ROLLING STOCK

FREIGHT WAGONS – ANNEX PP

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Status: ADOPTED

Version: 03

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APTU Uniform Rules (Appendix F to COTIF 1999)

Uniform Technical Prescriptions (UTP) applicable to Rolling Stock, subsystem

FREIGHT WAGONS - (UTP WAG) - ANNEX PP

VEHICLE IDENTIFICATION

Explanatory note:

The texts of this UTP which appear across two columns are identical to corresponding texts of the European Union regulations. Texts which appear in two columns differ; the left-hand column contains the UTP regulations, 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.

OTIF UTP

Corresponding text in EU regulations 1

EU ref.

PP.0 GENERAL REMARKS

Part 0

PP.0.1 THIS ANNEX DESCRIBES

1.

2.

the vehicle number and linked marking applied in a visible manner on the vehicle to identify it uniquely during operation. It does not describe other numbers or markings possibly engraved or fixed in a permanent manner on the chassis or the main components of the vehicle during its construction.

These other markings are included in Annex B.

Note: This part PP is an adapted extract of TSI OPE Appendix P. It contains the provisions applicable to freight wagons. Some tables include information concerning other types of railway vehicles; such information shall not be considered as regulations applicable in accordance with this Annex.

The conformity of the number and linked marking with the indications described in this Appendix is not mandatory for:

vehicles that are only used on networks to which
 UTP WAG this TSI (OPE)
 does not apply;

- heritage vehicles, in a historical guise;
- wagons that are not normally used or transported on the networks to which this UTP WAG TSI applies.

Nevertheless, these vehicles must receive a temporary number permitting their operation.

¹

Appendix P of TSI OPE (Operations and traffic management) –Commission Decision 2011/314/EU published in the EU Official Journal L144 on 31.05.2011.

If no EU reference is indicated, it means that the chapter/section number is the same as in the OTIF text.



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PP.02 STANDARD NUMBER AND LINKED ABBREVIATIONS

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

Type of rolling stock	Type of vehicle and indication of interoperability [2 digits]	Country in which the vehicle is registered [2 digits]	Technical characteristics [4 digits]	Serial number [3 digits]	Self- checking digit [1 digit]
Wagons	00 to 09 10 to 19 20 to 29 30 to 39 40 to 49 80 to 89 [details in PP.6]	01 to 99 [details in PP.4]	0000 to 9999 [details in PP.9]	001 to 999	0 to 9 [details in PP.3]
Hauled passenger vehicles	50 to 59 60 to 69 70 to 79 [details in PP.7]		0000 to 9999 [details in PP.10]	001 to 999	
Tractive rolling stock	90 to 99 [details in PP.8]	01 to 99 [details in PP.4]	0000001 to 8999999 [the meaning of these figures is defined by the Contracting States, eventually by bilateral or multilateral agreement]		0 to 9 [details in PP.3]
Special vehicles			9000 to 9999 [details in PP.11]	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 stock ³ and special vehicles⁴.

Alphabetical markings complete the number:

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

For tractive rolling stock, the six digits of the number has to be unique in a given country.

⁴ For special vehicles, the first digit and the last five digits of the technical characteristics and serial number must be unique in a given country.

A vehicle keeper is the person, who, being the owner or having the right of disposal over it, exploits a vehicle economically in a permanent manner as a means of transport and is registered as such in the National Vehicle Register.



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PP.03 ALLOCATION OF NUMBER

The unique Standard Number shall be The rules for the management of the allocated according to the rules laid down in Article 14 § 1 of ATMF.

numbers will be proposed by the ERA as part of the activity No 15 of its work programme 2005. European Vehicle Number

The

Standard Number

European Vehicle Number

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

admission to operation.

authorisation for placing in service according to Articles 20-25 of Interoperability Directive 2008/57/EC.

PP.1 **VEHICLE KEEPER MARKING (VKM)**

Part 1

PP.1.1 **DEFINITION OF THE VEHICLE KEEPER MARKING**

A Vehicle Keeper Marking (VKM) is an alphabetic code, consisting of 2 to 5 letters⁶. A VKM is inscribed on each side of the rail vehicle, near the Standard Number. European Vehicle Number.

The VKM denominates the vehicle keeper as registered in a National Vehicle Register. the Rolling Stock Register.

A VKM is unique and valid in all countries covered by UTP WAG (i.e. the OTIF Contracting States) | this TSI (OPE) 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 TSI (OPE). this Annex PP.

PP.1.2 FORMAT OF THE VEHICLE KEEPER MARKING

The VKM is a representation of the full name or an abbreviation of the vehicle keeper, if possible in a recognisable manner. All 26 letters of the Latina 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 letters written in lower case will be taken as written in capitals.

Letters may contain diacritical signs⁷. Diacritical signs used by these letters are ignored for checking uniqueness.

For vehicles kept by keepers that reside in a country that does not use the Latin alphabet, a translation letter by letter 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 checking uniqueness and other data-processing purposes.

