 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>		<b>UTP WAG - PP Page 1 of 45</b>	
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

## 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 <sup>1</sup>	EU ref. <sup>2</sup>
<p><b>NOTE</b> Annex PP consists of two parts:</p> <p>Part PP which only applies until 31.12.2013 (included).</p> <p>Part PPa which applies from 01.01.2014 (included).</p> <p><b>Part PP:</b></p>		
<b>PP.0 GENERAL REMARKS</b>		Part 0
<b>PP.0.1 THIS ANNEX DESCRIBES</b>		1.
<p>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.</p> <p><b>Note:</b> 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.</p>		
<p>The conformity of the number and linked marking with the indications described in this Appendix is not mandatory for:</p> <ul style="list-style-type: none"> <li>– vehicles that are only used on networks to which UTP WAG does <b>not</b> apply;</li> <li>– heritage vehicles, in a historical guise;</li> </ul>	<p>this TSI (OPE)</p>	2.

<sup>1</sup> Appendix P of TSI OPE (Operations and traffic management) – Commission Decision 2010/640/EU published in the EU Official Journal L280 on 26.10.2010 – as amended by Commission Decision 2011/314/EU published in the EU Official Journal L144 on 31.05.2011.

<sup>2</sup> If no EU reference is indicated, it means that the chapter/section number is the same as in the OTIF text.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 2 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

- wagons that are not normally used or transported on the networks to which this UTP WAG applies.

TSI

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

## 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 <i>[details in PP.6]</i>	01 to 99 <i>[details in PP.4]</i>	0000 to 9999 <i>[details in PP.9]</i>	001 to 999	0 to 9 <i>[details in PP.3]</i>
Hauled passenger vehicles	50 to 59 60 to 69 70 to 79 <i>[details in PP.7]</i>	01 to 99 <i>[details in PP.4]</i>	0000 to 9999 <i>[details in PP.10]</i>	001 to 999	0 to 9 <i>[details in PP.3]</i>
Tractive rolling stock	90 to 99 <i>[details in PP.8]</i>		0000001 to 8999999 <i>[the meaning of these figures is defined by the Contracting States, eventually by bilateral or multilateral agreement]</i>		
Special vehicles			9000 to 9999 <i>[details in PP.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 stock <sup>3</sup> and special vehicles <sup>4</sup>.

Alphabetical markings complete the number:

- markings linked to the interoperability ability (details in section PP.5);
- abbreviation of the country in which the vehicle is registered (details in section PP.4);
- keeper <sup>5</sup> (details in section PP.1);
- 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).

<sup>3</sup> For tractive rolling stock, the six digits of the number has to be unique in a given country.

<sup>4</sup> 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.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP Page 3 of 45</b>
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

OTIF UTP

| Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

### PP.03 ALLOCATION OF NUMBER

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

| The rules for the management of the 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 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.

| European Vehicle Number  
| 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 letters<sup>6</sup>. 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) 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 Annex PP.

| this TSI (OPE)

| TSI (OPE).

#### 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 signs<sup>7</sup>. 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


A Contracting State may decide to apply the following exemptions:

| Member States

<sup>5</sup> 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.

<sup>6</sup> Digits, spaces and signs other than letters are not allowed. For NMBS/SNCB, the use of an encircled single letter B can be continued.

<sup>7</sup> Diacritical marks are "accent signs", such as in Å, Ç, Ö, Ć, 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.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 4 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

OTIF UTP

| Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

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 applies.

| TSI (OPE)

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](http://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 Secretary General and ERA. If the applicant

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP Page 5 of 45</b>
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

*OTIF UTP*

*Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>*

has his place of business in a State which does not 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 BODYWORK** Part 2

**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):

21 TEN	31 TEN	23 RIV	81 (profile G2)
85 CH-SBB	72 SRB-ZS	85 CH-SBB	80 D-DB
7369 551-5	0691 232-1	7369 005-0	6633 001-5
Zcs	Tanoos	Zcs	Falns
23 TEN	31 TEN	33 TEN	43 (In this case without VKM, full name and address information is inscribed on the vehicle); this option has limited validity, see last paragraph of PP.1.4
80 D-RFC	80 D-DB	84 NL-ACTS	87 F
7369 553-4	0691 235-2	4796 100-8	4273 361-3
Zcs	Tanoos	Slpss	Laeks

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 6 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

**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 E-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 E-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

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 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.

<sup>8</sup> no similar provision in TSI OPE for freight wagons, only for locomotives, power cars and special wagons

<sup>9</sup> no similar provision in TSI OPE at all



**OTIF**

**ROLLING STOCK  
FREIGHT WAGONS – ANNEX PP**

UTP WAG - PP  
Page 7 of 45

Status: **PROPOSAL**

Version: 01

Ref.: A 94-02-PP/3.2011 rev1

Original: EN

Date: 02.04.2012

OTIF UTP

| Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>


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 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.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 8 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP


Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

**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	Alphabetical country code <sup>(1)</sup>	Numerical country code	Companies concerned by the square brackets in part 6 and part 7 <sup>(2)</sup>	Countries	Alphabetical country code <sup>(1)</sup>	Numerical country code	Companies concerned by the square brackets in part 6 and part 7 <sup>(2)</sup>
Albania	AL	41	HSh	Liechtenstein	FL	-	-
Algeria	DZ	92	SNTF	Lithuania	LT	24	LG
Armenia	AM <sup>(3)</sup>	58	ARM	Luxembourg	L	82	CFL
Austria	A	81	ÖBB	Macedonia (Former Yugoslav Republic of)	MK	65	CFARYM (MŽ)
Azerbaijan	AZ	57	AZ	Moldova	MD <sup>(1)</sup>	23	CFM
Belarus	BY	21	BC	Montenegro	MNE	62	JŽ <sup>(3)</sup>
Belgium	B	88	SNCB/NMBS	Monaco	MC	-	-
Bosnia-Herzegovina	BIH	44	ŽRS	Mongolia	MGL	31	MTZ
		50	ŽFBH	Morocco	MA	93	ONCFM
Bulgaria	BG	52	BDZ, SRIC	Netherlands	NL	84	NS
China	RC	33	KZD	North Korea	PRK	30	ZC
Cuba	CU <sup>(3)</sup>	40	FC	Norway	N	76	NSB, JBV
Cyprus	CY			Poland	PL	51	PKP
Czech Republic	CZ	54	ČD	Portugal	P	94	CP, REFER
Denmark	DK	86	DSB, BS	Romania	RO	53	CFR
Egypt	ET	90	ENR	Russia	RUS	20	RZD
Estonia	EST	26	EVR	Serbia	SRB	72	ŽS
Finland	FIN	10	VR, RHK	Slovakia	SK	56	ŽSSK, ŽSR
France	F	87	SNCF, RFF	Slovenia	SLO	79	SŽ
Georgia	GE	28	GR	South Korea	ROK	61	KNR
Germany	D	80	DB, AAE <sup>(2)</sup>	Spain	E	71	RENFE
Greece	GR	73	CH	Sweden	S	74	GC, BV
Hungary	H	55	MÁV, GySEV/ROeEE <sup>(2)</sup>	Switzerland	CH	85	SBB/CFF/FFS, BLS <sup>(4)</sup>
Iran	IR	96	RAI	Syria	SYR	97	CFS
Iraq	IRQ <sup>(3)</sup>	99	IRR	Tajikistan	TJ	66	TZD
Ireland	IRL	60	CIE	Tunisia	TN	91	SNCFT
Israel	IL	95	IR	Turkey	TR	75	TCDD



 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 9 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012


OTIF UTP

Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

Countries	Alphabetical country code <sup>(1)</sup>	Numerical country code	Companies concerned by the square brackets in part 6 and part 7 <sup>(2)</sup>	Countries	Alphabetical country code <sup>(1)</sup>	Numerical country code	Companies concerned by the square brackets in part 6 and part 7 <sup>(2)</sup>
Italy	I	83	FS, FNME <sup>(2)</sup>	<i>Turkmenistan</i>	TM	67	TRK
<i>Japan</i>	J	42	EJRC	Ukraine	UA	22	UZ
<i>Kazakhstan</i>	KZ	27	KZH	United Kingdom	GB	70	BR
<i>Kyrgyzstan</i>	KS	59	KRG	<i>Uzbekistan</i>	UZ	29	UTI
Latvia	LV	25	LDZ	<i>Vietnam</i>	VN <sup>(3)</sup>	32	DSVN
Lebanon	RL	98	CEL				

