



Bulletin

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OTIF

EDITORIAL



Dear Readers,
In these uncertain times, we tend to seek **fixed points** in our lives.

OTIF is a **fixed point**. Firstly, in the host state, Switzerland, with its particularly strong connection to the railways. Secondly, since the revision of the Vilnius Protocol 20 years ago, in the European Union (EU).

This close relationship with the EU is particularly evident in the technical area. In the EU context, the whole area of interoperability and safety has developed very positively, as has its transferral to non-EU states by OTIF (the technical appendices ATMF and APTU

and the Uniform Technical Prescriptions (UTP) that are based on them).

What could be more apparent than to place this relationship on the required formal basis for practical cooperation? At the end of September, new administrative arrangements were therefore concluded with the European Commission's Directorate-General for Mobility and Transport and the European Union Agency for Railways (ERA). These arrangements are structured in a modular fashion, i.e. in addition to the technical and dangerous goods areas, they also afford other areas for future cooperation by the addition of new appendices.

What is **not a fixed point** in international rail transport is often the railway rolling stock, at least as far as rail freight wagons are concerned. There is therefore a need for special internationally applicable provisions which clearly lay down the responsibility for maintaining railway material. The issue of the "entity in charge of maintenance (ECM)" and its specific tasks also goes far beyond the EU and is therefore on OTIF's standing agenda.

International dangerous goods law is a **firmly fixed point**. The new RID 2021 is based on the UN Regulations and has a clear link to EU law; it is intermodal, extremely important and up to date. OTIF is very proud that, despite the difficult circumstances, this new edition of RID was punctually adopted and published on OTIF's website.

Extensive information on all these topics can be found in this edition of the Bulletin. In addition, you also have the opportunity to give your opinion on how this Bulletin is designed. I look forward to your feedback!

I should like to wish you and your families all the best for the festive season and a happy and healthy 2021!

Wolfgang Küpper
Secretary General

OTIF-DG MOVE-ERA: SIGNING OF THE SECOND ADMINISTRATIVE ARRANGEMENT

On 29 September 2020, OTIF signed a tripartite administrative arrangement with the European Commission's Directorate-General for Mobility and Transport and the European Union Agency for Railways (ERA).

This arrangement renews the initial agreement and strengthens the intensive partnership that exists between the European Union and OTIF in terms of technical interoperability and the carriage of dangerous goods in particular.

Unlike the previous arrangement, the parties have decided not to include an expiry date and have chosen to agree on a cooperation framework with common objectives for an indefinite period.

This second administrative arrangement has been restructured

and made more flexible so that areas of cooperation between OTIF and the EU can be broadened and developed further:

- It sets out the methods for exchanging information;
- It establishes the framework for interaction between the rules of OTIF and the EU so as to improve joint understanding;
- It defines continuous cooperation on the various technical registers;
- It strengthens coordination to ensure that the rules of railway law of OTIF and the EU are aligned;
- Lastly, it refers to the Joint Coordinating Group of Experts to ensure consistency between

the Regulation concerning the International Carriage of Goods by Rail (RID) and EU law.

The administrative arrangement was signed by Mr Henrik Hololei, the Director General of DG Mobility and Transport, Mr Felice Ferrari on behalf of Mr Josef Doppelbauer, the Executive Director of ERA, and Mr Wolfgang Küpper, the Secretary General of OTIF. It reflects the parties' wish to improve, promote and facilitate international rail transport for more sustainable and "greener" development.

In addition to confirming the first arrangement, which was signed following the European Union's accession to COTIF, this arrangement also enshrines the interdependence and close links that exist between OTIF and the EU.



CONGRATULATIONS TO THE NEW CHAIRMAN OF THE OSJD COMMITTEE

From 28 to 30 September 2020, the XLVIII session of the Conference of Ministers of the Organisation for Cooperation between Railways (OSJD) was held as a video-conference. The Secretary General of OTIF, Mr Wolfgang Küpper, was invited to take part.

At this session, Mr Tadeusz Szozda's successor, Mr Mirosław Antonowicz, was elected as chairman of the OSJD Committee, which is the executive organ of OSJD.