PP.1.3 **EXEMPTIONS FOR USING A VEHICLE KEEPER MARKING**

Member States A Contracting State may decide to apply the following exemptions:

Digits, spaces and signs other than letters are not allowed. For NMBS/SNCB, the use of an encircled single letter B can be continued. 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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A VKM is not required for the vehicles whose numbering system does not follow the present

Annex PP TSI (OPE)

(*cf.* part 0, 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

Annex TSI (OPE)

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 besides the application of a VKM, only the VKM is valid and the logo is disregarded.

PP.1.4 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 (e.g. holding structure),
- that has mandated a separate, single legal entity for handling all issues on their behalf, in which event the legal entity is the keeper.

PP.1.5 REGISTER OF VEHICLE KEEPER MARKINGS (VKM) AND PROCEDURE FOR ALLOCATION

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

It is a joint register set up in accordance with an agreement between the Secretary General and ERA, see "Rules for registration of a VKM" on the OTIF website (www.otif.org) under Technology/Registers.

An application for a VKM is filed with the applicant's competent national authority and forwarded to the central body.

The central body is formed jointly by the



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Secretary General and ERA. If the applicant has his place of business in a State which does <u>not</u> apply EU law, the central body is the Secretary General. The application form included in the above-mentioned Rules shall be used.

A VKM can be used only after publication by the central body.

i.e. after publication on the OTIF and ERA websites.

The National Authorities and the Secretary General (or ERA) may refuse registration of a requested VKM if the letter combination might lead to confusion or deception. In this case a justified decision shall be issued.

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,

the Secretary General.

ERA.

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 VKM's holder changes his name to a name that does not bear resemblance to the VKM.

The VKM will be applied to all new build wagons after entry into force of the UTP WAG. relevant TSIs.

Existing wagons will have to be brought in compliance with the VKM marking by 31 December 2013. In case of inconsistency between the VKM marked on the vehicle and the data registered in the NVR, the NVR-registration supersedes.

PP.2 INSCRIPTION OF THE NUMBER AND LINKED ALPHABETICAL MARKING ON THE Part 2 BODYWORK

PP.2.1 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 placed not higher than 2 metres above rail level.

PP.2.2 WAGONS

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

		23 RIV	81	(profile G2)
		85 <u>CH</u> -SBB 7369 005-0	80 <u>D</u> -DB 6633 001-5	
Zcs	Tanoos	: 7309 003-0 : Zcs	Falns	
·		33 TEN	43	(In this case without VKM, full
80 <u>D</u> -RFC	80 <u>D</u> -DB	84 <u>NL</u> -ACTS	87 <u>F</u>	name and address information is inscribed on the vehicle);



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7369 553-4	0691 235-2	4796 100-8	4273 361-3	this option has limited validity,	•
Zcs	Tanoos	Slpss	Laeks	see last paragraph of PP.1.4	-

Note concerning the examples:

The example RIV is only valid for existing wagons, i.e. not for wagons admitted after the entry into force of UTP WAG (including this Annex), see section PP.5.1.

The dotted frame is not part of the marking.

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 with a national definition are inscribed on a wagon, this national marking (in the example below "xy") must be shown after the international letter marking and separated from it by a hyphen as follows:

01 87 3320 644-7 TEN F-SNCF Ks-xy

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.

However, it must always be possible to identify easily the unique standard number from the keeper's own number marking.

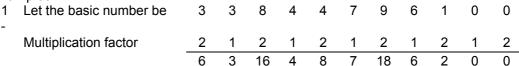
PP.3 RULES FOR THE DETERMINATION OF THE CHECK-DIGIT (DIGIT 12)

Part 3

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 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 last digit of this sum is retained;
- the complement required to bring the last digit to 10 forms the check-digit; should this last digit be nought, then the check-digit will also be nought.

Examples



Sum: 6 + 3 + 1 + 6 + 4 + 8 + 7 + 1 + 8 + 6 + 2 + 0 + 0 = 52

The last 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



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Multiplication factor

Sum: 6 + 1 + 1 + 0 + 1 + 6 + 3 + 4 + 0 + 2 + 9 + 1 + 6 = 40

The last 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.



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PP.4 CODING OF THE COUNTRIES IN WHICH THE VEHICLES ARE REGISTERED Part 4 (DIGITS 3-4 AND ABBREVIATION)

The Information relating to third countries (non OTIF Member States) is given for information purposes only.