- (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.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>		<b>UTP WAG - PP</b> Page 10 of 45	
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

OTIF UTP

Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

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

Part 5

PP.5.1 “TEN”: a wagon which

- 1) fully<sup>10</sup> complies with all relevant UTPs (and RID if applicable) in the versions in force at the time<sup>11</sup> 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);

or

“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;

or

“PPV/PPW”: A wagon which complies with the PPV/PPW or PGW agreement (inside OSJD States) (original: PPV/PPW: ППВ (Правила пользования вагонами в международном сообщении; PGW: Правила Пользования Грузовыми Вагонами)

**Note:**

“TEN”: Vehicle which complies with the following conditions:

- it complies with all relevant TSIs which are in force at the moment of placing in service and has been authorised to be placed in service according to Article 22(1) of Directive 2008/57/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 which have been granted before 19 July 2008, including authorisations delivered under international agreements, in 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.

2011/314/EU Annex P. part 5 ↓

2008/57/EC, Art. 21 (12)

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

(b) 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”.


Member States  
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).

The States shall be codified in accordance with this Annex section PP.4.

Appendix P, part 4

<sup>10</sup> 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.

<sup>11</sup> The date of admission is the date on which the Certificate is issued.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 11 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

OTIF UTP


| Corresponding text in EU regulations <sup>1</sup> EU ref. <sup>2</sup>

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.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP</b> Page 12 of 45	
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN	Date: 02.04.2012

## PP.6 INTEROPERABILITY CODES USED FOR WAGONS (DIGITS 1-2)

### PP.6.1 (valid until 31.12.2013)

	1 <sup>st</sup> digit ↓	2 <sup>nd</sup> digit →	0	1	2	3	4	5	6	7	8	9	2 <sup>nd</sup> digit ←	1 <sup>st</sup> digit ↓
		Track Gauge	fixed or variable	fixed	variable	fixed	variable	fixed	variable	fixed	variable	fixed or variable	Track Gauge	
TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> and/or PPV/PPW	0	with axles	Not to be used	TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> wagons <i>[of which keeper is a railway undertaking listed in part PP.4]</i>				not to be used <sup>(d)</sup>				PPV/PPW wagons (variable gauge)	with axles	0
	1	with bogies	wagons used by industry										with bogies	1
TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> and/or PPV/PPW	2	with axles	Not to be used	TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> wagons <i>[of which keeper is a railway undertaking listed in part PP.4]</i>				TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> and/or PPV/PPW wagons		TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> and/or PPV/PPW wagons		PPV/PPW wagons (fixed gauge)	with axles	2
	3	with bogies											with bogies	3
non TEN and non RIV <sup>(b)</sup> and non PPV/PPW	4	with axles <sup>(c)</sup>	service wagons	Other wagons <i>[of which keeper is a railway undertaking listed in part PP.4]</i>				Other wagons				Wagons with special numbering for technical characteristics	with axles <sup>(c)</sup>	4
	8	with bogies <sup>(c)</sup>											with bogies <sup>(c)</sup>	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 <sup>st</sup> digit	→ 2 <sup>nd</sup> digit	0	1	2	3	4	5	6	7	8	9	← 2 <sup>nd</sup> digit	↑ 1 <sup>st</sup> digit


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

(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.

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

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>		<b>UTP WAG - PP Page 13 of 45</b>	
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

## OTIF UTP

PP.6.2 For the purpose of marking a wagon which is subject to UTP WAG section 7.6.4 with the indication of its physical characteristics set out below, some additional criteria have to be met:<sup>13</sup>

A wagon compliant with UTP WAG and subject to the UTP's section 7.6.4 and which also meet all the additional criteria set out below, may receive the marking "GE".

A wagon compliant with UTP WAG and subject to the UTP's section 7.6.4 and which also meet all the additional criteria set out below, but not C.3 and/or UTP WAG section 7.6.4 (c) and/or (d), may receive the marking "CW".

The format and position of these two additional markings will be included in UTP WAG Annex B (as soon as possible).

### *Additional criteria:*

#### C.3 Ability to be hump shunted:

In addition to the requirements of in section 6.2.3.1.1 of this UTP, the unit shall be assessed in accordance with clause 8 of EN 12663-2:2010 and classified in Category F-I in accordance with clause 5.1 of EN 12663-2:2010 with the following exception: for units designed to carry motor vehicles or combined transport units without long stroke shock absorbers the Category F-II may be used. The requirements concerning the buffing tests in clause 8.2.5.1 of EN 12663-2:2010 apply.

#### C.8 Tests concerning longitudinal compressive forces:

The verification of safe running under longitudinal compressive forces shall be carried out in accordance with EN 15839:2011.

#### C.10 Location of parking brake handles

If a unit is equipped with a parking brake the location of its operating handle or operating wheel shall be:

- On both sides of the unit if it is operated from the ground or
- on a platform, that can be accessed from both sides of the unit.

The operation from the ground shall be done

## Corresponding text in EU regulations<sup>12</sup> EU ref.

(See footnote<sup>14</sup>)

Units compliant with all requirements set out in section 4.2, fulfilling all conditions in clause 7.1.2 and all conditions in Appendix C of this TSI may receive the marking "GE".

Units compliant with all requirements set out in section 4.2, fulfilling all conditions in clause 7.1.2 and the conditions in Appendix C of this TSI but not C.3 and/or C.6 and/or C.7.b may receive the marking "CW".

If the additional marking is used, it shall be inscribed on the unit as outlined in figure C.3.



**Figure C.3:**

### **The additional markings "GE" and "CW"**


The letters shall be of the same font type as the TEN marking. The size of the letters shall be at least 100 mm high. The outer measures of the frame shall be at least 275 mm wide and 140 mm high, the frame shall be 7 mm thick.

The marking shall be located on the right hand side of the area containing the European Vehicle Number and the TEN marking.

<sup>12</sup> See footnote 1 on page 1.

<sup>13</sup> The other provisions in Appendix C of IU-WAG-TSI Final draft 0.2\_amended, dated 19.10.2011, are covered in UTP WAG chapter 4-6, including the additional provisions applicable to wagons subject to section 7.6.4 (i.e. wagons cross-admitted in all Contracting States).

<sup>14</sup> This text is a quotation of section C.5 of Appendix C of IU-WAG-TSI Final draft 0.2\_amended, dated 19.10.2011; the additional criteria in the left-hand column are equivalent to the texts in the corresponding C.3, C.8, C.10, C.16, C.17 and C.18 of Appendix C.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP Page 14 of 45</b>
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

**OTIF UTP**

by wheel.

**C.16 Tow hooks**

Units shall be provided with tow hooks, each one being fixed to the side of the unit under-frame in accordance with clause 1.4 of leaflet UIC 535-2.

**C.17 Protection of protruding parts**

To ensure the safety of staff on stationary vehicles, protruding (angular or pointed) parts of the unit located up to 2 m above rail level or above passageways and working surfaces which are liable to cause accidents, shall be fitted with protective devices as described in clause 1.3 of leaflet UIC 535-2.

**C.18 Label holders**

Units shall be equipped with a label holder in accordance with clause 1 of leaflet UIC 575.

Corresponding text in EU regulations <sup>12</sup> EU ref.

**PP.7-  
PP.8**

(Not relevant for wagons)

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](http://www.otif.org)).

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:

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP</b> Page 15 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

OTIF UTP

|Corresponding text in EU regulations<sup>12</sup> EU ref.