The Secretary General of OTIF lauded the excellent cooperation

there had been with Mr Tadeusz Szozda and congratulated Mr Mirosław Antonowicz on his election and wished him every success in his new role.

SURVEY ON OTIF'S BULLETIN

The Bulletin of International Carriage by Rail is an official OTIF publication (Article 23 of COTIF). The first Bulletin was published in January 1893. It has changed a lot since then.

It was originally published in French and German, but became trilingual when English was introduced in 2002. Since 2010, this publication has only been issued as an electronic version and its contents have been adapted to

developments in the sector.

These days, the Bulletin describes the activities of OTIF's organs, provides information on depositary notifications and contains information that is useful in the application of COTIF. It also contains articles on leading railway

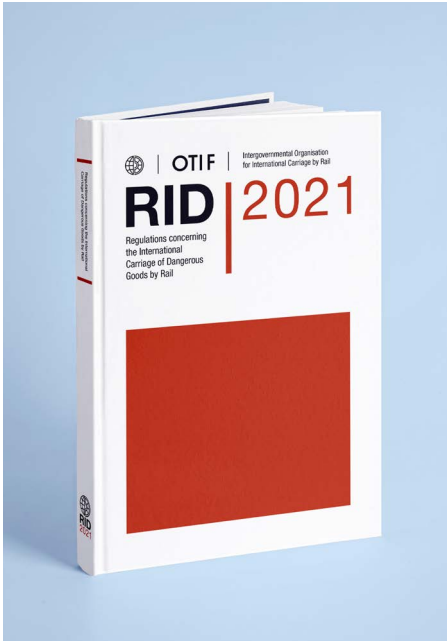
law issues of the day.

The OTIF Secretariat has set up a survey in order to gauge satisfaction and gain a better understanding of what is expected from the Bulletin.

YOUR OPINION ON THE BULLETIN



APPENDIX C: A NEW EDITION OF RID 2021



The new provisions of the Regulation concerning the International Carriage of Dangerous Goods by Rail (RID) will enter into force on 1 January 2021. The 2021 edition replaces the 2019 edition. However, in accordance with a general transitional provision, the provisions of RID 2019 may continue to be used until 30 June 2021. A change to the usual working methods meant that despite the COVID-19 pandemic, it was possible to adhere to the two-year revision cycle for the dangerous goods provisions for rail transport.

RID applies to the international carriage of dangerous goods by rail between the 45 existing RID Contracting States in Europe, Asia and North Africa. In the Member States of the European Union, RID also applies to national, as well as international transport.

RID is harmonised with the United Nations Recommendations on the Transport of Dangerous Goods, which serve as the basis for all the modal dangerous goods regulations. There is also close coordination with the dangerous

goods regulations for road (ADR) and inland waterways (ADN). This process ensures simple transport by all transport modes.

RID 2021 contains various new provisions to take account of technical and scientific progress, which contribute to the further improvement of safety in the clean and energy-efficient rail mode.

For solid waste generated from the medical treatment of humans or the veterinary treatment of animals infected by infectious substances of Category A, a new, globally applicable UN number (UN 3549) is being introduced. Infectious substances of Category A are substances that, when exposure to them occurs, are capable of causing permanent disability, life-threatening or fatal disease in otherwise healthy humans or animals. For the carriage of this type of waste, new packing instructions are available that fall back on common dangerous goods packagings, so they are also quickly available in a crisis situation. These packing instructions prescribe a triple packaging consisting of an inner, an intermediate and an outer packaging.

For their electrical energy supply, data loggers and cargo tracking units contain lithium batteries or fuel cells, which are considered as dangerous goods. Such devices are fitted to packages, overpacks, containers or load compartments in order, for example, to document the opening of container doors or to enable their position to be determined, irrespective of whether these means of containment contain dangerous goods or normal freight. To avoid having to treat data loggers or cargo tracking units as dangerous goods, a general exemption has been included in RID, which can be

used provided certain minimum requirements are met.

In future, multiple markings are allowed for dangerous goods packagings if, for example, they are approved for both liquids and solids, or if the design criteria and testing requirements meet the provisions for different design types. This makes it possible to use packagings flexibly.