Countries	Alpha- betical country code (1)	Numeri- cal country code	Companies concerned by the square brackets in part 6 and part 7 (2)
Albania	AL	41	HSh
Algeria	DZ	92	SNTF
Armenia	AM ⁽³⁾	58	ARM
Austria	A	81	ÖBB
Azerbaijan	AZ	57	AZ
Belarus	BY	21	BC
Belgium	В	88	SNCB/NMBS
Bosnia-	BIH	44	ŽRS
Herzego- vina		50	ŽFBH
Bulgaria	BG	52	BDZ, SRIC
China	RC	33	KZD
Cuba	CU (3)	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	Η	55	MÁV, GySEV/ ROeEE ⁽²⁾
Iran	IR	96	RAI
Iraq	IRQ (3)	99	IRR
Ireland	IRL	60	CIE

O a constant a a	Alalaa	NI	0
Countries	Alpha-	Nu-	Companies
	betical	merical	concerned
	country code (1)	country	by the square brackets
	code	code	
			in part 6 and part 7 (2)
			part /
Liechten-	FL	_	_
stein			
Lithuania	LT	24	LG
Luxem-	L	82	CFL
bourg	_	<u> </u>	0
Macedonia	MK	65	CFARYM
(Former			(MŽ)
Yugoslav			
Republic			
of)	(4)		
Moldova	MD ⁽¹⁾	23	CFM JŽ ⁽³⁾
Montene-	MNE	62	JZ (3)
gro			
Monaco	MC	-	_
Mongolia	MGL	31	MTZ
Morocco	MA	93	ONCFM
Nether-	NL	84	NS
lands			
North	PRK	30	ZC
Korea			
Norway	N	76	NSB, JBV
Poland	PL	51	PKP
Portugal	Р	94	CP, REFER
Romania	RO	53	CFR
		20	RZD
Russia Serbia	RUS	72	ŽS
	SRB		
Slovakia	SK	56	ŽSSK, ŽSR
Slovenia	SLO	79	SŽ
South	ROK	61	KNR
Korea	F	74	DENEE
Spain	E	71	RENFE
Sweden	S	74	GC, BV
Switzer- land	СН	85	SBB/CFF/FFS, BLS (4)
Syria	SYR	97	CFS
Tajikistan	TJ	66	TZD
Tunisia	TN	91	SNCFT



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Israel	IL	95	IR	Turkey	TR	75	TCDD

Countries	Alpha- betical country code (1)	Numeri- cal country code	Companies concerned by the square brackets in part 6 and part 7 (2)
Italy	I	83	FS, FNME ⁽²⁾
Japan	J	42	EJRC
Kazakh- stan	KZ	27	KZH
Kyrgyzstan	KS	59	KRG
Latvia	LV	25	LDZ
Lebanon	RL	98	CEL

Countries	Alpha- betical country code (1)	Nu- merical country code	Companies concerned by the square brackets in part 6 and part 7 (2)
Turkmeni- stan	TM	67	TRK
Ukraine	UA	22	UZ
United Kingdom	GB	70	BR
Uzbeki- stan	UZ	29	UTI
Vietnam	VN (3)	32	DSVN
			-

- (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) Companies who, at the time of coming into force, were members of UIC or OSJD and used the described country code as company code.
- (3) Codes to be confirmed.
- (4) 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 Contracting States.

Country names indicated in *italic* letters are not OTIF Member States at the time of the adoption of this UTP WAG.



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ALPHABETICAL MARKING OF THE INTEROPERABILITY CAPABILITY **PP.5**

Part 5

PP.5.1 "TEN": a wagon which

- 1) fully⁸ complies with all relevant UTPs (and RID if applicable) in the versions in force at the time9 of its technical admission and which, as it is subject to section 7.6.4 of UTP WAG, is admitted in all OTIF Contracting States (= OTIF Member States that apply APTU and ATMF) in accordance with ATMF Article 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);

"RIV": a wagon which complies with the regulations of the railway Technical Unity (TU) and the obligatory provisions of the applicable leaflets in the UIC Code, including the provisions of the RIV 2000 agreement in its version of 1 January 2004. NB.: The RIV marking is only valid for wagons subject to the transitional provisions in Article 19 of ATMF:

"TEN": Vehicle which complies with the 2011/ following conditions:

314/EU Annex P.

it complies with all relevant TSIs $_{\text{part 5}}\downarrow$ 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/EC;

and

it is provided with an authorisation valid in all Member States in accordance with Article 23(1) of Directive 2008/57/EC.

Authorisations for placing in service 2008/57/ which have been granted before 19 July 2008, including authorisations delivered international under agreements, particular RIC (Regolamento Internazionale Carrozze) and RIV (Regolamento Internazionale Veicoli), shall remain valid in accordance with the conditions under which the authorisations have been granted. This provision takes precedence over Articles 22 to 25.

EC. Art. 21 (12)

2011/ 314/FU

(b)

"PPV/PPW": A wagon which complies with the PPV/PPW or PGW agreement (inside Annex P. (original: PPV/PPW: ППВ (Правила пользования вагонами в part 5 международном сообщении; PGW: Правила Пользования Грузовыми Вагонами)

Note:

Vehicles marked TEN correspond to (a) coding 0 to 3 of the first digit in the vehicle number specified in Appendix P. part 6.

Wagons which are not admitted for operation in all **Contracting States**

Member States

authorised

need a marking indicating the States where they have been admitted/authorised.

The marking shall be in accordance with standard EN 15877-1:2012 marking 4.5.33 "Derogation plate".

