



Bulletin of International Carriage by Rail

121th year : No. 3 / 2013



Summary

News

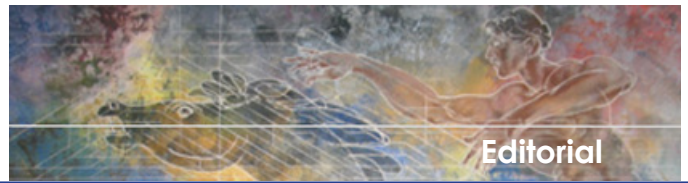
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Editorial



By **François Davenne**,
Secretary General of OTIF

The accession to COTIF of Pakistan, which has become our 49th Member State, is a sign of the interest our Organisation arouses. The development of unified railway law is seen as necessity in the rail sector.

Recent UNECE studies on international carriage of goods by rail show that the lack of coordination and the variety of applicable legal regimes hamper the development of trade by rail, which currently makes up less than 5% of Eurasian traffic.

OTIF endeavours to provide for shared rules, legal certainty, and – if agreed upon by the States – uniform technical rules, both for dangerous goods and on interoperability matters. The diversity of articles in this bulletin reflects this spirit of cooperation and sharing.

François Davenne



1

Pakistan became the 49th Member State of OTIF on 1 September 2013

Pakistan's accession to COTIF took effect on 1 September 2013.



As a result, OTIF now has 49 Member States. Application of the CIM Uniform Rules and the use of the CIM consignment note simplifies goods traffic between Pakistan, Iran and Turkey and also improves legal certainty for such traffic.

Eva Hammerschmiedová

2

Young experts programme

OTIF is pleased to welcome to its international Secretariat in Berne the first two interns recruited through the "Young Experts" programme.



Mr **Ayoub Elkaroubi**, from Morocco, has joined the programme to work in the field of communication.

Mr Elkaroubi is a qualified translator (Arabic–English–French). He has also obtained an MA in European Interdisciplinary Studies from the prestigious College of Europe in Warsaw.

He already has professional experience in a number of undertakings, foundations and organisations in Morocco and in other countries, as well as academic experience in the United States.

As part of his training within OTIF, Mr Elkaroubi has helped edit and format this Bulletin of International Carriage by Rail.



Mr **Jan Hampl**, from the Czech Republic, has joined the programme to work in the field of railway technology in OTIF's technical expert service.

Mr Hampl has trained as a transport systems engineer. He has studied at Darmstadt Technical University in Germany, the Chung Hua University in Taiwan and the Czech Technical University in Prague.

He has substantial professional experience, having worked for the Computer Science Corporation in Prague and the Railways of the Czech Republic.

Samuel Flückiger



3

Withdrawal of the declaration of non-application made by Estonia

In an instrument issued on 9 August 2013, Estonia withdrew the declaration it had made in accordance with Article 42 § 1 of COTIF, with immediate effect. Article 42 of COTIF says that any Member State may declare, at any time, that it will not apply in their entirety or partly certain Appendices to the Convention.

The Member States of OTIF and the European Union (EU) were informed of this withdrawal in a circular.

Estonia also withdrew the declaration it had made in accordance with Article 2 § 1 of CIV (non-application of Article 30 CIV). The withdrawal takes effect one month after the date on which the Depository informs the Member States, i.e. 15 September 2013.

The reason for these withdrawals is the agreement concluded between the European Union and OTIF concerning the EU's accession on 23 June 2011 to the Convention concerning International Carriage by Rail of 9 May 1980, as amended by the Vilnius Protocol of 3 June 1999 (COTIF 1999).

Like several other Member States of OTIF and the EU, Estonia entered a reservation and decided not to apply the CUI, APTU and ATMF Appendices.

Estonia benefits from the fact that it is again applying all the Appendices to the Convention on its territory, thus becoming a State Party to the APTU and ATMF Appendices.









So far, 17 Member States of OTIF that are also members of the EU have withdrawn their declarations. These are Austria, Belgium, Bulgaria, Denmark, Finland, Germany, Greece, Hungary, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovenia and now Estonia.