In the 2021 edition of RID, new checklists for the filling and emptying of tank-wagons for liquids and gases will be referred to. The aim of these checklists is to avoid mistakes when filling and emptying tank-wagons and hence to improve safety during transport. The lists cover all the obligations of the filler and unloader that are allocated to them under RID.

Guidelines dealing with the use of electronic transport documents, which is permitted under RID, have been published on OTIF's website. The guidelines ensure that the procedures used with regard to evidential value and availability during transport are at least equivalent to those of paper documentation.

RID 2021, which is published in the official languages of OTIF (German, English and French), is available on OTIF's website (www.otif.org). During 2021, a Russian version will also be published on the website.

Two publishers will also issue printed editions of the English and French versions. The addresses where they can be obtained are also available on OTIF's website.

Jochen Conrad

DEPOSITARY NOTIFICATIONS

Since 16 September 2020 ([Bulletin 3/2020](#))

NOT-20048	08.12.2020	Designation of H. Exc. Victorio Redondo Baldrich, the Ambassador of Spain in Switzerland, as Spain's permanent representative to OTIF
NOT-RID-20045	02.11.2020	Correction of modifications to RID (Annex to Appendix C to the Convention) adopted by the RID Committee of Experts in the written procedure.
NOT-RID-20044	02.11.2020	Entry into force of modifications to RID (Annex to Appendix C to the Convention) adopted by the RID Committee of Experts in the written procedure.
NOT-20043	07.10.2020	Turkey - Ratification of the amendments to COTIF and Appendices D, F and G adopted by the 12 th General Assembly.
NOT-20038	09.10.2020	Decisions taken by the Committee of Technical Experts using the written procedure: Modifications to the UTP Noise, Wagons, Marking. Full revision of the specifications concerning vehicle registers.
NOT-20037	24.09. 2020	Hungary – Ratification of the amendments to COTIF and Appendices E and G adopted by the 13 th General Assembly.
NOT-20032	18.09.2020	France – Approval of the amendments to COTIF and Appendices E and G adopted by the 13 th General Assembly.

A HIGH-LEVEL PARTNERSHIP FOR INTERNATIONAL REGULATIONS

On 3 September 2020, the Secretary General of OTIF, Mr Wolfgang K pper, took part in the 7th Annual Meeting of international organisations organised by the Organisation for Economic Cooperation and Development (OECD).

The meeting was held remotely as a video-conference. It was held in two parts: first, a high-level webinar on the coordination of international organisations and their Member States in view of the global crisis and second, a webinar on establishing a compendium of the practices of international organisations.

At the meeting, the secretariats of the participating international organisations issued a joint statement on a partnership of international organisations for effective international rulemaking, which the Secretariat of OTIF will certainly join, in order to:

- Exchange information, experiences and best practices on international rulemaking;
- Identify key challenges and priority opportunities in international rulemaking, with a view to advancing understanding in these areas, reducing overlaps and avoiding duplication, and encouraging coordinated action;

- Promote greater commonality, compatibility, and synergy in international rulemaking.

The Secretariat took this opportunity to reiterate its commitment to more effective international rulemaking and to better international coordination.

It is crucial to strengthen cooperation between OTIF and other relevant international organisations and associations so that the Organisation can achieve the aim it has been given under Article 2 of the Convention concerning International Carriage by Rail (COTIF).



WORKSHOPS FOR THE STATES OF THE COOPERATION COUNCIL FOR THE ARAB STATES OF THE GULF

On 7 September 2020, the Secretary General of OTIF, Mr Wolfgang Küpper, and the head of the legal department, Mr Aleksandr Kuzmenko, held a video-conference to present Appendices B (CIM), D (CUV) and E (CUI) of the Convention concerning International Carriage by Rail (COTIF) and hosted the workshop on COTIF, which focused specifically on freight transport.

This workshop for experts from the Member States of the Cooperation Council for the Arab States of the Gulf (GCC) was the first in a series of four specific workshops on the application of COTIF and its appendices.

The Secretary General of OTIF would like to thank the Secretary General of the GCC, His Excellency Dr Nayef Falah M. Al-Hajraf, as well as the teams in charge of the railway project at GCC, particularly Mr Khalid Al-Olayan, the Director

of the Transport Department, for initiating and organising this series of workshops.