The list of authorising MS should be marked according to one of the following drawings, where D stands for the MS who has granted the first authorisation (in the given example, Germany) and F stands for the second authorising MS (in the given example, France).

If the UTP contains "open points" relating to the wagon's compatibility with infrastructure or if the wagon 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 specified in the note to indicate the States by which the wagon has been admitted.

The date of admission is the date on which the Certificate is issued.



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The States shall be codified in accordance with

this Annex section PP.4.

Appendix P, part 4

This case may cover vehicles which are

UTP WAG compliant but admitted according to ATMF Article 6 § 4 (i.e. State by State) and wagons which do not comply with the UTP WAG.

TSI compliant or which are not.

These wagons correspond to coding 4 or 8 of the first digit in the vehicle number specified in

this Annex section PP.6.1

Appendix P, part 6.

OTIF		ROLLING STOCK FREIGHT WAGONS – ANNEX PP				
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PP.6 INTEROPERABILITY CODES USED FOR WAGONS (DIGITS 1-2)

PP.6.1 (valid until 31.12.2013)

	1 st digit ↓	2 nd digit →	0	1	2	3	4	5	6	7	8	9	2 nd digit ←	1 st digit ↓
		Track Gauge	fixed or variable	fixed	variable	fixed	variable	fixed	variable	fixed	variable	fixed or variable	Track Gauge	
TEN ^(a) =and/or RIV ^(b) and/or	0	with axles	Not to be used	wag	d/or RIV ^(b) gons keeper is a			not to be	a upod (d)			PPV/PPW wagons	with axles	0
PPV/PPW	1	with bogies	wagons used by industry	railway ui	ndertaking part PP.4]	rtaking				(variable gauge)	with bogies	1		
TEN ^(a) and/or	2	with axles	Not to be	wag	d/or RIV ^(b) gons keeper is a		TEN ^(a) and/or RIV ^(b) and/or PPV/PPW wagons TEN ^(a) and/or RIV ^(b) and/or PPV/PPW wagons wagons					PPV/PPW	with axles	2
RIV ^(b) and/or PPV/PPW	3	with bogies	used	listed in p	ndertaking part PP.4] PV/PPW							wagons (fixed gauge)	with bogies	3
non TEN	4	with axles (c)	service wagons	Other wagons [of which keeper is a Other wagons					Wagons with special	with axles (c)	4			
non RIV ^(b) and non PPV/PPW	8	with bogies (c)		railway ur	railway undertaking listed in part PP.4]		Other wagons				numbering for technical characteristics	with bogies (c)	8	
_	↑ 1 st digit	$\xrightarrow{2^{\text{nd}}}$ digit	0	1	2	3	4	5	6	7	8	9	← 2 nd digit	↑ 1 st digit

⁽a) Wagons permitted to carry the TEN marking, see section PP.5.1 (TSI Appendix P, part 5)

For more information on the criteria for 1st digit, see the APPLICATION GUIDE (not part of the regulations) at the end of this Annex PP - (page 45).

⁽b) Including wagons, which according to existing regulations carry the digits defined in the present table. RIV cannot be used for wagons admitted after the entry into force of UTP WAG.

⁽c) Fixed or variable gauge.

⁽d) Except for wagons in category I (temperature-controlled wagons), not to be used for new vehicles placed in service.



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(Not relevant for wagons)

PP.7-PP.8 Corresponding text in EU regulations 10

Part 7-8

PP.9 STANDARD NUMERICAL MARKING OF WAGONS (DIGITS 5 TO 8)

Part 9

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

This part

is published on the

is published on the OTIF website (www.otif.org).

website is distributed on a separate medium (electronic file).

An application for a new code is filed with the registering entity and forwarded to the central body (Secretary General).

A new code can be used only after publication by the central body (Secretary General).

PP.10 (Not relevant for wagons)

Part 10

PP.11 (Not relevant for wagons)

Part 11

PP.12 LETTER MARKING FOR WAGONS

Part 12

An application for a new code is filed with the registering entity and forwarded to the central body (Secretary General).

A new code can be used only after publication by the central body (Secretary General).

LETTER MARKING FOR WAGONS WHICH ARE NOT ARTICULATED OR 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 point 4.5.4 Wagon load table in EN 15877-1:2012)
- ss wagons authorised to run under "ss" conditions (see point 4.5.4 Wagon load table in EN 15877-1:2012)

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3. Index letters with a national value

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

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

Member State.

CATEGORY LETTER: E - OPEN HIGH-SIDED WAGON

Reference w	/agon	of ordinary type, with side and end tipping, with flat floor with 2 axles: $lu \ge 7,70$ m; 25 t $\le tu \le 30$ t with 4 axles: $lu \ge 12$ m; 50 t $\le tu \le 60$ t with 6 axles or more: $lu \ge 12$ m; 60 t $\le tu \le 75$ t
Index	а	with 4 axles
letters	aa	with 6 axles or more
	С	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 ≤ tu < 25 t
		with 4 axles: 40 t ≤ tu < 50 t
		with 6 axles or more: 50 t ≤ tu < 60 t
	I	without side tipping
	II	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
	0	without end tipping
	р	with station for brakeman ^b

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.

