t}$ with 4 axles: $tu < 40\text{ t}$ with 6 axles or more: $tu < 50\text{ t}$
	kk	with 2 axles: $20\text{ t} \leq tu < 25\text{ t}$ with 4 axles: $40\text{ t} \leq tu < 50\text{ t}$ with 6 axles or more: $50\text{ t} \leq tu < 60\text{ t}$
	l	with bulk gravity unloading, on both sides, simultaneously, at the top ^{a b c}
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^{a b c}
	m	with 2 axles: $lu < 9\text{ m}$ with 4 axles or more: $lu < 15\text{ m}$ ^b
n	with 2 axles: $tu > 30\text{ t}$ with 4 axles: $tu > 60\text{ t}$ with 6 axles or more: $tu > 75\text{ t}$	
o	with axial bulk gravity unloading, at the top ^{a b c}	
oo	with axial bulk gravity unloading, at the bottom ^{a b c}	
p	with axial controlled gravity unloading, at the top ^{a b c}	
pp	with axial controlled gravity unloading, at the bottom ^{a b c}	
<p>a. Index letter "e":</p> <ul style="list-style-type: none"> - 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", "j", "l", "o", "oo", "p" or "pp". <p>b. Index letter "b" and "m" shall not be marked on wagons bearing the index letters "d", "dd", "l", "ll", "o", "oo", "p" or "pp".</p> <p>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.</p> <p>The method of unloading these wagons is defined by a combination of the following characteristics:</p> <p><i>Arrangement of the unloading apertures:</i></p> <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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 <p><i>Rate of unloading:</i></p> <ul style="list-style-type: none"> - 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: U - SPECIAL WAGONS

Reference wagon	other than those in categories F, H, L, S ou Z with 2 axles: 25 t ≤ tu ≤ 30 t with 3 axles: 25 t ≤ tu ≤ 40 t with 4 axles: 50 t ≤ tu ≤ 60t with 6 axles or more: 60 t ≤ tu ≤ 75 t	
Index letters	a	with 4 axles
	aa	with 6 axles or more
	c	with unloading under pressure
	d	with controlled gravity unloading, on both sides, alternately, at the top ^a
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom ^a
	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 ^{b c}
	k	with 2 or 3 axles: tu < 20 t with 4 axles: tu < 40 t with 6 axles or more: tu < 50 t
	kk	with 2 or 3 axles: 20 t ≤ tu < 25 t with 4 axles: 40 t ≤ tu < 50 t with 6 axles or more: 50 t ≤ tu < 60 t
	l	with bulk gravity unloading, on both sides, simultaneously, at the top ^a
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^a
	n	with 2 axles: tu > 30 t with 3 axles: tu > 40 t with 4 axles: tu > 60 t with 6 axles or more: tu > 75 t ^c
o	with axial bulk gravity unloading, at the top ^a	
oo	with axial bulk gravity unloading, at the bottom ^a	
p	with axial bulk gravity unloading, at the top ^a	
pp	with axial bulk gravity unloading, at the bottom ^a	
<p>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.</p> <p>b. In particular:</p> <ul style="list-style-type: none"> - well wagons - wagons with a central recess - wagons with an ordinary sloping diagonal permanent control desk <p>c. Index letter "n" shall not be marked on wagons bearing the index letter "i".</p>		
<p>The method of unloading these wagons is defined by a combination of the following characteristics:</p> <p><i>Arrangement of the unloading apertures:</i></p> <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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 <p><i>Rate of unloading:</i></p> <ul style="list-style-type: none"> - 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

Reference wagon	<p style="text-align: center;">with metal shell, for the transport of liquids or gases</p> <p style="text-align: center;">with 2 axles: $25\text{ t} \leq l_u \leq 30\text{ t}$</p> <p style="text-align: center;">with 3 axles: $25\text{ t} \leq t_u \leq 40\text{ t}$</p> <p style="text-align: center;">with 4 axles: $50\text{ t} \leq t_u \leq 60\text{ t}$</p> <p style="text-align: center;">with 6 axles or more: $60\text{ t} \leq t_u \leq 75\text{ t}$</p>	
Index letters	a	with 4 axles
	aa	with 6 axles or more
	b	for oil products ^a
	c	with unloading under pressure ^b
	d	for food and chemical products ^a
	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 ^b
	i	tank of non-metallic material
	j	with shock-absorbing device
	k	with 2 or 3 axles: $t_u < 20\text{ t}$ with 4 axles: $t_u < 40\text{ t}$ with 6 axles or more: $t_u < 50\text{ t}$
kk	with 2 or 3 axles: $20\text{ t} \leq t_u < 25\text{ t}$ with 4 axles: $40\text{ t} \leq t_u < 50\text{ t}$ with 6 axles or more: $50\text{ t} \leq t_u < 60\text{ t}$	
n	with 2 axles: $t_u > 30\text{ t}$ with 3 axles: $t_u > 40\text{ t}$ with 4 axles: $t_u > 60\text{ t}$ with 6 axles or more: $t_u > 75\text{ t}$	
p	with station for brakeman ^a	
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

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 under "s" conditions (see annex B of rolling stock STI)

ss wagons authorised to run under "ss" conditions (see annex B of rolling stock STI)

3. Index letters with a national value

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

The value of these letters is defined by each Member State.