- 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)

## 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 wagon		of ordinary type, with side and end tipping, with flat floor with 2 axles: $lu \geq 7,70 \text{ m}$ ; $25 \text{ t} \leq tu \leq 30 \text{ t}$ with 4 axles: $lu \geq 12 \text{ m}$ ; $50 \text{ t} \leq tu \leq 60 \text{ t}$ with 6 axles or more: $lu \geq 12 \text{ m}$ ; $60 \text{ t} \leq tu \leq 75 \text{ t}$
Index letters	a	with 4 axles
	aa	with 6 axles or more
	c	with floor traps <sup>a</sup>
	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	without side tipping
	ll	without floor traps <sup>b</sup>
	m	with 2 axles: $lu < 7,70 \text{ m}$ with 4 axles or more: $lu < 12 \text{ m}$
	mm	with 4 axles or more: $lu > 12 \text{ m}$ <sup>b</sup>
	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	without end tipping
	p	with station for brakeman <sup>b</sup>
<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 track gauge of 1520 mm.</p>		



OTIF UTP

[Corresponding text in EU regulations <sup>12</sup> EU ref.

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

<i>Reference wagon</i>	<b>Of special type</b> 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	
<b>Index letters</b>	a	with 4 axles
	aa	with 6 axles or more
	b	high capacity with axles (volume > 45 m <sup>3</sup> )
	c	with controlled gravity unloading, on both sides, alternately, at the top <sup>a</sup>
	cc	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a</sup>
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	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 <sup>a</sup>
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a</sup>
	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 <sup>a</sup>
	oo	with axial bulk gravity unloading, at the bottom <sup>a</sup>
p	with axial controlled gravity unloading, at the top <sup>a</sup>	
pp	with axial controlled gravity unloading, at the bottom <sup>a</sup>	
ppp	with station for brakeman <sup>b</sup>	
a.	Wagons with gravity unloading in category F are open wagons, which do not have a flat floor and have no tipping facility either at the end or the side.	
b.	Only applicable to wagons with track gauge of 1520 mm.	
<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"> <li>– axial : Apertures situated above the centre of the track</li> <li>– bilateral: Apertures on either side of the track, outside the rails (For these wagons, unloading is: <ul style="list-style-type: none"> <li>• simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides,</li> <li>• alternate, if complete emptying of the wagon can take place by opening the apertures on one side only)</li> </ul> </li> <li>– 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,</li> </ul>		



**OTIF UTP**|Corresponding text in EU regulations<sup>12</sup> EU ref.

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: G - COVERED WAGON**

<i>Reference wagon</i>	<b>Of ordinary type with at least 8 ventilation apertures with 2 axles: <math>9\text{ m} \leq \text{lu} &lt; 12\text{ m}</math>; <math>25\text{ t} \leq \text{tu} \leq 30\text{ t}</math> with 4 axles: <math>15\text{ m} \leq \text{lu} &lt; 18\text{ m}</math>; <math>50\text{ t} \leq \text{tu} \leq 60\text{ t}</math> with 6 axles or more: <math>15\text{ m} \leq \text{lu} &lt; 18\text{ m}</math>; <math>60\text{ t} \leq \text{tu} \leq 75\text{ t}</math></b>	
<b>Index letters</b>	a	with 4 axles
	aa	with 6 axles or more
	b	high capacity: - with 2 axles: $\text{lu} \geq 12\text{ m}$ and payload capacity $\geq 70\text{ m}^3$ - with 4 axles or more: $\text{lu} \geq 18\text{ m}$
	bb	with 4 axles: $\text{lu} > 18\text{ m}$ <sup>a</sup>
	g	for grain
	h	for fruits and vegetables <sup>b</sup>
	k	with 2 axles: $\text{tu} < 20\text{ t}$ with 4 axles: $\text{tu} < 40\text{ t}$ with 6 axles or more: $\text{tu} < 50\text{ t}$
	kk	with 2 axles: $20\text{ t} \leq \text{tu} < 25\text{ t}$ with 4 axles: $40\text{ t} \leq \text{tu} < 50\text{ t}$ with 6 axles or more: $50\text{ t} \leq \text{tu} < 60\text{ t}$
	l	with less than 8 ventilation apertures
	ll	with enlarged doors apertures <sup>a</sup>
	m	with 2 axles: $\text{lu} < 9\text{ m}$ with 4 axles or more: $\text{lu} < 15\text{ m}$
	n	with 2 axles: $\text{tu} > 30\text{ t}$ with 4 axles: $\text{tu} > 60\text{ t}$ with 6 axles or more: $\text{tu} > 75\text{ t}$
	o	with 2 axles: $\text{lu} < 12\text{ m}$ and payload capacity $\geq 70\text{ m}^3$
p	with station for brakeman <sup>a</sup>	
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**

<i>Reference wagon</i>	<b>of special type with 2 axles: <math>9\text{ m} \leq \text{lu} \leq 12\text{ m}</math>; <math>25\text{ t} \leq \text{tu} \leq 28\text{ t}</math> with 4 axles: <math>15\text{ m} \leq \text{lu} &lt; 18\text{ m}</math>; <math>50\text{ t} \leq \text{tu} \leq 60\text{ t}</math> with 6 axles or more: <math>15\text{ m} \leq \text{lu} &lt; 18\text{ m}</math>; <math>60\text{ t} \leq \text{tu} \leq 75\text{ t}</math></b>	
<b>Index letters</b>	a	with 4 axles
	aa	with 6 axles or more
	b	with 2 axles: $12\text{ m} \leq \text{lu} \leq 14\text{ m}$ and payload capacity $\geq 70\text{ m}^3$


**OTIF UTP***Corresponding text in EU regulations <sup>12</sup> EU ref.*

	<sup>a</sup> 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 <sup>b</sup>
e	with 2 floors
ee	with 3 floors or more
f	suitable for traffic with Great Britain <sup>a</sup>
ff	suitable for traffic with Great Britain (by tunnel exclusively)
fff	suitable for traffic with Great Britain (by train-ferry exclusively) <sup>a</sup>
g	for grain
gg	for cement <sup>b</sup>
h	for fruits and vegetables <sup>c</sup>
hh	for mineral fertilizer <sup>b</sup>
i	with opening or shunt walls
ii	with very robust opening or shunt walls <sup>d</sup>
k	with 2 axles: $tu < 20\text{ t}$ 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 <sup>e</sup>
ll	with lockable movable partitions <sup>e</sup>
m	with 2 axles: $lu < 9\text{ m}$ with 4 axles or more: $lu < 15\text{ m}$
mm	with 4 axles or more: $lu > 18\text{ m}$ <sup>b</sup>
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 <sup>b</sup>

- a. 2-axle wagons bearing the index letters "f", "fff" can have a payload capacity less than  $70\text{ m}^3$ .  
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 dismantled temporarily.

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

<b>Reference wagon</b>	<b>refrigerator wagon</b> <b>with class IN thermal insulation,</b> <b>with motor-driven ventilation, with gratings and ice</b> <b>bunker <math>\geq 3,5\text{ m}^3</math></b> <b>with 2 axles: <math>19\text{ m}^2 \leq \text{floor area} &lt; 22\text{ m}^2</math>; <math>15\text{ t} \leq tu \leq 25\text{ t}</math></b> <b>with 4 axles: floor area <math>\geq 39\text{ m}^2</math>; <math>30\text{ t} \leq tu \leq 40\text{ t}</math></b>
------------------------	--

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 19 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

|Corresponding text in EU regulations<sup>12</sup> EU ref.