CATEGORY LETTER: F - OPEN HIGH-SIDED WAGON

		Of special type			
Reference v	vagon	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	а	with 4 axles			
letters	aa	with 6 axles or more			
	b	high capacity with axles (volume > 45 m ³)			
	С	with controlled gravity unloading, on both sides, alternately, at the top ^a			
	CC	with controlled gravity unloading, on both sides, alternately, at			

b. Only applicable to wagons with track gauge of 1520 mm.



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	Corresponding text in EC regulations
	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 < 50t
	with 6 axles or more: 50 t ≤ tu < 60 t
I	with bulk gravity unloading, on both sides, simultaneously, at the top ^a
II	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
0	with axial bulk gravity unloading, at the top ^a
00	with axial bulk gravity unloading, at the bottom ^a
р	with axial controlled gravity unloading, at the top ^a
рр	with axial controlled gravity unloading, at the bottom ^a
ppp	with station for brakeman ^b

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 track 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:

- 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

Reference wagon	Of ordinary type
	with at least 8 ventilation apertures



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		Corresponding toxe in 20 regulations
		with 2 axles: 9 m \leq lu $<$ 12 m; 25 t \leq tu \leq 30 t
		with 4 axles: 15 m \leq lu $<$ 18 m; 50 t \leq tu \leq 60 t
		with 6 axles or more: 15 m \leq lu $<$ 18 m; 60 t \leq tu \leq 75 t
Index	а	with 4 axles
letters	aa	with 6 axles or more
	b	high capacity: - with 2 axles: lu \geq 12 m and payload capacity \geq 70 m ³
		 with 4 axles or more: lu ≥ 18 m
	bb	with 4 axles: lu > 18 m ^a
	g	for grain
	h	for fruits and vegetables ^b
	k	with 2 axles: tu < 20 t with 4 axles: tu < 40t
		with 6 axles or more: tu < 50 t
	kk	with 2 axles: 20 t < tu < 25 t
		with 4 axles: 40 t ≤ tu < 50 t
		with 6 axles or more: 50 t \leq tu $<$ 60 t
	I	with less than 8 ventilation apertures
	II	with enlarged doors apertures ^a
	m	with 2 axles: lu < 9 m
		with 4 axles or more: lu < 15 m
	n	with 2 axles: tu > 30 t
		with 4 axles: tu > 60 t
	_	with 6 axles or more: tu > 75 t
	0	with 2 axles: lu < 12 m and payload capacity ≥ 70 m ³
	р	with station for brakeman ^a

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

CATEGORY LETTER: H - COVERED WAGON

Reference wagon		of special type with 2 axles: 9 m \leq lu \leq 12 m; 25 t \leq tu \leq 28 t with 4 axles: 15 m \leq lu $<$ 18 m; 50 t \leq tu \leq 60 t with 6 axles or more: 15 m \leq lu $<$ 18 m; 60 t \leq tu \leq 75 t
Index	а	with 4 axles
letters	aa	with 6 axles or more
	b	with 2 axles: 12 m \leq lu \leq 14 m and payload capacity \geq 70 m ³ with 4 axles or more: 18 m \leq lu \leq 22 m
	bb	with 2 axles: lu ≥ 14m with 4 axles or more: lu ≥ 22 m
	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 ^b
	е	with 2 floors
	ee	with 3 floors or more



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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 t with 4 axles: tu < 40 t with 6 axles or more: tu < 50 t
kk	with 2 axles: $20 \text{ t} \le \text{tu} < 25 \text{ t}$ with 4 axles: $40 \text{ t} \le \text{tu} < 50 \text{ t}$ with 6 axles or more: $50 \text{ t} \le \text{tu} < 60 \text{ t}$
ı	with movable partitions ^e
II	with lockable movable partitions ^e
m	with 2 axles: lu < 9 m with 4 axles or more: lu < 15 m
mm	with 4 axles or more: lu > 18 m b
n	with 2 axles: tu > 28 t with 4 axles: tu < 60 t with 6 axles or more: tu > 75 t
0	with 2 axles: lu 12 m < 14 m et volume utile ≥ 70 m ³

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

with station for brakeman b

- b. Only applicable to wagons with track 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.

CATEGORY LETTER: I - TEMPERATURE-CONTROLLED WAGON

Reference wa	agon	refrigerator wagon with class IN thermal insulation, with motor-driven ventilation, with gratings and ice bunker ≥ 3,5 m³ with 2 axles: 19 m² ≤ floor area < 22 m²; 15 t ≤ tu ≤ 25 t with 4 axles: floor area ≥ 39 m²; 30 t ≤ tu ≤ 40 t
Index	а	with 4 axles
letters	b	with 2 axles and large floor area: 22 $m^2 \le$ floor area \le 27 m^2
	bb	with 2 axles and very large floor area: floor area > 27 m ²
	С	with meat hooks
	d	for fish
	е	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)



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g	with mechanical refrigeration a b
99	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 t
	with 4 axles: tu < 30 t
I	insulated without ice bunkers a d
m	with 2 axles: floor area < 19 m ²
	with 4 axles: floor area < 39 m ²
mm	with 4 axles: floor area ≥ 39m ^{2 e}
n	with 2 axles: tu > 25 t
	with 4 axles; tu > 40 t
0	with ice bunkers of capacity less than 3,5 m ^{3 d}
р	without gratings

- a. The index letter "I" 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 "I".
- e. Only applicable to wagons with track gauge of 1520 mm.