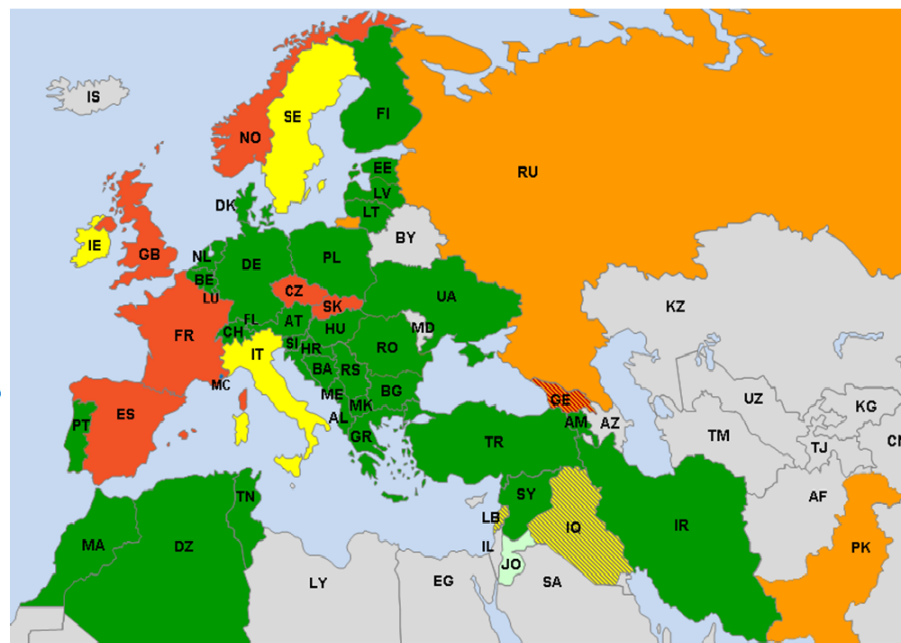
The **map below** and the **table summary on the next page** give a general overview of the scope of application of COTIF and the reservations.



Champ d'application géographique de la COTIF et ses appendices Geografischer Anwendungsbereich des COTIF und dessen Anhänge Geographical scope of COTIF and its appendices

État au 1^{er} septembre 2013
Stand 1. September 2013
Situation on 1st September 2013

-  Tous les appendices de la COTIF (33)
Alle Anhänge des COTIF (33)
All COTIF appendices (33)
-  Sans ATMF (1)
Ohne ATMF (1)
Without ATMF (1)
-  Sans CUI/APTU/ATMF (6)
Ohne CUI/APTU/ATMF (6)
Without CUI/APTU/ATMF (6)
-  Sans CUV/CUI/APTU/ATMF (1)
Ohne CUV/CUI/APTU/ATMF (1)
Without CUV/CUI/APTU/ATMF (1)
-  Sans CIV/RID/CUV/CUI/APTU/ATMF (2)
Ohne CIV/RID/CUV/CUI/APTU/ATMF (2)
Without CIV/RID/CUV/CUI/APTU/ATMF (2)
-  COTIF 1999 pas encore ratifiée (3)
COTIF 1999 noch nicht ratifiziert (3)
COTIF 1999 not yet ratified (3)
-  Suspension de la qualité de membre (2)
Ruhe der Mitgliedschaft (2)
Membership suspended (2)
-  Membres associés (1)
Assoziierte Mitglieder (1)
Associate Members (1)



Summary of the scope of application of COTIF and its Appendices

	CIV	CIM	RID	CUV	CUI	APTU	ATMF	Not yet ratified	Comments
AL		✓	✓	✓	✓	✓	✓		
DZ		✓	✓	✓	✓	✓	✓		
AM		✓	✓	✓	✓	✓	✓		
AT		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 1 July 2011 Reservations against the CUI/APTU/ATMF lifted with effect from 8 February 2012
BE		✓	✓	✓	✓	✓	✓		
BA		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 17 December 2012
BG		✓	✓	✓	✓	✓	✓		
HR		✓	✓	✓	✓	✓	✓		
CY		✓	✓	✓	✓	✓	✓		No railway infrastructure (no OTIF membership)
CZ		✓	✓	✓	✓	✓	✓		
DK		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 7 July 2011
EE		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 9 August 2013
FI		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 1 July 2011
FR		✓	✓	✓	✓	✓	✓		
GE		✓	✓	✓	✓	✓	✓		
DE		✓	✓	✓	✓	✓	✓		Reservation against the CUI lifted with effect from 1 January 2012 and against the APTU/ATMF with effect from 1 January 2013
GR		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 13 Sept. 2011
HU		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 16 February 2012
IR		✓	✓	✓	✓	✓	✓		
IQ		✓	✓	✓	✓	✓	✓		OTIF membership suspended
IE		✓	✓	✓	✓	✓	✓		
IT		✓	✓	✓	✓	✓	✓		
LV		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 26 April 2013
LB		✓	✓	✓	✓	✓	✓		OTIF membership suspended
FL		✓	✓	✓	✓	✓	✓		
LT		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 10 Nov. 2011
LU		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 11 January 2012
MK		✓	✓	✓	✓	✓	✓		
MT		✓	✓	✓	✓	✓	✓		No railway infrastructure (no OTIF membership)
MC		✓	✓	✓	✓	✓	✓		
ME		✓	✓	✓	✓	✓	✓		
MA		✓	✓	✓	✓	✓	✓		
NL		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 1 January 2012
NO		✓	✓	✓	✓	✓	✓		
PL		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 1 January 2012
PT		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 13 May 2013
RO		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 1 March 2013
RU		✓	✓	✓	✓	✓	✓		Application on specific lines only
RS		✓	✓	✓	✓	✓	✓		
SK		✓	✓	✓	✓	✓	✓		
SI		✓	✓	✓	✓	✓	✓		
ES		✓	✓	✓	✓	✓	✓		
SE		✓	✓	✓	✓	✓	✓		
CH		✓	✓	✓	✓	✓	✓		Reservations against the CUI/APTU/ATMF lifted with effect from 19 October 2012
SY		✓	✓	✓	✓	✓	✓		
TN		✓	✓	✓	✓	✓	✓		
TR		✓	✓	✓	✓	✓	✓		
UA		✓	✓	✓	✓	✓	✓		Application on specific lines only
PK		✓	✓	✓	✓	✓	✓		Application on specific lines only
GB		✓	✓	✓	✓	✓	✓		
EU		✓	✓	✓	✓	✓	✓		