<b>Index letters</b>	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 <sup>a b</sup>
	gg	refrigerator with liquefied gas <sup>a</sup>
	h	with class IR thermal insulation
	i	mechanically refrigerated by the machinery of an accompanying technical wagon <sup>a b c</sup>
	ii	accompanying technical wagon <sup>a c</sup>
	k	with 2 axles: $tu > 15 \text{ t}$ with 4 axles: $tu < 30 \text{ t}$
	l	insulated without ice bunkers <sup>a d</sup>
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 $\geq 39 \text{ m}^2$ <sup>e</sup>	
n	with 2 axles: $tu > 25 \text{ t}$ with 4 axles; $tu > 40 \text{ t}$	
o	with ice bunkers of capacity less than $3,5 \text{ m}^3$ <sup>d</sup>	
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 track 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 $lu \geq 12 \text{ m}; 25 \text{ t} \leq tu \leq 30 \text{ t}$	
<b>Index letters</b>	b	with long stanchions
	g	fitted for the transport of containers <sup>a</sup>
	i	with removable cover and non-removable ends <sup>b</sup>
	j	with shock-absorbing device
	k	$tu < 20 \text{ t}$
	kk	$20 \text{ t} \leq tu < 25 \text{ t}$
	l	without stanchions
	m	$9 \text{ m} \leq lu < 12 \text{ m}$

**OTIF UTP**Corresponding text in EU regulations <sup>12</sup> EU ref.

mm	lu < 9 m
n	tu > 30 t
o	with non-removable sides
p	without sides <sup>b</sup>
pp	with removable sides

a. Index letter "g" may be used together with category letter K exclusively for ordinary wagons which have only been additionally fitted out for the transport of containers. Wagons fitted out solely for the transport of containers must be classified in category L.

b. The index letter "p" shall not be marked on wagons bearing index letter "i".

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


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

a. The inscription of the index letters "l" or "p" is optional for wagons bearing the index letters "b", "c", "d", "e", "g", "h", "hh", "i" or "ii". But numerical codes must always correspond to letter markings on wagons.

b. Wagons used solely for the transport of containers (except pa).

c. Wagons used solely for the transport of steel coils.

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

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 21 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

[Corresponding text in EU regulations <sup>12</sup> EU ref.

**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: $lu \geq 12\text{ m}$ ; $25\text{ t} \leq tu \leq 30\text{ t}$ with 3 axles: $lu \geq 12\text{ m}$ ; $25\text{ t} \leq tu \leq 40\text{ t}$
<b>Index letters</b>	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	$tu < 20\text{ t}$
	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	with 2 axles: $tu > 30\text{ t}$ with 3 axles: $tu > 40\text{ t}$	

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

Reference wagon		of ordinary type with drop ends and stanchions $18\text{ m} \leq lu < 22\text{ m}$ ; $50\text{ t} \leq tu \leq 60\text{ t}$
<b>Index letters</b>	b	$lu \geq 22\text{ m}$
	e	with drop sides
	g	fitted for the transport of containers <sup>a</sup>
	h	fitted out for the transport of steel coils, eye to side <sup>b</sup>
	hh	fitted out for the transport of steel coils, eye to sky <sup>b</sup>
	i	with removable cover and non-removable ends <sup>c</sup>
	j	with shock-absorbing device
	k	$tu < 40\text{ t}$
	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 <sup>c</sup>
p	without drop ends <sup>c</sup>	
pp	with removable sides	

a. The use of the index letter "g" associated with the category letter R is only possible in the case of ordinary wagons which have only been additionally fitted out for the transport of containers. Wagons fitted out solely for the transport of containers must be classified in category S.

b. The use of the index letter "h" or "hh" together with the category letter R is only possible in the case of ordinary wagons which have only been additionally fitted out for the transport of containers. Wagons fitted out solely for the transport of containers must be classified in category S.

c. The index letters "oo" and/or "p" shall not be marked on wagons bearing index letter "i".




OTIF UTP

|Corresponding text in EU regulations<sup>12</sup> EU ref.

## CATEGORY LETTER: S - FLAT BOGIES WAGON

Reference wagon	of special type with 4 axles: $lu \geq 18 \text{ m}$ ; $50 \text{ t} \leq tu \leq 60 \text{ t}$ with 6 axles or more: $lu \geq 22 \text{ m}$ ; $60 \text{ t} \leq tu \leq 75 \text{ t}$	
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) <sup>a</sup>
	b	with special fittings for securing purposes for medium-sized containers (pa) <sup>b</sup>
	c	with swivelling bolster <sup>b</sup>
	d	fitted out for the transport of motor cars, without deck <sup>b c</sup>
	e	with decks for the transport of motor cars <sup>b</sup>
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	g	fitted for the transport of containers, total loading length $\leq 60'$ (except pa) <sup>b c d</sup>
	gg	fitted for the transport of containers, total loading length $> 60'$ (except pa) <sup>b c d</sup>
	h	fitted out for the transport of steel coils, eye to side <sup>b e</sup>
	hh	fitted out for the transport of steel coils, eye to sky <sup>b e</sup>
	i	with removable cover and non-removable ends <sup>b</sup>
	ii	with very robust removable metallic cover <sup>f</sup> and non-removable ends <sup>b</sup>
	j	with shock-absorbing device
	k	with 4 axles: $tu < 40 \text{ t}$ with 6 axles or more: $tu < 50 \text{ t}$
	kk	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	without stanchions <sup>b</sup>
m	with 4 axles: $15 \text{ m} \leq lu < 18 \text{ m}$ ; with 6 axles or more: $18 \text{ m} \leq lu < 22 \text{ m}$	
mm	with 4 axles: $lu < 15 \text{ m}$ with 6 axles or more: $lu < 18 \text{ m}$	
mmm	with 4 axles: $lu \geq 22 \text{ m}$ <sup>a</sup>	
n	with 4 axles: $tu > 60 \text{ t}$ with 6 axles or more: $tu > 75 \text{ t}$	
p	without sides <sup>b</sup>	
<p>a. Only applicable to wagons with track 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 track gauge of 1435 mm.</p>		

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 23 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

[Corresponding text in EU regulations <sup>12</sup> EU ref.

**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: $lu \geq 18\text{ m}$ <sup>a b</sup>
	c	with end doors
	d	with controlled gravity unloading, on both sides, alternately, at the top <sup>a b c</sup>
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a b c</sup>
	e	with unobstructed height of the doors $> 1,90\text{ m}$ <sup>a b c</sup>
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	g	for grain
	h	fitted out for the transport of steel coils, eye to side
	hh	fitted out for the transport of steel coils, eye to sky
	i	with opening walls <sup>a</sup>
	j	with shock-absorbing device
	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 <sup>a b c</sup>
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a b c</sup>
	m	with 2 axles: $lu < 9\text{ m}$ with 4 axles or more: $lu < 15\text{ m}$ <sup>b</sup>
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 <sup>a b c</sup>	
oo	with axial bulk gravity unloading, at the bottom <sup>a b c</sup>	
p	with axial controlled gravity unloading, at the top <sup>a b c</sup>	
pp	with axial controlled gravity unloading, at the bottom <sup>a b c</sup>	


- a. Index letter "e":
- is optional on wagons bearing the index letter "b" (but numerical codes must always correspond to letter markings on wagons),
  - shall not be marked on wagons bearing the index letters "d", "dd", "l", "ll", "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 characteristics:

*Arrangement of the unloading apertures:*

- axial: Apertures situated above the centre of the track



 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>		<b>UTP WAG - PP Page 24 of 45</b>	
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

OTIF UTP


|Corresponding text in EU regulations<sup>12</sup> EU ref.