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

CATEGORY LETTER: K - 2-AXLE FLAT WAGON

Reference v	vagon	Of ordinary type with drop sides and short stanchions lu ≥ 12 m; 25 t ≤ tu ≤ 30 t
Index	b	with long stanchions
letters	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 t
	kk	20 t ≤ tu < 25 t
	I	without stanchions
	m	9 m ≤ lu < 12 m
	mm	lu < 9 m
	n	tu > 30 t
	0	with non-removable sides
	р	without sides ^b
	рр	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
		lu ≥ 12 m; 25 t ≤ tu ≤ 30 t
Index	b	with special fittings for securing purposes for medium-sized containers (pa) ^a
letters	С	with swivelling bolster ^a
	d	fitted out for the transport of motor cars, without deck a
	е	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 t
	kk	20 t ≤ tu < 25 t
	I	without stanchions ^a
	m	9 m ≤ lu < 12 m
	mm	lu < 9 m
	n	tu > 30 t
	р	without sides ^a

- a. The inscription of the index letters "I" 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 track gauge of 1435 mm.



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

Reference w	agon	of ordinary type with 2 or 3 axles, with drop sides or ends and stanchions with 2 axles: $lu \ge 12$ m; 25 t $\le tu \le 30$ t with 3 axles: $lu \ge 12$ m; 25 t $\le tu \le 40$ t
Index	а	with 3 axles
letters	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 ≤ tu < 25 t
	ı	without stanchions
	m	9 m ≤ 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 v	vagon	of ordinary type with drop ends and stanchions 18 m ≤ lu < 22 m; 50 t ≤ tu ≤ 60 t
Index	b	lu ≥ 22 m
letters	е	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 t
	kk	40 t ≤ tu < 50 t
	I	without stanchions
	m	15 m ≤ lu < 18 m
	mm	lu < 15 m
	n	tu > 60 t
	0	with non-removable ends less than 2 m in height
	00	with non-removable ends, 2 m or more in height ^c
	р	without drop ends ^c
	рр	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



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CATEGORY LETTER: S - FLAT BOGIES WAGON

Reference wagon		of special type
		with 4 axles: lu ≥ 18 m; 50 t ≤ tu ≤ 60 t
		with 6 axles or more: $lu \ge 22 m$; 60 t $\le tu \le 75 t$
Index	а	with 6 axles (2 bogies of 3 axles)
letters	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
	С	with swivelling bolster ^b
	d	fitted out for the transport of motor cars, without deck bc
	е	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 \leq 60' (except pa) $^{b c d}$
	99	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 be
	hh	fitted out for the transport of steel coils, eye to sky be
	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 ≤ tu < 50 t
		with 6 axles or more: 50 t ≤ tu < 60 t
	I	without stanchions ^b
	m	with 4 axles: 15 m ≤ lu < 18 m;
		with 6 axles or more: 18 m ≤ lu < 22 m
	mm	with 4 axles: lu < 15 m with 6 axles or more: lu < 18 m
	mmm	with 4 axles : lu ≥ 22 m ^a
	n	with 4 axles: tu > 60 t with 6 axles or more: tu > 75 t
	р	without sides ^b

- a. Only applicable to wagons with track 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.



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. Only applicable to wagons with track gauge of 1435 mm.

CATEGORY LETTER: T - WAGON WITH OPENING ROOF

Reference wagon		with 2 axles: 9 m \le lu $<$ 12 m; 25 t \le tu \le 30 t with 4 axles: 15 m \le lu $<$ 18 m ; 50 t \le tu \le 60 t with 6 axles or more: 15 m \le lu $<$ 18 m; 60 t \le tu \le 75 t
Index	а	with 4 axles
letters	aa	with 6 axles or more
	b	high capacity: with 2 axles: lu ≥ 12 m
		with 4 axles or more: lu ≥ 18 m ^{a b}
	С	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}
	е	with unobstructed height of the doors > 1,90 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 t
		with 4 axles: tu < 40 t
		with 6 axles or more: tu < 50 t
	kk	with 2 axles: 20 t ≤ tu < 25 t
		with 4 axles: 40 t ≤ tu < 50 t
		with 6 axles or more: 50 t \leq tu $<$ 60 t
	I	with bulk gravity unloading, on both sides, simultaneously, at the top abc
	II	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^{a b c}
	m	with 2 axles: lu < 9 m
		with 4 axles or more: lu < 15 m b
	n	with 2 axles: tu > 30 t
		with 4 axles: tu > 60 t
		with 6 axles or more: tu > 75 t
	0	with axial bulk gravity unloading, at the top abc
	00	with axial bulk gravity unloading, at the bottom ""
	р	with axial controlled gravity unloading, at the top abc
	рр	with axial controlled gravity unloading, at the bottom abc

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" or "pp".
- 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".
- 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.