 OTIF and EU Member State

 OTIF Member State only





Development of railway law

1. Railway Technology

The revision of the UTP WAG



1. Introduction

On 12 June 2013 the Committee of Technical Experts adopted revised Uniform Technical Prescriptions for freight wagons (UTP WAG).

According to ATMF Article 3a, TSIs and UTPs must be fully equivalent for the cross-authorisation of vehicles. This equivalence, within the meaning of ATMF Article 3a, was first achieved for wagons on 1 December 2012 when the UTP WAG:2012¹, which is equivalent to the EU WAG TSI:2006², entered into force.

In March 2013 the European Commission published revised WAG TSI³, which will apply from 1 January 2014. In order to maintain full equivalence between the OTIF and EU regulations, the UTP WAG also had to be revised.

As a result of close cooperation between the European Railway Agency and the European Commission on one hand, and the OTIF Secretariat and OTIF non-EU Member States on the other, revised UTP WAG were prepared. With the anticipated entry into force of the revised UTP WAG in January 2014, full equivalence between TSI and UTP is ensured for the foreseeable future. The revised UTP WAG is referred to in this document as UTP WAG:2014.

Full equivalence between the UTP WAG and the WAG TSI, within the meaning of ATMF Articles 3a and 6, benefits the cross-authorisation/“admission” of wagons. Wagons not subject to derogations which are constructed according to either the UTP WAG or the WAG TSI and which are equipped with the defined solutions to close the open points relating to network compatibility are admitted in all EU and non-EU OTIF Contracting States.

1- A 94-02/3.2011.

2- EU Decision 2006/861/EC, as amended by Decision 2009/107/EC and Decision 2012/464/EU.

3- Commission Regulation (EU) No 321/2013 of 13 March 2013 concerning the technical specification for interoperability relating to the subsystem ‘rolling stock — freight wagons’ of the rail system in the European Union and repealing Decision 2006/861/EC.

2. The revised UTP WAG and the responsibilities of actors

The content and principle of the revised UTP WAG:2014 are different from its predecessor.

Whereas the previous UTP WAG:2012 was very detailed and left few possibilities for innovation, the revised UTP WAG:2014 is much more functional, thus allowing technical systems to be optimised. A prerequisite for this new technical freedom is that all actors meet their respective responsibilities.

The essential requirements for the rail system are set out in the UTP GEN-A. All vehicles, including wagons, have to meet the applicable essential requirements, taking into account their intended design operating states.

The manufacturer ensures compliance with the UTP, which is checked by the assessing entity. If the UTP is correctly applied, the Competent Authority issues a certificate of operation.

The manufacturer or applicant composes the technical file relating to the wagon. The technical file contains all the information necessary for correct use of the wagon, such as the conditions and limits of use and the instructions concerning servicing, monitoring, adjustment and maintenance.

This technical file accompanies the wagon during its operational life and helps the railway undertaking and ECM fulfil their responsibilities for the safe operation and maintenance of the wagon.

The keeper of the vehicle keeps the certificate of operation to which the technical file, with the conditions and limits of use, is attached. The keeper should be indicated on each wagon by means of a Vehicle Keeper Marking (VKM).

The Entity in Charge of Maintenance ensures that the wagon is kept in a good state of maintenance. Each freight wagon in international operation must have an ECM assigned to it, in accordance with ATMF Article 15. The railway undertaking operating a train must check this and may only operate wagons to which an ECM is assigned⁴.

The rail transport undertaking is responsible for the safe operation of its trains in accordance with ATMF. For each vehicle it operates, the rail transport undertaking should be in a position to understand the limits and conditions of use and be able to determine if it can operate the vehicle accordingly.

The rail transport undertaking should therefore ensure that it has all the information necessary to operate the vehicle safely. The railway undertakings’ activities should be supervised by the Contracting States’ Competent Authorities.

3. Compliance with the UTP WAG

The UTP WAG:2014 stipulates three levels of compliance:

1. Compliance with the core UTP in section 4, which mainly contains functional requirements; this allows for different technical solutions. The admission to operation needs to be

4- See ATMF Annex A for the rules relating to ECM. An OTIF explanatory document relating to the ECM responsibilities is available on the OTIF website.



obtained for each Contracting State separately, because the revised UTP WAG contains three open points and one specific case, which means that closure of these open points must be accepted in each Contracting State individually, e.g. by applying national technical requirements. If compliance with level two or three is selected by the applicant, the open points will be closed by harmonised solutions as defined in the UTP⁵.