- 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: U - SPECIAL WAGONS**

Reference wagon	other than those in categories F, H, L, S or Z with 2 axles: $25\text{ t} \leq tu \leq 30\text{ t}$ with 3 axles: $25\text{ t} \leq tu \leq 40\text{ t}$ with 4 axles: $50\text{ t} \leq tu \leq 60\text{ t}$ with 6 axles or more: $60\text{ t} \leq tu \leq 75\text{ t}$	
<b>Index letters</b>	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 <sup>a</sup>
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a</sup>
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	g	for grain
	i	fitted out for the transport objects which should exceed the gauge if they were loaded on ordinary wagons <sup>b c</sup>
	k	with 2 or 3 axles: $tu < 20\text{ t}$ with 4 axles: $tu < 40\text{ t}$ with 6 axles or more: $tu < 50\text{ t}$
	kk	with 2 or 3 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 <sup>a</sup>
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a</sup>
	n	with 2 axles: $tu > 30\text{ t}$ with 3 axles: $tu > 40\text{ t}$ with 4 axles: $tu > 60\text{ t}$ with 6 axles or more: $tu > 75\text{ t}$ <sup>c</sup>
o	with axial bulk gravity unloading, at the top <sup>a</sup>	



 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 25 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012


OTIF UTP

Corresponding text in EU regulations <sup>12</sup> EU ref.

	oo	with axial bulk gravity unloading, at the bottom <sup>a</sup>
	p	with axial bulk gravity unloading, at the top <sup>a</sup>
	pp	with axial bulk gravity unloading, at the bottom <sup>a</sup>
<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"> <li>- well wagons</li> <li>- wagons with a central recess</li> <li>- wagons with an ordinary sloping diagonal permanent control desk</li> </ul> <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"> <li>- axial: Apertures situated above the centre of the track</li> <li>- bilateral: Apertures on either side of the track, outside the rails (For these wagons, unloading is: <ul style="list-style-type: none"> <li>- simultaneous, if complete emptying of the wagon requires the apertures to be open on both sides,</li> <li>- alternate, if complete emptying of the wagon can take place by opening the apertures on one side only)</li> </ul> </li> <li>- 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</li> <li>- 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</li> </ul> <p><i>Rate of unloading:</i></p> <ul style="list-style-type: none"> <li>- bulk: Once the apertures are open for unloading, they cannot be closed again until the wagon is empty</li> <li>- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped</li> </ul>		

**CATEGORY LETTER: Z - TANK WAGON**

<b>Reference wagon</b>	<b>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</b>	
<b>Index letters</b>	a	with 4 axles
	aa	with 6 axles or more
	b	for oil products <sup>a</sup>
	c	with unloading under pressure <sup>b</sup>
	d	for food and chemical products <sup>a</sup>
	e	fitted with heating devices
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	g	for the transport of gases under pressure, liquefied or

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 26 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

Corresponding text in EU regulations <sup>12</sup> EU ref.

	dissolved under pressure <sup>b</sup>
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: $20\text{ t} \leq tu < 25$ t with 4 axles: $40\text{ t} \leq tu < 50$ t with 6 axles or more: $50\text{ t} \leq tu < 60$ 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
p	with station for brakeman <sup>a</sup>
<p>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".</p>	

## 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 $22\text{ m} \leq lu < 27\text{ m}$	
Index letters	a	with bogies
	c	with controlled gravity unloading, on both sides, alternately, at the top <sup>a</sup>
	cc	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a</sup>
	E	with 3 units
	ee	with 4 units or more
	f	suitable for traffic with Great Britain

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP</b> Page 27 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN


OTIF UTP

|Corresponding text in EU regulations<sup>12</sup> EU ref.

	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 <sup>a</sup>
	ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a</sup>
	m	with 2 units: $lu \geq 27$ m
	mm	with 2 units: $lu < 22$ m
	o	with axial bulk gravity unloading, at the top <sup>a</sup>
	oo	with axial bulk gravity unloading, at the bottom <sup>a</sup>
	p	with axial controlled gravity unloading, at the top <sup>a</sup>
	pp	with axial controlled gravity unloading, at the bottom <sup>a</sup>
	r	articulated wagon
	rr	multiple wagon
a. Wagons with gravity unloading in category F are open wagons, which do not have a flat floor and are not designed for end or side tipping.		
The method of unloading these wagons is defined by a combination of the following characteristics:		
<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 $22 \text{ m} \leq lu < 27 \text{ m}$	
<b>Index letters</b>	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 exclu-

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 28 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

|Corresponding text in EU regulations <sup>12</sup> EU ref.


	sively)
g	for grain
h	for fruits and vegetables <sup>a</sup>
i	with opening or shunt walls
ii	with very robust opening or shunt walls <sup>b</sup>
l	with movable partitions <sup>c</sup>
ll	with lockable movable partitions <sup>c</sup>
m	with 2 units: $lu \geq 27$ 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 dismantled temporarily.

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

<b>Reference wagon</b>	<b>refrigerator wagon with class IN thermal insulation, with motor-driven ventilation, with gratings and ice bunker <math>\geq 3,5</math> m<sup>3</sup> articulated or multiple wagon with axles, with 2 units <math>22 \text{ m} \leq lu &lt; 27 \text{ m}</math></b>	
<b>Index letters</b>	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 <sup>a</sup>
	gg	refrigerator with liquefied gas <sup>a</sup>
	h	with class IR thermal insulation
	i	mechanically refrigerated by the machinery of an accompanying technical wagon <sup>a b</sup>
	ii	accompanying technical wagon <sup>a b</sup>
	l	insulated without ice bunkers <sup>a c</sup>
	m	with 2 units: $lu \geq 27$ m
	mm	with 2 units: $lu < 22$ m
	o	with ice bunkers of capacity less than $3,5$ m <sup>3c</sup>
	oo	with 3 units
	p	without gratings
	r	articulated wagon
	rr	multiple wagon

a. The index letter "l" shall not be marked on wagons bearing the index letters "g", "gg", "i" or "ii".

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 29 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

|Corresponding text in EU regulations<sup>12</sup> EU ref.


- |  |
|--|
| <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 $22\text{ m} \leq lu < 27\text{ m}$	
<b>Index letters</b>	a	articulated wagon
	aa	multiple wagon
	b	with special fittings for securing purposes for medium-sized containers (pa) <sup>a</sup>
	c	with swivelling bolster <sup>a</sup>
	d	fitted out for the transport of motor cars, without deck <sup>a</sup>
	e	with decks for the transport of motor cars <sup>a</sup>
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	g	fitted for the transport of containers <sup>a b</sup>
	h	fitted out for the transport of steel coils, eye to side <sup>a c</sup>
	hh	fitted out for the transport of steel coils, eye to sky <sup>a c</sup>
	i	with removable cover and non-removable ends <sup>a</sup>
	ii	with very robust removable metallic cover <sup>d</sup> and non-removable ends <sup>a</sup>
	j	with shock-absorbing device
	l	without stanchions <sup>a</sup>
	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 <sup>a</sup>	
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 $22\text{ m} \leq lu < 27\text{ m}$	
<b>Index letters</b>	b	with special fittings for securing purposes for medium-sized containers (pa) <sup>a</sup>
	c	with swivelling bolster <sup>a</sup>
	d	fitted out for the transport of motor cars, without deck <sup>a b</sup>

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 30 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

|Corresponding text in EU regulations<sup>12</sup> EU ref.

e	with decks for the transport of motor cars <sup>a</sup>
f	suitable for traffic with Great Britain
ff	suitable for traffic with Great Britain (by tunnel exclusively)
fff	suitable for traffic with Great Britain (by train-ferry exclusively)
g	fitted for the transport of containers, total loading length ≤ 60' (except pa) <sup>a b c</sup>
gg	fitted for the transport of containers, total loading length > 60' (except pa) <sup>a b c</sup>
h	fitted out for the transport of steel coils, eye to side <sup>a d</sup>
hh	fitted out for the transport of steel coils, eye to sky <sup>a d</sup>
i	with removable cover and non-removable ends <sup>a</sup>
ii	with very robust removable metallic cover <sup>e</sup> and non-removable ends <sup>a</sup>
j	with shock-absorbing device
l	without stanchions <sup>a</sup>
m	with 2 units: lu ≥ 27 m
mm	with 2 units: lu < 22 m
o	with 3 units
oo	with 4 units or more
p	without sides <sup>a</sup>
r	articulated wagon
rr	multiple wagon

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

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

Reference wagon	articulated or multiple wagon with axles, with 2 units 22 m ≤ lu < 27 m	
<b>Index letters</b>	a	with bogies
	b	with unobstructed height of doors > 1,90 m <sup>a</sup>
	c	with end doors
	d	with controlled gravity unloading, on both sides, alternately, at the top <sup>b</sup>
	dd	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a b</sup>
	e	with 3 units
	ee	with 4 units or more
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)