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



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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

CATEGORY LETTER: U - SPECIAL WAGONS

Reference w	agon	other than those in categories F, H, L, S or 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	а	with 4 axles
letters	aa	with 6 axles or more
	С	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 bc
	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 \le tu $<$ 25 t with 4 axles: 40 t \le tu $<$ 50 t with 6 axles or more: 50 t \le tu $<$ 60 t
	I	with bulk gravity unloading, on both sides, simultaneously, at the top ^a
	II	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



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with 4 axles: tu > 60) t	
with 6 axles or more: tu > 75 t °		
with axial bulk gravity unloading, at the top ^a		
with axial bulk gravi	ty unloading, at the bottom ^a	
with axial bulk gravi	ty unloading, at the top a	

with axial bulk gravity unloading, at the bottom ^a pp 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.

with axial bulk gravity unloading, at the top a

- b. In particular:
 - well wagons
 - wagons with a central recess

0

00

p

- 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

Apertures on either side of the track, outside the rails - bilateral:

(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)
- The lower edge of the discharge through (without taking into account mobile - top:

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

The position of the lower edge of the discharge through does not allow for - bottom:

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

Reference wagon		with metal shell, for the transport of liquids or gases with 2 axles: 25 t ≤ lu ≤ 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	а	with 4 axles
letters	aa	with 6 axles or more
	b	for oil products ^a
	С	with unloading under pressure b
	d	for food and chemical products ^a
	е	fitted with heating devices
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)



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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: 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 \leq tu $<$ 25 t with 4 axles: 40 t \leq tu $<$ 50 t with 6 axles or more: 50 t \leq tu $<$ 60 t
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
р	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 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 point 4.5.4 Wagon load table in EN 15877-1:2012)
- ss wagons authorised to run under "ss" conditions (see point 4.5.4 Wagon load table in EN 15877-1:2012)

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 m ≤ lu < 27 m
Index	а	with bogies
letters	С	with controlled gravity unloading, on both sides, alternately, at the top ^a
	СС	with controlled gravity unloading, on both sides, alternately,



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	at the bottom ^a
Е	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)
I	with bulk gravity unloading, on both sides, simultaneously, at the top ^a
II	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^a
m	with 2 units: $lu \ge 27 \text{ m}$
mm	with 2 units: lu < 22 m
0	with axial bulk gravity unloading, at the top ^a
00	with axial bulk gravity unloading, at the bottom ^a
р	with axial controlled gravity unloading, at the top ^a
рр	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:

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:
At any time during unloading, the flow of the goods can be regulated or eye.

- 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 m ≤ lu < 27 m
Index	а	with bogies
letters	С	with end doors
	СС	with end doors and fitted internally for the transport of motor cars
	d	with floor traps



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Corresponding text in EU regulations 10	EU ref.
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е	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
1	with movable partitions ^c
II	with lockable movable partitions ^c
m	with 2 units: lu ≥ 27 m
mm	with 2 units: lu < 22 m
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.

CATEGORY LETTER: I - TEMPERATURE CONTROLLED WAGON

Reference w	ragon	refrigerator wagon with class IN thermal insulation, with motor-driven ventilation, with gratings and ice bunker ≥ 3,5 m³ articulated or multiple wagon with axles, with 2 units 22 m ≤ lu < 27 m
Index	а	with bogies
letters	С	with meat hooks
	d	for fish
	е	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
	I	insulated without ice bunkers ^{a c}
	m	with 2 units: lu ≥ 27 m
	mm	with 2 units: lu < 22 m
	0	with ice bunkers of capacity less than 3,5 m ^{3 c}



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ROLLING STOCK FREIGHT WAGONS - ANNEX PP

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Corresponding text in EU regulations 10

EU ref.

00	with 3 units
р	without gratings
r	articulated wagon
rr	multiple wagon

- a. The index letter "I" 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 "I".

CATEGORY LETTER: L - FLAT WAGON WITH SEPARATE AXLES

Reference wagon		articulated or multiple wagon with 2 units			
		22 m ≤ lu < 27 m			
Index	а	articulated wagon			
letters	aa	multiple wagon			
	b	with special fittings for securing purposes for medium-sized containers (pa) ^a			
	С	with swivelling bolster ^a			
	d	fitted out for the transport of motor cars, without deck ^a			
	е	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			
	I	without stanchions ^a			
	m	with 2 units: 18 m ≤ lu < 22 m			
	mm	with 2 units: lu < 18 m			
	0	with 3 units			
	00	with 4 units or more			
	р	without sides ^a			
	r	with 2 units: lu ≥ 27 m			

- 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.