It was decided to hold this series of workshops when the Secretary General of OTIF visited Kuwait in July 2019. The workshops will strengthen the partnership between the GCC and OTIF. It is clear that COTIF provides the GCC states with solutions and the legal tools for their project to link all the countries of the Arabian Peninsula by a completely interoperable modern railway network of freight and passenger transport. The will to achieve interoperability on the peninsula is the result of a strategic vision in which the network being built could also act as a hub for traffic with

Europe, Asia and North Africa.

As a result of signing the memorandum of understanding with the GCC in 2014, OTIF plays the role of preferred partner in the development of this new railway network and, with COTIF, provides the legal tools for interoperability.

Establishing this railway network on the Arabian Peninsula is a complex challenge, both at the technical level (desert and extreme climate) and the legal level (development of complete regulations). It is a challenge which, accompanied by the eventual accession of the peninsula to COTIF, will also enable OTIF to move forward and find inspiration for innovative solutions.



EU MEMBER STATES' PLATFORM FOR INTERNATIONAL PASSENGER TRANSPORT

Based on the premise that international rail passenger transport has not yet achieved its potential within the EU, the need to develop international passenger transport was discussed at a high-level meeting between representatives of the EU Member States, third countries and the European Commission on 15 November 2019. Subsequently, in June 2020, a declaration signed by the EU Member States, third countries and international organisations, including OTIF, was published.

This is the context in which the platform for Member States and third countries, in close cooperation

with the European Commission, was set up. Its purpose is to achieve cooperation with all the EU Member States, the European Commission, the European Union Agency for Railways, Shift2Rail and OTIF in order to improve international rail passenger services and fully to include international rail passengers in the framework of the European Union's Green Deal initiative.

One of its ultimate objectives is to make rail transport an attractive alternative over distances where it is not currently competitive.

The Secretary General of OTIF, Mr Wolfgang Küpper, was invited to

take part in a video-conference on the EU's platform for international rail passenger transport on 30 September 2020. In the afternoon, he gave a presentation on the Uniform Rules concerning the Contract of International Carriage of Passengers by Rail (CIV UR) as the historical and appropriate framework underpinning international passenger transport.

At the meeting, it was also decided that OTIF would be a member of the platform with official observer status and without voting rights.

The next meeting will be held on 16 December 2020.

NEW EDITION OF “TRADE AND TRANSPORT”

This manual was first published by Professor Kurt Spera in 2002 with the title “Trade and Transport”. For many years, Professor Spera was the Chairman of the International Organisation of Tariff and Transport Experts (IVT) and a *Conseiller honoraire* to OTIF. The manual concerns freight transport in foreign trade practice and examines the relationship between international freight transport law and the instruments that support its implementation, and international trade law and its supporting instruments.

In line with the title of the book, its taxonomy and contents assume the following basic premises:

International transport, the legislation on which forms one of the pillars of OTIF’s activities in terms of rail transport in Europe, North Africa and parts of Asia, is frequently based on private law contracts. These are subject to the United Nations Convention on Contracts for the International Sale of Goods (CISG), and, as contractual components, the so-called Incoterms of the International Chamber of Commerce (ICC). The Incoterms are globally applied standard clauses on significant relations between the parties to private law contracts, particularly with regard to the allocation of duties and the time and place of the transfer of risk.

It should also be borne in mind that to a considerable extent, carriage performed in the context of international trade takes place using more than one mode of transport, i.e. in multimodal or combined transport.

Moreover, in addition to the main actors in trading (exporter/importer) or in purchasing (seller/buyer) and in transport (consignor/carrier/consignee), a number of people are involved as intermediaries (forwarders, transport agents, logistics service providers, etc.).

The most recently published third edition of the manual¹ provides comprehensive coverage of the above-mentioned subject areas. The group of authors that joined the original author, who sadly passed away last year, includes a recognised transport industry and logistics expert from the University of Vienna, a senior officer at the International Chamber of Commerce (ICC) in Austria and a former senior officer of OTIF. In addition to a thorough updating with a partly new focus and a comprehensive editorial review of the texts, diagrams and tables, the authors have also added a host of further details. In addition to more references to sources, particularly on the Internet, those consulting the manual will appreciate the newly added extensive list of key words and abbreviations.