2. Compliance with point 7.1.2 (in addition to level 1) of the UTP provides a set of conditions aimed at closing the open points, dealing with specific cases and using some harmonised technical solutions which are accepted internationally, so that the first admission to operation is valid in all Contracting States. It is not mandatory to comply with section 7.1.2, but if 7.1.2 is complied with in addition to compliance with section 4, this will result in the mutual recognition of the first authorisation, which makes the authorisation valid in all OTIF Contracting States.

3. Compliance with appendix C (in addition to level 2) is the third level of compliance, which is combined with a high level of technical harmonisation. It is not mandatory to comply with appendix C, but meeting these requirements could be the basis for the applicant to declare a wagon compatible and exchangeable with the existing fleet of 'RIV' wagons⁶.

4. Differences between application of the UTP WAG:2012 and UTP WAG:2014

In the revision of the UTP WAG, many technical solutions which were mandated in the UTP WAG:2012 have been defined as functional requirements in the UTP WAG:2014. This allows these functional requirements to be met with the same solutions as before, or with an alternative solution that meets these functional requirements in an equivalent manner. However, the UTP WAG:2014 also contains some specifications which are additional to those in the UTP WAG:2012, such as:

- Bogie strength (4.2.3.6.1)
- Wheel set strength (4.2.3.6.2)
- Wheel strength (4.2.3.6.3)
- Axle strength (4.2.3.6.4)
- Axle boxes / bearings - mechanical resistance / fatigue (4.2.3.6.5)
- Variable gauge wheelset - safe locking (4.2.3.6.6)
- Brake – safety requirements (4.2.4.2).



5- Level 1 compliance is automatically obtained when using level 2 or level 3 compliance, because level 2 and 3 provide technical solutions which ensure compliance with the functional requirements of level 1.

6- The first digit of the 12-digit number of such wagons will be 0, 1, 2 or 3.

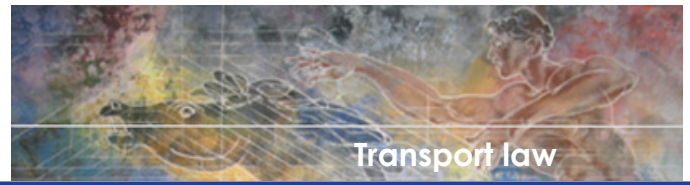
In addition to the above, the revised UTP refers to the most recent EN standards in order to reflect technical progress. The UTP WAG:2012, in contrast, referred to either EN standards available before 2005, or, in most cases, to its Appendices, in which the content of UIC leaflets available before 2005 was reproduced.

5. Conclusion

The UTP WAG has been amended so as to be fully equivalent to WAG TSI developments in the EU. In so doing, it is ensured that wagons that comply with the UTP WAG:2014 also comply with the revised WAG TSI and vice versa. This enables free circulation⁷ in all OTIF Contracting States of wagons which comply with level 2 or level 3, as explained in section 3 of this document. In addition, the revised UTP allows for innovations, as it no longer imposes unnecessary or suboptimal technical solutions in law.

Bas Leermakers / Peter Sorger

7- Within the meaning of ATMF Article 6 § 3.



2. Transport law

1

Updates to the CIV/CIM lists of railway lines and inland waterway services

CIV/CIM Lists of railway Lines:

None

CIV/CIM Lists of maritime and inland waterway services:

CIM List of lines

In an official letter dated 25.07.2013, the Federal Ministry of Transport, Building and Urban Development (Bonn) notified the deletion of the following shipping services:

- Sassnitz – Baltijsk, operated by AB DFDS Seaways Klaipeda (order of DFDS A/S Copenhagen)
- Sassnitz – Baltijsk and Sassnitz – Ust-Luga operated by Anship LLC, Moscow

Member States were informed of this in a circular on 5.08.2013. Following these modifications, the chapters Germany and Russia have been re-issued.

These shipping services continue to be operated by DFDS A/S, Copenhagen and by Black Sea Ferry & Investments LLS, Moscow.

See www.otif.org, under “Publications”.

At a glance

For a brief overview of the geography of the maritime and inland waterway services...

for CIV [Click here!](#) @

for CIM [Click here!](#) @

Samuel Flückiger

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Bibliography

Publications & interesting links

Rail transport

Bulletin des transports et de la logistique, Paris, n 3465/2013, p. 403/404 – Fret ferroviaire. Entre deux chaises [SNCF et RFF] (M. Tilche et B. Gruau); p. 412 – CIM - Droit d'action et prescription (Jurisprudence – Cour d'appel de Paris, 22.05.2013).

CIT-Info (Comité international des transports ferroviaires, CIT), éditions 3/2013 et 4/2013, v. <http://www.cit-rail.org>.

Erlassungssammlung zum Gütertransport- & Logistikrecht (A. Furrer), Schulthess Juristische Medien AG, Zürich-Basel-Genf 2013, S. 201- 320 – Transportvertrag – Schienentransport.