CATEGORY LETTER: F - OPEN HIGH-SIDED WAGON

Reference wagon	Articulated or multiple wagon with axles, with 2 units $22\text{ m} \leq lu < 27\text{ m}$	
Index letters	a	with bogies
	c	with controlled gravity unloading, on both sides, alternately, at the top ^a
	cc	with controlled gravity unloading, on both sides, alternately, at the bottom ^a
	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)
	l	with bulk gravity unloading, on both sides, simultaneously, at the top ^a
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^a
	m	with 2 units: $lu \geq 27\text{ m}$
	mm	with 2 units: $lu < 22\text{ m}$
	o	with axial bulk gravity unloading, at the top ^a
	oo	with axial bulk gravity unloading, at the bottom ^a
	p	with axial controlled gravity unloading, at the top ^a
	pp	with axial controlled gravity unloading, at the bottom ^a
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:		
<i>Arrangement of the unloading apertures:</i>		
- 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	
<i>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	

CATEGORY LETTER: H - COVERED WAGON

Reference wagon	articulated or multiple wagon with axles, with 2 units $22\text{ m} \leq lu < 27\text{ m}$	
Index letters	a	with bogies
	c	with end doors
	cc	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)
	g	for grain
	h	for fruits and vegetables ^a
	i	with opening or shunt walls
	ii	with very robust opening or shunt walls ^b
	l	with movable partitions ^c
	ll	with lockable movable partitions ^c
	m	with 2 units: $lu \geq 27\text{ m}$
	mm	with 2 units: $lu < 22\text{ m}$
	r	articulated wagon
rr	multiple wagon	
<p>a. The concept "for fruits and vegetables" applies only to wagons provided with additional ventilation apertures at the floor level.</p> <p>b. Only applicable to wagons with gauge of 1435 mm.</p> <p>c. Movable partitions may be dismantled temporarily.</p>		

CATEGORY LETTER: I - TEMPERATURE CONTROLLED WAGON

Reference wagon	refrigerator wagon with class IN thermal insulation, with motor-driven ventilation, with gratings and ice bunker $\geq 3,5 \text{ m}^3$ articulated or multiple wagon with axles, with 2 units $22 \text{ m} \leq \text{lu} < 27 \text{ m}$	
Index letters	a	with bogies
	c	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 ^a
	gg	refrigerator with liquefied gas ^a
	h	with class IR thermal insulation
	i	mechanically refrigerated by the machinery of an accompanying technical wagon ^{a b}
	ii	accompanying technical wagon ^{a b}
	l	insulated without ice bunkers ^{a c}
	m	with 2 units: $\text{lu} \geq 27 \text{ m}$
	mm	with 2 units: $\text{lu} < 22 \text{ m}$
	o	with ice bunkers of capacity less than $3,5 \text{ m}^3$ ^c
	oo	with 3 units
p	without gratings	
r	articulated wagon	
rr	multiple wagon	
<p>a. The index letter "l" shall not be marked on wagons bearing the index letters "g", "gg", "i" or "ii".</p> <p>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.</p> <p>c. The index letter "o" shall not be marked on wagons bearing the index letter "l".</p>		

CATEGORY LETTER: L - FLAT WAGON WITH SEPARATE AXLES

Reference wagon	articulated or multiple wagon with 2 units $22\text{ m} \leq lu < 27\text{ m}$	
Index letters	a	articulated wagon
	aa	multiple wagon
	b	with special fittings for securing purposes for medium-sized containers (pa) ^a
	c	with swivelling bolster ^a
	d	fitted out for the transport of motor cars, without deck ^a
	e	with decks for the transport of motor cars ^a
	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 ^{a b}
	h	fitted out for the transport of steel coils, eye to side ^{a c}
	hh	fitted out for the transport of steel coils, eye to sky ^{a c}
	i	with removable cover and non-removable ends ^a
	ii	with very robust removable metallic cover ^d and non-removable ends ^a
	j	with shock-absorbing device
	l	without stanchions ^a
	m	with 2 units: $18\text{ m} \leq lu < 22\text{ m}$
	mm	with 2 units: $lu < 18\text{ m}$
o	with 3 units	
oo	with 4 units or more	
p	without sides ^a	
r	with 2 units: $lu \geq 27\text{ m}$	
<p>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.</p> <p>b. Wagons used solely for the transport of containers (except pa).</p> <p>c. Wagons used solely for the transport of steel coils.</p> <p>d. Only applicable to wagons with gauge of 1435 mm.</p>		