The occasional references to Austrian regulations, which is due to the country of origin of the manual, do not curtail its international applicability, especially as other countries often have comparable regulations.

The manual has two aims: firstly, to enable those who have a general interest in the issues and those training in this area to obtain a rapid introduction and knowledge of the principles and secondly, to provide a host of specific details and useful practical information so that experts can consolidate their knowledge. Readers must judge whether and to what extent the manual is successful in this regard.

Gustav Kafka

¹ Spera/Schramm/Kafka/Krumpel: Handel und Transport, 3rd edition, Kitzler Verlag Vienna 2020, ISBN 978-3-903285-04-0.

THE REGISTRATION PROCESS FOR ECM CERTIFICATION BODIES AND ECM CERTIFICATES

This article explains the process and steps to be followed in order to register entity in charge of maintenance (ECM) certification bodies and to register ECM certificates in the ECM register, in accordance with the ATMF Uniform Rules.

Introduction

In accordance with Article 15 of ATMF, each vehicle intended for use in international traffic must have an entity in charge of maintenance (ECM). The task of the ECM is to ensure that the vehicle concerned *is in a safe state of running by means of a system of maintenance*. In order to verify that the ECM complies with harmonised requirements, it has to be *certified by an independent ECM certification body*. The rules to be applied by ECM certification bodies are laid down in Annex A to ATMF (“ECM Regulation”).

Currently, the rules in Annex A to ATMF are being revised, *inter alia* to extend their scope from ECMs for freight wagons only to ECMs for all types of vehicles. This article takes as a basis the revised rules for certification and auditing of entities in charge of maintenance, which were adopted in a vote using the written procedure on 30 September 2020 (see [Circular NOT-20038](#)).

Please see [Bulletin 4/2019](#) (pages 12-15) for more information on the task of ECMs and their certification.

The ECM register

In accordance with Article 13 § 1a of ATMF, *the Organisation shall establish and keep up-to-date, or make accessible a register with certificates of entities in charge of maintenance (ECM) and ECM certification bodies*.

All ECM certification bodies and ECM certificates issued should be registered in this electronic register. Following a decision by the Committee of Technical Experts, in 2014, OTIF and the European Union established a joint ECM register, of which the European Union Agency for Railways (ERA) is the registrar. [The ECM register is publicly accessible](#) and allows users, such as vehicle keepers, authorities and railway undertakings, to ascertain whether an ECM is certified, what the scope and validity of the certificate are and which ECM certification body issued the certificate. The ECM register includes a database of certification bodies and a database of ECM certificates.

ECM certification bodies

ECM certificates are awarded by so-called ECM certification bodies to ECMs which meet all the applicable requirements. ATMF Contracting States have to notify the OTIF Secretary General of ECM certification bodies which have their place of business on their territory. It is important to note that Contracting States are not obliged to have an ECM certification body, as an applicant for an ECM certificate may use the services of an ECM certification body in other Contracting States.

According to Article 6 of the ECM Regulation, there are three options for Contracting States to inform the Secretary General of their ECM certification bodies. Firstly,

competence can be designated directly to the competent authority in the meaning of Article 5 of ATMF. Secondly, Contracting States may inform the Secretary General that the national accreditation body is competent to accredit ECM certification bodies. Lastly, Contracting States may inform the Secretary General of a national body, other than the accreditation body, which is competent to recognise ECM certification bodies. If a Contracting State is using the second option (accreditation), the national accreditation body must inform the Secretary General directly of any ECM certification body it accredits.

Depending on the decision of each Contracting State, the ECM certification bodies may be public or private entities. Nevertheless, *the ECM certification body must be organisationally and functionally independent in its decision-making from railway undertakings, infrastructure managers, keepers, manufacturers and entities in charge of maintenance and shall not provide similar services* (Annex I of the ECM Regulation). Contracting States are required to ensure that all ECM certification bodies comply with the criteria and principles in accordance with Annex A to ATMF.