European Transport Law / Droit européen des transports / Europäisches Transportrecht, Antwerpen, n°3/2013, p. 229-245 – Enlightenment of the European Attitude Towards Passenger Rights: In dubio pro consumatore (M. Pavliha).

Transportrecht, Hamburg, Nr. 7-8/2013, p. 260-265 – Der Güterumschlag im Eisenbahnverkehr (R. Freise).

Zeitschrift der OSShD, Warschau, Nr. 3/2013, S. 20-23 – Finanzrechtliche Aspekte internationaler Eisenbahnbeförderungen. Rechtliche Verfahrensweise zur Beilegung von Streitigkeiten, die aus Güterbeförderungen im internationalen Eisenbahnverkehr resultieren (N. Netschiporemko) [ukrainische Rechtsprechung zu Art. 29 und 30 SMGS].

Other modes of transport

Bulletin des transports et de la logistique, Paris, n° 3466/2013, p. 423/424 – Déclaration de valeur/Assurance. Éviter les confusions (M. Tilche).

Idem, n° 3468/2013, p. 455/456 – CMR. Pierres d'achoppement (M. Tilche)

Recht der Transportwirtschaft, München, Nr. 6/2013, S. 213-218 – Schadenersatzansprüche im nationalen russischen Transportrecht (A. Boës, A. Frolov).

Transportrecht, Hamburg, Nr. 6/2013, p. 213-220 – Adoption of the CLNI 2012 – What has changed compared with CLNI 1988? [Convention on the limitation of liability in inland navigation] (C. Tournaye).

Eva Hammerschmiedová



3. RID/ADR/ADN

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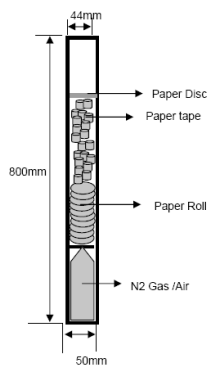
42nd Session of the UN Sub-Committee of Experts on the Transport of Dangerous Goods

(Geneva, 3 – 11 December 2012)

The UN Sub-Committee of Experts held its 42nd session from 3 to 11 December 2012. This was the last session of the 2011/2012 biennium. In the context of harmonisation, its decisions will be taken over into the 2015 edition of RID/ADR/ADN.

Confetti-shooters

In the previous biennium, Germany had already made attempts to include provisions for new types of confetti-shooters in the UN Model Regulations. Instead of pyrotechnic substances, these confetti-shooters use a pressurised gas contained in a cartridge. By turning the bottom part of the shooter, a mechanism unlocks the gas cartridge and the pressurised gas (usually compressed air or nitrogen) is discharged so that the confetti is shot away for a few metres.



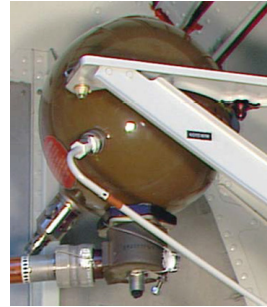
As these confetti-shooters do not contain any explosives, they cannot be assigned to Class 1. On the other hand the shooters do not meet the criteria of the existing UN numbers 1002 Air, compressed, 1066 Nitrogen, compressed or 3150 Devices, small, hydrocarbon gas powered, with release device, as they do not contain any flammable gas.

The UN Sub-Committee of Experts decided to use the existing UN number 3164 for these articles (Articles, pressurised, pneumatic or hydraulic (containing non-flammable gas)), with a new special provision assigned to this UN number specifying particular requirements.

Fire extinguishers

At the suggestion of Germany, the UN Sub-Committee of Experts looked at the issue of which types of fire extinguishers were assigned to UN number 1044. This question is of particular interest in European land transport, because under certain conditions, RID/ADR exempts fire extinguishers from the provisions (manufactured and filled according to the

provisions of the country of manufacture, packed in a strong outer packaging and protected against unintended activation). If this exemption cannot be used, fire extinguishers are subject to all the construction and testing requirements for pressure receptacles which, when applied, can result in difficulties because there is no reference to a specific standard for fire extinguishers and the requirements of the standards referred to cannot be met in full.



Above (left to right) : Fire extinguishers for installation in aircraft / Fire extinguishers composed of a non-rollable pressure drum and equipment, handled by fork lift or crane when loaded or unloaded / Fire extinguishers mounted on wheels.

The UN Sub-Committee of Experts welcomed a better definition of the fire extinguishers as assigned to UN number 1044. It also adopted a new special packing provision according to which large fire extinguishers may be carried unpackaged under certain circumstances.

Neutron radiation detectors

Neutron radiation detection is a key component in the identification of illicit radioactive materials (e.g. plutonium) passing through ports of entry and borders of a country. Radiation detection systems can be employed to scan containers or to detect radioactive materials. The shortage of helium-3 gas has prompted the search for alternative neutron radiation detection media. Boron trifluoride (BF₃) has been proven to be an effective alternative.