CATEGORY LETTER: S - FLAT BOGIE WAGON



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OTIF UTP			Corresponding text in EU regulations 10
	Reference w	/agon	articulated or multiple wagon
			with 2 units
			22 m ≤ lu < 27 m
	Index	b	with special fittings for securing purposes for medium-sized containers (pa) ^a
	letters	С	with swivelling bolster ^a
		d	fitted out for the transport of motor cars, without deck ab
		е	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}
		99	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
		İ	without stanchions ^a
		m	with 2 units: lu ≥ 27 m
		mm	with 2 units: lu < 22 m
		0	with 3 units
		00	with 4 units or more
		р	without sides ^a
		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.

CATEGORY LETTER: T - WAGON WITH OPENING ROOF

Reference wa	agon	articulated or multiple wagon with axles, with 2 units 22 m ≤ lu < 27 m			
Index	а	with bogies			
letters	b	with unobstructed height of doors > 1,90 m ^a			
	С	with end doors			
	d	with controlled gravity unloading, on both sides, alternately, at the top ^b			



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dd	with controlled gravity unloading, on both sides, alternately, at the bottom ^{a b}
е	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
I	with bulk gravity unloading, on both sides, simultaneously, at the top ^{a b}
II	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^{a b}
m	with 2 units: $lu \ge 27 \text{ m}$
mm	with 2 units: lu < 22 m
0	with axial bulk gravity unloading, at the top a b
00	with axial bulk gravity unloading, at the bottom a b
р	with axial controlled gravity unloading, at the top a b
рр	with axial controlled gravity unloading, at the bottom a b
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.

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



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CATEGORY LETTER: U - SPECIAL WAGONS

Reference wagon		articulated or multiple wagon, with axles, with 2 units 22 m ≤ lu < 27 m			
Index	а	with bogies			
letters	е	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 ^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			
	I	with bulk gravity unloading, on both sides, simultaneously, at the top ^a			
	II	with bulk gravity unloading, on both sides, simultaneously, at the bottom ^a			
	m	with 2 units: lu ≥ 27 m			
	mm	with 2 units: lu < 22 m			
	0	with axial bulk gravity unloading, at the top ^a			
	00	with axial bulk gravity unloading, at the bottom ab			
	р	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 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,



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- 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

Reference	wagon	with metal shell, for the transport of liquids or gases articulated or multiple wagon with axles, with 2 units 22 m ≤ lu < 27 m
Index	а	with bogies
letters	С	with unloading under pressure ^a
	е	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: lu ≥ 27 m
	mm	with 2 units: lu < 22 m
	0	with 3 units
	00	with 4 units or more
	r	articulated wagon
	rr	multiple wagon
The index le	tter "c" shal	I not be marked on wagons bearing the index letter "g".

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APPLICATION GUIDE to PP.5 and PP.6

(NOT part of the regulations)

Requirements	Authorisation	Marking	Authorisation	Marking	Authorisation	Marking	Authorisation	Marking
UTP/TSI WAG	OTIF:	Deroga-	OTIF:		OTIF:		OTIF:	
Chapter 4, 5 and 6	ATMF Article 6 § 4	tion plate	ATMF Article 6 § 3		ATMF Article 6 § 3		ATMF Article 6 § 3	
(with open points 1)	EU:	(B.33)	EU:		EU:		EU:	
related to the wagon in question)	2008/57/EC		2008/57/EC		2008/57/EC		2008/57/EC	
••	Article 22 (1) +	First digit	Article 22 (1) +		Article 22 (1) +		Article 22 (1) +	
Mandatory	Article 23 (2)	4 / 8	Article 23 (1)		Article 23 (1)		Article 23 (1)	
	Authorised							
	State by State		Cross authorised	TEN	Cross authorised	TEN	Cross authorised	TEN
UTP/TSI WAG								
section 7.6.4,								
e) (~TSI Annex JJ.2)				First digit		First digit		First digit
(closing open points 1)				4 / 8		4 / 8		0 / 1 / 2 / 3
relating to the wagon in ques-								"
tion)								
Voluntary - but								
mandatory if b)+c)+d)								
below are all met								
b) 1435 mm track gauge ²⁾								
c) G1 (+GI1) profile gauge 3)		1						
d) ≤ 17 500 mm between								
adjacent axles					all requirements,	cw		GE
section PP.6.2 or PPa.6.2					except one or			
f) hump shunting allowed					more of c), d) or f)		all requirements	
g) all other "6.2 criteria"					are met		are met	

- 1) Only open points relating to compatibility with infrastructure, see Annex JJ.1
- 2) If the wagon with exchangeable bogies or wheelsets can run on 1435 mm, it will meet condition b)
- 3) If the wagon does not meet condition c), e.g. is profile G2, this shall be indicated by UTP WAG Annex B marking pos. No 2: 4.5.2 Gauge marking (B.2)
- 4) Wagons subject to ATMF Article 19 marked RIV also use 0, 1, 2 or 3 as the first digit; they will keep the RIV and need not be marked GE or CW.