Contracting States shall also inform the Secretary General of any changes in the situation concerning the notified ECM certification bodies.

Registration of ECM certification bodies in the ECM register

After being notified of an ECM certification body, the Secretary General will inform the registrar of the ECM register. The registrar will, in turn, include the ECM certification body in the database of certification bodies. The registrar will also provide the ECM certification body with access to the database of ECM certificates, so that, as a next step, it can autonomously register ECM certificates.

Registration of ECM certificates in the ECM register

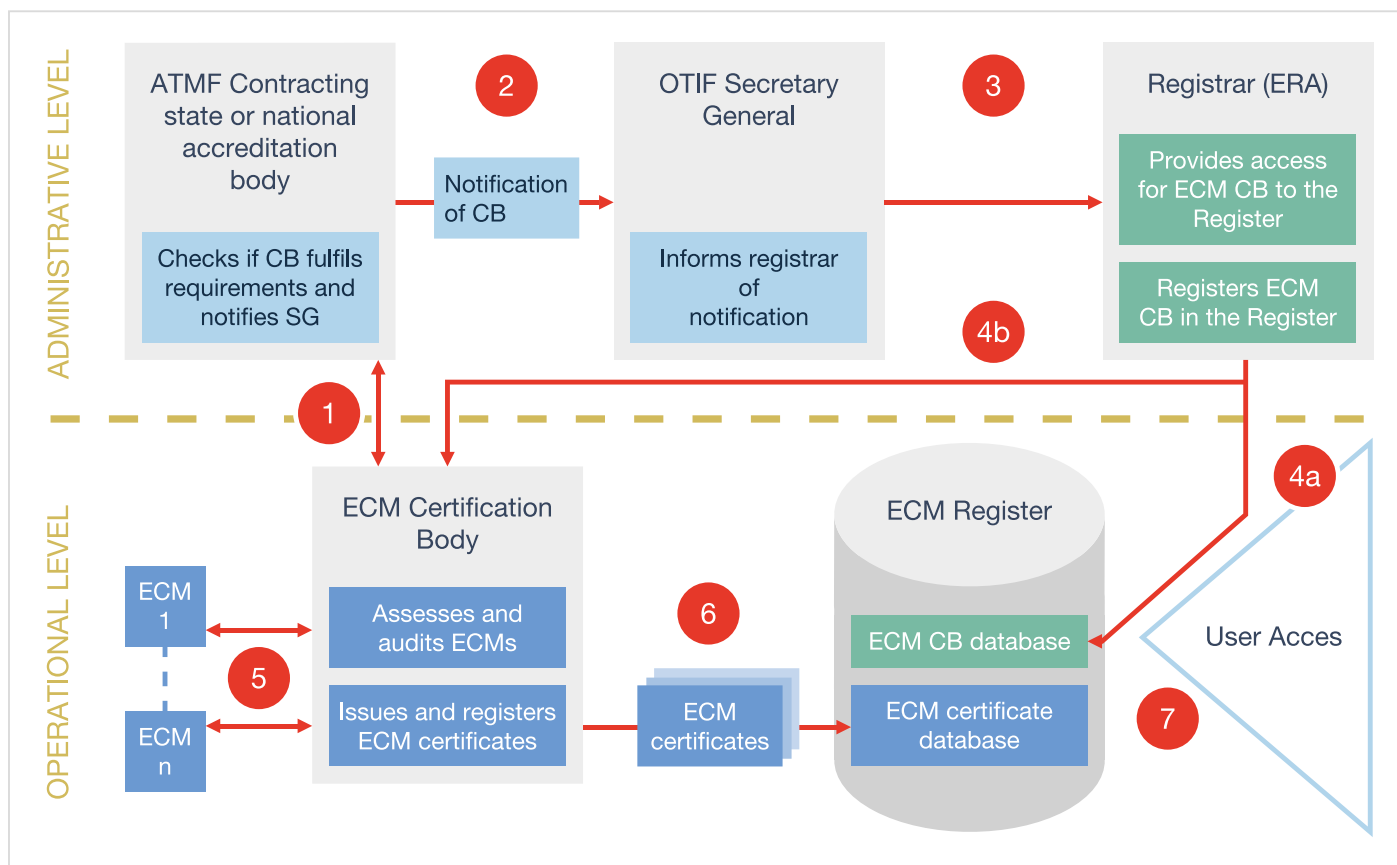
When an ECM certification body receives an application for ECM certification from an entity in charge of maintenance, the ECM certification body verifies whether the ECM fulfils all the requirements set out in Annex A to ATMF. If all requirements are fulfilled, it may issue an ECM certificate and register it in the database of ECM certificates. The ECM certification body also has a duty to audit ECMs that are already certified,