Such detectors are not subject to RID/ADR/ADN in European land transport, but the UN Model Regulations do not currently exempt them from the requirements. Based on a proposal from the Dangerous Goods Advisory Council (DGAC), the UN Sub-Committee of Experts adopted a special provision for UN number 1008 Boron trifluoride, which lays down the requirements for the carriage of neutron radiation detectors. Neutron radiation detectors containing not more than 1 g of boron trifluoride are exempt from the provisions, provided they meet certain requirements, particularly with regard to the packaging. Radiation detection systems may even contain up to 13 g of boron trifluoride.



RID/ADR/ADN

Transport of discarded packagings with residues of dangerous goods

As a result of practical problems caused by the implementation of European legislation on collection of wastes for disposal, recycling or recovery, an informal working group set up by the RID/ADR/ADN Joint Meeting had looked at the issue of carrying discarded packagings with residues of dangerous goods adhering to them. The report of this working group was submitted directly to the UN Sub-Committee of Experts so that it could first establish the basic principles for intermodal transport.

To start with, the UN Sub-Committee of Experts decided to provide a new UN number, to which a special provision will be assigned requiring competent authority approval for the carriage of such discarded packagings.

Assignment of packing groups to articles

For packaging purposes, substances are assigned to packing groups on the basis of their degree of danger. No such rule applies to articles. However, the list of dangerous goods contains articles to which a packing group is assigned. For other articles, no packing group is indicated.

The International Air Transport Association (IATA) had now raised the question of whether it is really necessary to assign packing groups to articles, hence requiring that these be noted in the transport document, or whether it is sufficient to specify packing provisions for each article in the corresponding packing instructions.

The UN Sub-Committee of Experts was of the view that there were in fact no reasons for assigning a packing group, as the danger arising from the articles was not linked solely to the substance they contain.

Classification and packaging of adsorbed gases

Traditionally, gases are compressed under high pressure or liquefied and carried in pressure receptacles. Pressurised gases are extremely dangerous, because if the cylinders or valves malfunction, large quantities of toxic, flammable and/or corrosive gases can be released into the environment. Owing to this inherent danger, the dangerous goods regulations contain strict requirements in terms of packaging and carriage.

When using gas adsorption technology – a reversible process – the gas is concentrated on the surface of a porous material which is permanently contained in a metal cylinder. The forces of attraction between the adsorption material and the adsorbed gas molecules result in large differences in the physical properties of a gas. These forces of attraction lead to a reduction in energy of the individual gas molecules and hence to a reduction in pressure compared to the compressed or liquefied state.

At 20°C, the adsorbed gas contained in a metal cylinder is not pressurised, so a vacuum has to be created to extract the gas. This significantly reduces the risk, as the high pressure risk factor is eliminated.

This technology is already used today as an alternative to supply the semiconductor industry with toxic gases (e.g. arsine, phosphine or boron trifluoride).

On the basis of specific proposals from the *Council on Safe Transportation of Hazardous Articles* (COSTHA), the UN Sub-Committee of Experts accepted the inclusion of 17 new UN numbers incorporating both entries for specific adsorbed gases and n.o.s. entries. It also adopted a definition and a new packing instruction, which is to be applied to all adsorbed gases.

Asymmetric capacitors

Asymmetric capacitors are electrochemical capacitors in which the positive and negative electrodes are made of different materials. Typical asymmetric capacitors are lithium ion capacitors and nickel-carbon capacitors.

Asymmetric capacitors have a rapid charge and discharge capacity, high energy density, are very durable and are used in various vehicle applications (recovery of braking energy, energy supply for peak loads in railways, buses and motor vehicles), and in the storage of renewable energy.



Above : Laminate cell 2000 F / Lithium ion capacitor module

The following potential risks may arise in the carriage of asymmetric capacitors:

- asymmetric capacitor must be transported in a charged state because if the lower voltage limit is passed, the capacitor is damaged;
- as with double layer capacitors, asymmetric capacitors may contain flammable liquids in the electrolyte solution.

The UN Sub-Committee of Experts adopted a proposal from Japan to include a new entry for asymmetric capacitors in addition to the electric double layer capacitors (UN 3499) included in the provisions in 2013. To provide explanation, a special provision will be included, the wording of which will be based on the special provision that applies to double layer capacitors.



Damaged and used lithium batteries

At present, the UN Model Regulations only contain requirements for the carriage of new undamaged lithium batteries. Owing to the increasing use of such batteries in vehicle construction, for some time there has been a question of how, for example, lithium batteries damaged in an accident can be carried for the purposes of disposal or reprocessing. As this is particularly a land transport problem, in March 2012 the Joint Meeting decided to include a special provision in the 2013 edition of RID/ADR enabling carriage under conditions laid down by the competent authority of the country of origin.