**OTIF UTP***Corresponding text in EU regulations<sup>12</sup> EU ref.*

g	for grain
h	fitted out for the transport of steel coils, eye to side
hh	fitted out for the transport of steel coils, eye to sky
i	with opening walls <sup>a</sup>
j	with shock-absorbing device
l	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a b</sup>
ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a b</sup>
m	with 2 units: $lu \geq 27$ m
mm	with 2 units: $lu < 22$ m
o	with axial bulk gravity unloading, at the top <sup>a b</sup>
oo	with axial bulk gravity unloading, at the bottom <sup>a b</sup>
p	with axial controlled gravity unloading, at the top <sup>a b</sup>
pp	with axial controlled gravity unloading, at the bottom <sup>a b</sup>
r	articulated wagon
rr	multiple wagon

- a. Index letter "b" shall not be marked on wagons bearing the index letters "d", "dd", "i", "l", "ll", "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 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**

<b>Reference wagon</b>	<b>articulated or multiple wagon, with axles, with 2 units <math>22\text{ m} \leq lu &lt; 27\text{ m}</math></b>	
<b>Index letters</b>	a	with bogies
	e	with 3 units



**OTIF UTP***Corresponding text in EU regulations <sup>12</sup> EU ref.*

ee	with 4 units or more
c	with unloading under pressure
d	with controlled gravity unloading, on both sides, alternately, at the top <sup>a</sup>
dd	with controlled gravity unloading, on both sides, alternately, at the bottom <sup>a</sup>
f	suitable for traffic with Great Britain
ff	suitable for traffic with Great Britain (by tunnel exclusively)
fff	suitable for traffic with Great Britain (by train-ferry exclusively)
g	for grain
i	fitted out for the transport objects which should exceed the gauge if they were loaded on ordinary wagons <sup>b</sup>
l	with bulk gravity unloading, on both sides, simultaneously, at the top <sup>a</sup>
ll	with bulk gravity unloading, on both sides, simultaneously, at the bottom <sup>a</sup>
m	with 2 units: $lu \geq 27$ m
mm	with 2 units: $lu < 22$ m
o	with axial bulk gravity unloading, at the top <sup>a</sup>
oo	with axial bulk gravity unloading, at the bottom <sup>a b</sup>
p	with axial controlled gravity unloading, at the top <sup>a</sup>
pp	with axial controlled gravity unloading, at the bottom <sup>a</sup>
r	articulated wagon
rr	multiple wagon

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

b. In particular:

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

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


*Arrangement of the unloading apertures:*

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

*Rate of unloading:*

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



 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 33 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012


OTIF UTP

|Corresponding text in EU regulations <sup>12</sup> EU ref.

<p>the wagon is empty</p> <p>- controlled: At any time during unloading, the flow of the goods can be regulated or even stopped</p>
---

**CATEGORY LETTER: Z - TANK WAGON**

<b>Reference wagon</b>	<b>with metal shell, for the transport of liquids or gases articulated or multiple wagon with axles, with 2 units 22 m ≤ lu &lt; 27 m</b>	
<b>Index letters</b>	a	with bogies
	c	with unloading under pressure <sup>a</sup>
	e	fitted with heating devices
	f	suitable for traffic with Great Britain
	ff	suitable for traffic with Great Britain (by tunnel exclusively)
	fff	suitable for traffic with Great Britain (by train-ferry exclusively)
	g	for the transport of gases under pressure, liquefied or dissolved under pressure <sup>a</sup>
	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
	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".		

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 34 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

Corresponding text in EU regulations <sup>15</sup> EU ref.

## **PART PPa:**

## **Appendix Pa**

### **PPa.0 GENERAL REMARKS**

#### **PPa.0.1 THIS ANNEX DESCRIBES**

the vehicle number and linked marking applied in a visible manner on the vehicle to identify it uniquely and in a permanent manner 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 PPa is an adapted extract of TSI OPE Appendix Pa. 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.


#### **PPa.02 STANDARD NUMBER AND LINKED ABBREVIATIONS**

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

Rolling stock group	Interoperability capability and vehicle type [2 digits]	Country in which the vehicle is registered [2 digits]	Technical characteristics [4 digits]	Serial number [3 digits]	Check digit [1 digit]
Wagons	00 to 09 10 to 19 20 to 29 30 to 39 40 to 49 80 to 89 <i>[details in PPa.6]</i>	01 to 99 <i>[details in PPa.4]</i>	0000 to 9999 <i>[details in PPa.9]</i>	000 to 999	0 to 9 <i>[details in PPa.3]</i>
Hauled passenger vehicles	50 to 59 60 to 69 70 to 79 <i>[details in PPa.7]</i>	01 to 99 <i>[details in PPa.4]</i>	0000 to 9999 <i>[details in PPa.10]</i>	000 to 999	0 to 9 <i>[details in PPa.3]</i>
Tractive rolling stock and units in a trainset in fixed or pre-defined formation	90 to 99 <i>[details in PPa.8]</i>		0000000 to 8999999 <i>[the meaning of these figures is defined by the Contracting States, eventually by bilateral or multilateral agreement]</i>		
Special vehicles			9000 to 9999 <i>[details in PPa.11]</i>	000 to 999	

In a given country, the 7 digits of technical characteristics and serial number are

<sup>15</sup> Appendix Pa of TSI OPE (Operations and traffic management) – Commission Decision 2010/640/EU published in the EU Official Journal L280 on 26.10.2010 – as amended by Commission Decision 2011/314/EU published in the EU Official Journal L144 on 31.05.2011.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP Page 35 of 45</b>
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

*OTIF UTP* | *Corresponding text in EU regulations*<sup>15</sup> *EU ref.*

sufficient to identify uniquely a vehicle inside the groups of hauled passenger vehicles and special vehicles<sup>16</sup>.

Alphabetical markings complete the number:

- (a) markings linked to the interoperability ability (details in section PPa.5);
- (b) abbreviation of the country in which the vehicle is registered (details in section PPa.4);
- (c) Vehicle Keeper Marking<sup>17</sup> (details in section PPa.1);
- (d) abbreviations of the technical characteristics (details in section section PPa.12 for wagons).

### **PPa.03 ALLOCATION OF NUMBER**

The unique Standard Number shall be allocated according to the rules laid down in Article 14 § 1 of ATMF. | The European Vehicle Number has to be allocated according to the rules laid down in Commission Decision 2007/756/EC.

The Standard 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 technical admission.

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

### **PPa.1 VEHICLE KEEPER MARKING (VKM)**

Part 1

#### **PPa.1.1 DEFINITION OF THE VEHICLE KEEPER MARKING**

A Vehicle Keeper Marking (VKM) is an alphabetic code, consisting of 2 to 5 letters<sup>18</sup>. A VKM is inscribed on each side of the rail vehicle, near the Standard Number. | European Vehicle Number.

The VKM identifies the vehicle keeper as registered in a National Vehicle 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 this Annex PP. | TSI (OPE).

#### **PPa.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 signs<sup>19</sup>. Diacritical signs used by these letters are ignored for checking uniqueness.

<sup>16</sup> For special vehicles, the number has to be unique in a given country with the first digit and the five last digits of the technical characteristics and serial number.

<sup>17</sup> 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.

<sup>18</sup> Digits, spaces and signs other than letters are not allowed. For NMBS/SNCB, the use of an encircled single letter B can be continued.

<sup>19</sup> Diacritical marks are "accent signs", such as in Å, Ç, Ö, Ć, 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.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>		UTP WAG - PP Page 36 of 45	
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

OTIF UTP

| Corresponding text in EU regulations <sup>15</sup> EU ref.

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.

### PPa.1.3 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.

### PPa.1.4 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](http://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 Secretary General and ERA. If the applicant has his place of business in a State which does not 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, i.e. the Secretary General if the Contracting State does not apply EU law.

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.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 37 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

| Corresponding text in EU regulations <sup>15</sup> EU ref.

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

**PPa.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.

**PPa.2.2 WAGONS**

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

21 TEN	31 TEN	23 RIV	81 (profile G2)
85 CH-SBB	72 SRB-ZS	85 CH-SBB	80 D-DB
7369 551-5	0691 232-1	7369 005-0	6633 001-5
Zcs	Tanoos	Zcs	Falns
23 TEN	31 TEN	33 TEN	43
80 D-RFC	80 D-DB	84 NL-ACTS	87 F-SNCF
7369 553-4	0691 235-2	4796 100-8	4273 361-3
Zcs	Tanoos	Slpss	Laeks

**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 PPa.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    F-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.