CATEGORY LETTER: S - FLAT BOGIE WAGON

Reference wagon	articulated or multiple wagon with 2 units $22\text{ m} \leq \text{lu} < 27\text{ m}$	
Index letters	b	with special fittings for securing purposes for medium-sized containers (pa) ^a
	c	with swivelling bolster ^a
	d	fitted out for the transport of motor cars, without deck ^{a b}
	e	with decks for the transport of motor cars ^a
	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) ^{a b c}
	gg	fitted for the transport of containers, total loading length $> 60'$ (except pa) ^{a b c}
	h	fitted out for the transport of steel coils, eye to side ^{a d}
	hh	fitted out for the transport of steel coils, eye to sky ^{a d}
	i	with removable cover and non-removable ends ^a
	ii	with very robust removable metallic cover ^e and non-removable ends ^a
	j	with shock-absorbing device
	l	without stanchions ^a
	m	with 2 units: $\text{lu} \geq 27\text{ m}$
	mm	with 2 units: $\text{lu} < 22\text{ m}$
	o	with 3 units
	oo	with 4 units or more
p	without sides ^a	
r	articulated wagon	
rr	multiple wagon	
<p>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.</p> <p>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".</p> <p>c. Wagons used solely for the transport of containers or for transport of swap bodies for grab handling and spreader gripping.</p> <p>d. Wagons used solely for the transport of steel coils.</p> <p>e. Only applicable to wagons with gauge of 1435 mm.</p>		

CATEGORY LETTER: T - WAGON WITH OPENING ROOF

Reference wagon	articulated or multiple wagon with axles, with 2 units $22\text{ m} \leq lu < 27\text{ m}$	
Index letters	a	with bogies
	b	with unobstructed height of doors $> 1,90\text{ m}^a$
	c	with end doors
	d	with controlled gravity unloading, on both sides, alternately, at the top ^{a b}
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom ^{a b}
	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)
	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 ^a
	j	with shock-absorbing device
	l	with bulk gravity unloading, on both sides, simultaneously, at the top ^{a b}
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^{a b}
	m	with 2 units: $lu \geq 27\text{ m}$
	mm	with 2 units: $lu < 22\text{ m}$
	o	with axial bulk gravity unloading, at the top ^{a b}
oo	with axial bulk gravity unloading, at the bottom ^{a b}	
p	with axial controlled gravity unloading, at the top ^{a b}	
pp	with axial controlled gravity unloading, at the bottom ^{a b}	
r	articulated wagon	
rr	multiple wagon	
<p>a. Index letter "b" shall not be marked on wagons bearing the index letters "d", "dd", "i", "l", "ll", "o", "oo", "p" or "pp".</p> <p>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.</p>		
<p>The method of unloading these wagons is defined by a combination of the following characteristics:</p> <p><i>Arrangement of the unloading apertures:</i></p> <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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 <p><i>Rate of unloading:</i></p> <ul style="list-style-type: none"> - 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: U - SPECIAL WAGONS

Reference wagon	<i>articulated or multiple wagon, with axles, with 2 units $22\text{ m} \leq lu < 27\text{ m}$</i>	
Index letters	a	with bogies
	e	with 3 units
	ee	with 4 units or more
	c	with unloading under pressure
	d	with controlled gravity unloading, on both sides, alternately, at the top ^a
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom ^a
	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 ^b
	l	with bulk gravity unloading, on both sides, simultaneously, at the top ^a
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^a
	m	with 2 units: $lu \geq 27\text{ m}$
	mm	with 2 units: $lu < 22\text{ m}$
	o	with axial bulk gravity unloading, at the top ^a
	oo	with axial bulk gravity unloading, at the bottom ^{a b}
	p	with axial controlled gravity unloading, at the top ^a
	pp	with axial controlled gravity unloading, at the bottom ^a
r	articulated wagon	
rr	multiple wagon	
<p>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.</p> <p>b. In particular:</p> <ul style="list-style-type: none"> - well wagons - wagons with a central recess - wagons with an ordinary sloping diagonal permanent control desk 		
<p>The method of unloading these wagons is defined by a combination of the following characteristics:</p> <p><i>Arrangement of the unloading apertures:</i></p> <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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 <p><i>Rate of unloading:</i></p> <ul style="list-style-type: none"> - 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

Reference wagon		with metal shell, for the transport of liquids or gases articulated or multiple wagon with axles, with 2 units $22\text{ m} \leq \text{lu} < 27\text{ m}$
Index letters	a	with bogies
	c	with unloading under pressure ^a
	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 ^a
	i	tank of non-metallic material
	j	with shock-absorbing device
	m	with 2 units: $\text{lu} \geq 27\text{ m}$
	mm	with 2 units: $\text{lu} < 22\text{ m}$
	o	with 3 units
	oo	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".		

Letter marking for hauled passenger stock**Serial letters with an international value:**

A	1 st class coach with seats
B	2 nd class coach with seats
AB	1 st /2 nd 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 WG	Bar coach with dancing facilities
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
c	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

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

Letter marking for special vehicles

This marking is indicated in document EN 14033-1 “Railway applications – Track – Technical requirements for railbound construction and maintenance machines – Part 1: Running of railbound machines”.