After a lengthy discussion, the UN Sub-Committee of Experts agreed in the previous biennium to assign new special provisions and new packing instructions to the existing entries for lithium batteries. These would deal with the carriage of damaged lithium batteries and the carriage of used lithium batteries. With regard to the new packing instruction applicable to used batteries, the UN Sub-Committee of Experts was guided by an RID/ADR-specific packing instruction which had been developed considerably earlier because of the need to transport used batteries in European land transport.

Lamps containing small quantities of dangerous goods

In connection with the development of energy-saving light bulbs, the question has arisen of which entry these should be carried under when they contain small quantities of dangerous goods. In various places, the dangerous goods regulations already contain provisions on exemptions for certain individual cases:

- Exemption of gases contained in lamps,
- Lamps containing mercury can be assigned to entry UN 3506 Mercury contained in manufactured articles, which was newly included in the regulations in 2013.

In addition to non-flammable, non-toxic gases, mercury and radioactive materials, mercury bromides (UN 1634), mercury iodide (UN 1638), sodium (UN 1428), thallium compounds (UN 1707), gallium (UN 2803) or potassium (UN 2257) or mixtures of these substances are also used in lamps.

The quantity of the dangerous goods contained in these lamps varies according to the power of the lamp, although in 90% of all cases the mass is less than 30 mg, in 9% of cases 30 mg and in only 1% of cases between 3 and 100 g. With the exception of potassium and sodium, all substances may be carried under the limited quantity provisions. Apart from sodium, gallium, potassium and mercury, even the exempted quantity provisions apply to substances used in lamps.

The dangerous substances are usually in the solid state in a glass component (discharge tube) and adhere to the inside of this tube where they remain even if the glass breaks. This discharge tube is contained in an external glass bulb. The lamp is then usually packed in an inner packaging with cushioning material to protect the glass from breaking, and is then placed in a sturdy box.

The UN Sub-Committee of Experts finally decided to introduce a general exemption provision. Other options, such as assigning a special provision to the UN numbers concerned or assigning a special provision to UN number 3363 (Dangerous goods in machinery or apparatus), which would then be applicable to all lamps containing dangerous goods, were rejected.

Descriptions of labels, placards, symbols, markings and marks

At its previous session, the UN Sub-Committee of Experts had agreed to show the minimum dimensions directly against all pictures of the various marking elements in the dangerous goods regulations. In addition, the minimum width of the line within the edge of danger labels should in future be set at 2 mm. In cases where the dimensions are not specified more precisely, the general statement was made that the proportions of all the characteristic features of the marking elements must correspond approximately to those in the picture.

Based on a proposal from the representative of the United Kingdom, who had also submitted the original proposal, the UN Sub-Committee of Experts decided to provide a transitional provision up to 31 December 2016 for all danger labels, placards and markings. IBCs and large packagings that have to be marked with the symbol for the maximum permissible stacking load and which are manufactured, remanufactured or repaired until 31 December 2016 may continue to be used with the existing symbol.

Next meeting

The 43rd meeting of the UN Sub-Committee of Experts which was the first meeting of the biennium 2013-2014 took place from 24 to 28 June 2013 in Geneva. The results will be published in our **Bulletin No. 4 / 2013**.

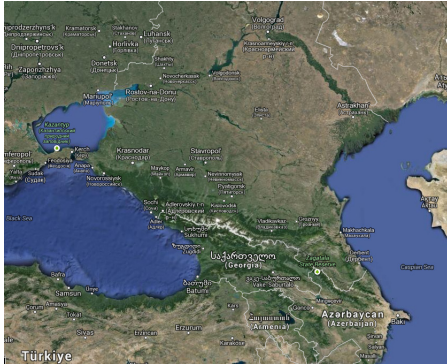
Jochen Conrad / Katarina Guricová



2

Third Regional Conference on Trade Facilitation and Caucasus Transit Corridor Promotion

(Batumi, 24 and 25 June 2013)



Picture: the Caucasian region (Google Maps).

The aims of this event organised by the Georgian Ministry of Economy and Sustainable Development, the Georgia Revenue Service, the UN Economic Commission for Europe and the US Agency for International Development were to facilitate international trade, speed up customs formalities and promote the transit corridor in the Caucasus region.

In addition to representatives from Georgia and the organisations referred to above, the Conference was attended by delegates from Armenia, Azerbaijan, Kazakhstan, Turkey, the Ukraine, the European Commission and the International Rail Transport Committee (CIT).

In a panel that discussed the harmonisation of rail transport law chaired by CIT's deputy Secretary General, Mr Evtimov, the head of the RID section gave a talk on the carriage of dangerous goods in rail-sea transport.

This type of multimodal transport is becoming increasingly important in the Black Sea region and is one of the main arguments in favour of why States in this region should accede to COTIF, because in contrast to SMGS and SMPS, CIM and CIV also allow carriage on shipping lines under one and the same legal regime.

The talk on the carriage of dangerous goods in rail-sea transport focused particularly on what practical opportunities there are for dealing with the small number of different conditions that exist between RID and SMGS Annex 2 on the one hand and the dangerous goods provisions for maritime transport (IMDG Code) on the other.