<sup>20</sup> no similar provision in TSI OPE for freight wagons, only for locomotives, power cars and special wagons

<sup>21</sup> no similar provision in TSI OPE at all

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 38 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

| Corresponding text in EU regulations <sup>15</sup> EU ref.

**PPa.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

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 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	
	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 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.

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

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

Countries	Alphabetical country code <sup>(1)</sup>	Numerical country code	Countries	Alphabetical country code <sup>(1)</sup>	Numerical country code
Albania	AL	41	Liechtenstein	FL <sup>(1)</sup>	-
Algeria	DZ	92	Lithuania	LT	24
Armenia	AM	58	Luxembourg	L	82
Austria	A	81	Macedonia (Former Yugoslav Republic of)	MK	65
<i>Azerbaijan</i>	AZ	57	<i>Malta</i>	M	-
<i>Belarus</i>	BY	21	<i>Moldova</i>	MD <sup>(1)</sup>	23
Belgium	B	88	Montenegro	MNE	62
Bosnia-Herzegovina	BIH	44	Monaco	MC	-
		50	<i>Mongolia</i>	MGL	31
Bulgaria	BG	52	Morocco	MA	93

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 39 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP


Corresponding text in EU regulations <sup>15</sup> EU ref.

Countries	Alphabetical country code <sup>(1)</sup>	Numerical country code	Countries	Alphabetical country code <sup>(1)</sup>	Numerical country code
<i>China</i>	RC	33	Netherlands	NL	84
<i>Cuba</i>	CU <sup>(3)</sup>	40	<i>North Korea</i>	PRK	30
<i>Cyprus</i>	CY	-	Norway	N	76
Czech Republic	CZ	54	Poland	PL	51
Denmark	DK	86	Portugal	P	94
<i>Egypt</i>	ET	90	Romania	RO	53
Estonia	EST	26	Russia	RUS	20
Finland	FIN	10	Serbia	SRB	72
France	F	87	Slovakia	SK	56
<i>Georgia</i>	GE	28	Slovenia	SLO	79
Germany	D	80	<i>South Korea</i>	ROK	61
Greece	GR	73	Spain	E	71
Hungary	H	55	Sweden	S	74
Iran	IR	96	Switzerland	CH	85
Iraq	IRQ <sup>(1)</sup>	99	Syria	SYR	97
Ireland	IRL	60	<i>Tajikistan</i>	TJ	66
<i>Israel</i>	IL	95	Tunisia	TN	91
Italy	I	83	Turkey	TR	75
<i>Japan</i>	J	42	<i>Turkmenistan</i>	TM	67
<i>Kazakhstan</i>	KZ	27	Ukraine	UA	22
<i>Kyrgyzstan</i>	KS	59	United Kingdom	GB	70
Latvia	LV	25	<i>Uzbekistan</i>	UZ	29
Lebanon	RL	98	<i>Vietnam</i>	VN <sup>(1)</sup>	32

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

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



 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP Page 40 of 45</b>
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN Date: 02.04.2012

OTIF UTP

| Corresponding text in EU regulations <sup>15</sup> EU ref.

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

Part 5

PPa.5.1 **“TEN”**: a wagon which

- 1) fully<sup>22</sup> complies with all relevant UTPs (and RID if applicable) in the versions in force at the time<sup>23</sup> 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);

or

**“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;

or

**“PPV/PPW”**: A wagon which complies with the PPV/PPW or PGW agreement (inside OSJD States) (original: PPV/PPW: ППВ (Правила пользования вагонами в международном сообщении); PGW: Правила Пользования Грузовыми Вагонами)

**Note:**

Wagons which are not admitted for operation in all Contracting States 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 States shall be codified in accordance with

**“TEN”**: Vehicle which:

- a) complies with all relevant TSIs which are in force at the moment of placing in service and has been authorised to be placed in service according to Article 22(1) of Directive 2008/57/EC;
- and
- b) is provided with an authorisation valid in all (EU) Member States in accordance with Article 23(1) of Directive 2008/57/EC.

Authorisations for placing in service which have been granted before 19 July 2008, including authorisations delivered under international agreements, in 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. 2008/57/EC, Art. 21 (12)

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

authorised (b)

Member States

The list of authorising MS should be marked according to one of the following drawings<sup>24</sup>, 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).

<sup>22</sup> 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.

<sup>23</sup> The date of admission is the date on which the Certificate is issued.

<sup>24</sup> The drawings are not included here but shall be in accordance with marking 4.5.33 “Derogation plate” in EN 15877-1:2012.





**OTIF**

**ROLLING STOCK  
FREIGHT WAGONS – ANNEX PP**

UTP WAG - PP  
Page 41 of 45

Status: **PROPOSAL**

Version: 01

Ref.: A 94-02-PP/3.2011 rev1

Original: EN

Date: 02.04.2012

*OTIF UTP*

this Annex section PP.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.


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

this Annex section PP.6.1.

*Corresponding text in EU regulations* <sup>15</sup> *EU ref.*  
Appendix Pa, part 4.

TSI compliant or which are not.

Appendix Pa, part 6.


 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 42 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

## PPa.6 INTEROPERABILITY CODES USED FOR WAGONS (DIGITS 1-2)

### PPa.6.1 (valid from 01.01.2014)

	1 <sup>st</sup> digit ↓	2 <sup>nd</sup> digit →	0	1	2	3	4	5	6	7	8	9	2 <sup>nd</sup> digit ←	1 <sup>st</sup> digit ↓	
		Track Gauge	fixed or variable	fixed	variable	fixed	variable	fixed	variable	fixed	variable	fixed or variable	Track Gauge		
TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> and/or PPV/PPW	0	with axles	Not to be used	TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> wagons		not to be used <sup>(d)</sup>						PPV/PPW wagons (variable gauge)	with axles	0	
	1	with bogies											with bogies	1	
TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> and/or PPV/PPW	2	with axles		TEN <sup>(a)</sup> and/or RIV <sup>(b)</sup> wagons								PPV/PPW wagons (fixed gauge)	with axles	2	
	3	with bogies												with bogies	3
Other wagons <sup>(e)</sup>	4	with axles <sup>(c)</sup>	maintenance related wagons	Other wagons <sup>(e)</sup>								Wagons with special numbering for technical characteristics not placed in service inside EU or a COTIF Contracting State	with axles <sup>(c)</sup>	4	
	8	with bogies <sup>(c)</sup>												with bogies <sup>(c)</sup>	8
		Traffic	Domestic traffic or international traffic by special agreement												
	↑ 1 <sup>st</sup> digit	→ 2 <sup>nd</sup> digit	0	1	2	3	4	5	6	7	8	9	← 2 <sup>nd</sup> digit	↑ 1 <sup>st</sup> digit	

(a) Wagons permitted to carry the TEN marking, see section PPa.5.1 (TSI: Appendix Pa, part 6), and which in addition to the criteria for the TEN marking meet the criteria included in section PPa.6.2.  
(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.  
(e) Including wagons permitted to carry the marking TEN, but do not meet the criteria included in section PPa.6.2; Includes also wagons which cannot carry the marking TEN.

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP Page 43 of 45</b>
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

## OTIF UTP

PPa.6.2 For the purpose of marking a wagon with an indication of its operational compatibility<sup>26</sup> the additional criteria below have to be met by a wagon which is subject to UTP WAG section 7.6.4 in order to be consistent with the requirements of Appendix C of the TSI WAG revised (final draft version 0.2):<sup>27</sup>

A wagon compliant with UTP WAG and subject to the UTP's section 7.6.4 and which also meet all the additional criteria set out below, may receive the marking "GE".

A wagon compliant with UTP WAG and subject to the UTP's section 7.6.4 and which also meet all the additional criteria set out below, but not C.3 and/or UTP WAG section 7.6.4 (c) and/or (d), may receive the marking "CW".

The format and position of these two additional markings will be included in UTP WAG Annex B (as soon as possible).

### *Additional criteria:*

#### C.3 Ability to be hump shunted:

In addition to the requirements in section 6.2.3.1.1 of this UTP, the wagon shall be assessed in accordance with clause 8 of EN 12663-2:2010 and classified in Category F-I in accordance with clause 5.1 of EN 12663-2:2010 with the following exception: for wagons designed to carry motor vehicles or combined transport wagons without long stroke shock absorbers, Category F-II may be used. The requirements concerning the buffing tests in clause 8.2.5.1 of EN 12663-2:2010 apply.

#### C.8 Tests concerning longitudinal compressive forces:

The verification of safe running under longitudinal compressive forces shall be carried out in accordance with EN 15839:2011.

#### C.10 Location of parking brake handles

If a wagon is equipped with a parking brake, the location of its operating handle or operating wheel shall be:

- on both sides of the wagon if it is operated from the ground or
- on a platform that can be accessed from both sides of the wagon.

## Corresponding text in EU regulations<sup>25</sup> EU ref.

(final draft version 0.2 of TSI WAG revised, Appendix C)

Units compliant with all requirements set out in (TSI WAG) section 4.2, fulfilling all conditions in clause 7.1.2 and all conditions in Appendix C of this TSI may receive the marking "GE".

Units compliant with all requirements set out in section 4.2, fulfilling all conditions in clause 7.1.2 and the conditions in Appendix C of this TSI but not C.3 and/or C.6 and/or C.7.b may receive the marking "CW".

If the additional marking is used, it shall be inscribed on the unit as outlined in figure C.3.



**Figure C.3:**

### **The additional markings "GE" and "CW"**


The letters shall be of the same font type as the TEN marking. The size of the letters shall be at least 100 mm high. The outer measures of the frame shall be at least 275 mm wide and 140 mm high, the frame shall be 7 mm thick.

The marking shall be located on the right hand side of the area containing the European Vehicle Number and the TEN marking.


<sup>25</sup> See footnote 1 on page 1.

<sup>26</sup> The operational compatibility is different from the interoperability; the interoperability TEN marking (and the grid) indicates those Contracting States where the wagon is admitted to operation, whereas the operational marking indicates the 1435 mm trackgauge networks (except those in UK) where the wagon can be operated in the single wagon transport system.

<sup>27</sup> The other provisions in Appendix C of the preliminary draft are covered in UTP WAG chapter 4-6, including the additional provisions applicable to wagons subject to section 7.6.4 (i.e. wagons cross-admitted in all Contracting States).

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			<b>UTP WAG - PP Page 44 of 45</b>
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

<i>OTIF UTP</i>	<i>Corresponding text in EU regulations<sup>25</sup></i>	<i>EU ref.</i>
<p>The handles for operation from the ground shall be wheels.</p> <p>C.16 Tow hooks Wagons shall be provided with tow hooks, which shall be fixed to the side of the wagon underframe in accordance with clause 1.4 of leaflet UIC 535-1.</p> <p>C.17 Protection of protruding parts To ensure the safety of staff on stationary vehicles, protruding (angular or pointed) wagon parts located up to 2 m above rail level or above passageways and working surfaces which are liable to cause accidents, shall be fitted with protective devices as described in clause 1.4 of leaflet UIC 535-2.</p> <p>C.18 Label holders Wagons shall be equipped with a label holder on each side in accordance with clause 1 of leaflet UIC 575.</p>		
<b>PPa.7-PPa.8</b> (Not relevant for wagons)		Part 7-8
<b>PPa.9</b> <b>STANDARD NUMERICAL MARKING OF WAGONS (DIGITS 5 TO 8)</b>		Part 9
<p>This part indicates the numerical marking in 4 digits associated to the main technical characteristics of the wagon and it is published on the OTIF website (<a href="http://www.otif.org">www.otif.org</a>).</p> <p>An application for a new code is filed with the registering entity and forwarded to the central body (Secretary General).</p> <p>A new code can be used only after publication by the central body (Secretary General).</p>	<p>on the ERA website (<a href="http://www.era.europa.eu">www.era.europa.eu</a>).</p> <p>as referred to in Decision 2007/756/EC and sent to the ERA.</p> <p>by the ERA.</p>	
<b>PPa.10-PPa.11</b> (Not relevant for wagons)		Part 10-11
<b>PPa.12</b> <b>LETTER MARKING FOR WAGONS</b>		Part 12
<p>This part is published on the OTIF website (<a href="http://www.otif.org">www.otif.org</a>).</p> <p>An application for a new code is filed with the registering entity and forwarded to the central body (Secretary General).</p> <p>A new code can be used only after publication by the central body (Secretary General).</p>	<p>on the ERA website (<a href="http://www.era.europa.eu">www.era.europa.eu</a>).</p> <p>as referred to in Decision 2007/756/EC and sent to the ERA.</p> <p>by the ERA.</p>	
<b>PPa.13</b> (Not relevant for wagons)		Part 13

 <b>OTIF</b>	<b>ROLLING STOCK FREIGHT WAGONS – ANNEX PP</b>			UTP WAG - PP Page 45 of 45
	Status: <b>PROPOSAL</b>	Version: 01	Ref.: A 94-02-PP/3.2011 rev1	Original: EN

**APPLICATION GUIDE to PP.5 and PP.6 - and to PPa.5 and PPa.6**

(NOT part of the regulations)

Requirements	Authorisation	Marking	Authorisation	Marking	Authorisation	Marking	Authorisation	Marking
<b>UTP/TSI WAG</b> <b>Chapter 4, 5 and 6</b> (with open points <sup>1)</sup> related to the wagon in question)  <b>Mandatory</b>	<b>OTIF:</b> <b>ATMF Article 6 § 4</b>  <b>EU:</b> <b>2008/57/EC</b> <b>Article 22 (1) +</b> <b>Article 23 (2)</b>  <b>Authorised</b> <b>State by State</b>	<b>Deroga-</b> <b>tion plate</b> <b>(B.33)</b>  <b>First digit</b> <b>4 / 8</b>	<b>OTIF:</b> <b>ATMF Article 6 § 3</b>  <b>EU:</b> <b>2008/57/EC</b> <b>Article 22 (1) +</b> <b>Article 23 (1)</b>  <b>Cross authorised</b>	<b>TEN</b>   <b>First digit</b> <b>4 / 8</b>	<b>OTIF:</b> <b>ATMF Article 6 § 3</b>  <b>EU:</b> <b>2008/57/EC</b> <b>Article 22 (1) +</b> <b>Article 23 (1)</b>  <b>Cross authorised</b>	<b>TEN</b>   <b>First digit</b> <b>4 / 8</b>	<b>OTIF:</b> <b>ATMF Article 6 § 3</b>  <b>EU:</b> <b>2008/57/EC</b> <b>Article 22 (1) +</b> <b>Article 23 (1)</b>  <b>Cross authorised</b>	<b>TEN</b>   <b>First digit</b> <b>0 / 1 / 2 / 3</b> <sup>4)</sup>
<b>UTP/TSI WAG</b> <b>section 7.6.4,</b> <b>e) (~TSI Annex JJ.2)</b> (closing open points <sup>1)</sup> relating to the wagon in ques- tion)  <b>Voluntary - but</b>  <b>mandatory if b)+c)+d)</b> <b>below are all met</b>  <b>b) 1435 mm track gauge <sup>2)</sup></b> <b>c) G1 (+G11) profile gauge <sup>3)</sup></b> <b>d) ≤ 17 500 mm between</b> <b>adjacent axles</b> <b>section PP.6.2 or PPa.6.2</b> <b>f) hump shunting allowed</b> <b>g) all other “6.2 criteria”</b>					<b>all requirements,</b> <b>except one or</b> <b>more of c), d) or f)</b> <b>are met</b>	<b>CW</b>	<b>all requirements</b> <b>are met</b>	<b>GE</b>

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.