In order to avoid having to display additional markings for maritime transport in ports, particular mention was made of the fact that for transport in a chain involving a sea leg, both RID and SMGS Annex 2 allow the markings and placards prescribed in the IMDG Code to be used for the rail part of the journey.



For the future, it was suggested that, following the example of the Memorandum of Understanding for the Transport of Packaged Dangerous Goods on Ro-Ro Ships in the Baltic Sea, an agreement should be concluded between the States bordering the Black Sea to say that under certain conditions, it is sufficient for the sea leg if the provisions of RID and SMGS Annex 2 are complied with.

Exceptional cases such as these, which can be accorded by the competent authority of the port of departure or arrival, or of the flag State, are permitted under the IMDG Code. The preparation of a Memorandum of Understanding could be initiated by, for example, the Black Sea Economic Cooperation Organisation (BSEC).

Jochen Conrad / Katarina Guricová





OTIF news

1

New member of staff in OTIF's technical section Mr Dragan Nešić

OTIF's technical section welcomes a new technical expert. Mr Dragan Nešić, from the Republic of Serbia, is a transport engineering graduate of the University of Belgrade's railways department.

He also trained at the Diplomatic Academy of the Ministry of Foreign Affairs (2006) and therefore has a solid international background.



Mr Nešić has had a great deal of professional experience in several Ministries, most notably the Ministry of Transport in Serbia and the Ministry of Transport and Telecommunications of the Federal Republic of Yugoslavia.

Mr Nešić also comes with a thorough knowledge of OTIF, which he obtained as the Republic of Serbia's head of technical and legal cooperation and as a member of OTIF's Administrative Committee.

Lastly, he has experience of international meetings and multilateral negotiations, as he was a national coordinator on the „Trans-European Railway“ project (TER) undertaken by the United Nations Economic Commission for Europe (UNECE), and has represented the Republic of Serbia in numerous meetings in the Balkans and in other countries.

Samuel Flückiger

2

Hon. Prof. Dr Kurt Spera – 85 years old

Following suitable contributions to the Bulletin in 1998 (Bulletin No. 4/1998), 2003 (Bulletin No. 3/2003) and 2008 (Bulletin No. 3/2008), the fact that Hon. Prof. Dr Kurt Spera, an OTIF Conseiller honoraire since 1999, celebrated his 85th birthday on 5 August 2013 is another opportunity to recognise the importance of this indefatigable campaigner for the optimum development, unification and uniform implementation of international railway law, both for OTIF and for the entire railway sector.

In view of his advanced age and thanks to his uninterrupted intellectual vigour and creative ability, it is becoming increasingly valuable to have available in Dr Spera a reliable and objective contemporary witness to the origins of OTIF and the legal regime it promotes. As Chairman of the International Association of Tariff Specialists (IVT) and as a widely acknowledged expert, we hope especially that Dr Spera will be able to use his comprehensive expertise and broad range of experience to contribute to the Organisation's forthcoming projects, such as «Unified International Railway Law (URL)» and «Revision of COTIF (25th session of the Revision Committee)».

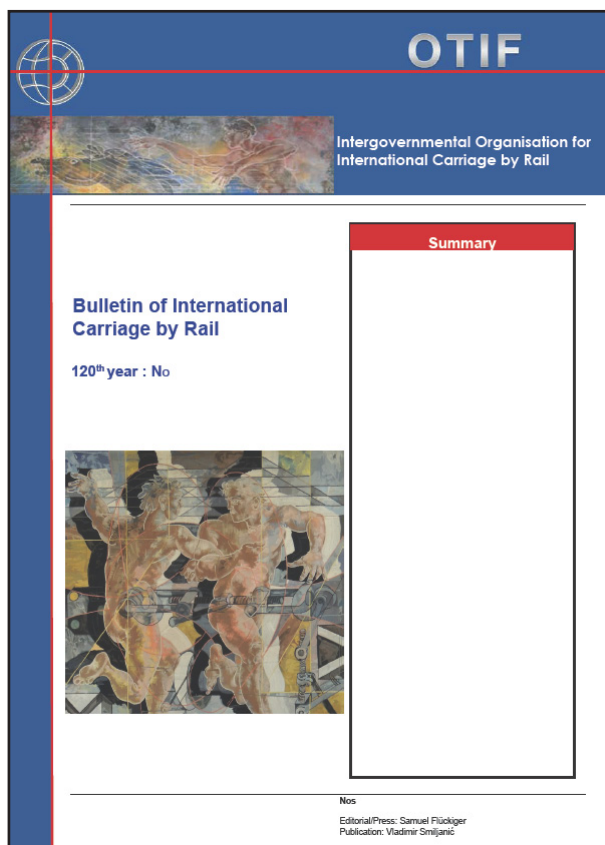


On this note, we should again like to thank Dr Kurt Spera for his tireless work in support of OTIF's objectives and international rail transport, and we should like to wish him many more years of good health, intellectual vigour and valuable service to the rail sector and the world at large.

Gustav Kafka



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The Bulletin editor