in order to verify their continued compliance with the requirements.

The ECM certification body must itself directly register the ECM certificates which it has issued, amended, renewed, suspended or revoked, in order to keep all the ECM certificates that it has issued up to date.

The process explained above is illustrated in the following diagram:

Dragan Nešić and Bas Leermakers



RID/ADR/ADN JOINT MEETING

(Berne, 10 and 11 September 2020 and Geneva, 14 to 18 September 2020)

The spring session of the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods of the United Nations Economic Commission for Europe was originally planned for 16 to 20 March 2020 in Berne. Owing to the risks in connection with the spread of the COVID-19 virus, this session had to be postponed at short notice. In order to catch up with the resulting backlog of work, it was decided to add two additional meeting days before the autumn session of the Joint Meeting. For organisational reasons, it was planned to meet on 10 and 11 September in Berne and from 14 to 18 September 2020 in Geneva. As a renewed increase in the number of infections was noted in some RID, ADR and ADN Contracting States in the summer, the Secretariats decided to hold this Joint Meeting as a video-conference (10 and 11 September 2020) and as a hybrid meeting, which participants could attend either in person or remotely (14 to 18 September 2020). For both parts of the meeting, a web-based multichannel platform was used, which made it possible to hold discussions in the four working languages (German, English, French and Russian).

Another difficulty was that at the moment, only two meeting rooms are available at the United Nations in Geneva that are equipped with the technical equipment required for hybrid meetings. Because of other UN conferences, one of these meeting rooms was only available for the Joint Meeting in the mornings. As a result, only the morning sessions could be held as official meetings. The afternoon sessions were held on an informal basis in English only.

Owing to the cancellation of the spring session of the Joint Meeting, there were 66 official documents and 64 informal documents on the agenda. Despite the difficult conditions, it was possible to deal with almost all the documents.

27 States, the European Union and 15 non-governmental organisations were represented at this meeting.

Tanks

The 19 official documents and 14 informal documents on tank issues were transferred to the working group on tanks to deal with. The working group also held a video-conference in parallel with the Joint Meeting. 47 experts from 16 states and 5 non-governmental organisations took part in the work of this working group.

Extra-large tank-containers

Two questions were discussed in connection with the discussions at the RID Committee of Experts on the extra-large tank-containers being used in European rail transport. These tank-containers have a capacity of up to 73,500 litres and a payload of up to 66 tonnes. One issue was the fixing of welded elements, which, for tank-wagons, must be made in such a way that the shell is prevented from being ruptured as a result of stresses caused by an accident (RID 6.8.2.2.1). Another was the pressure resistance of manhole closures for the internal inspection of tanks, which, for tank-wagons, must be designed for a test pressure of at least 4 bar (RID 6.8.2.2.4). Following confirmation from two

tank-container manufacturers that both these provisions are already taken into account for conventional tank-containers, it was proposed that these requirements should also be included in RID/ADR for tank-containers.

The working group on tanks was of the view that the existing RID provision for welded elements is worded too restrictively with regard to their possible design. It chose a form of wording intended to express a protective aim that is suitable for both tank-containers and tank-vehicles.

No consensus could be reached on the question of the pressure resistance of manhole closures. In particular, the requirement for a test pressure of 4 bar for tank-containers for the carriage of powdery substances would not be justified, because unlike liquids, no big surge movements can occur with such substances. For the time being, the working group decided not to follow a suggestion to limit the proposed amendment to tank-containers with a capacity of more than 40,000 litres. This question should be dealt with at the next session of the RID Committee of Experts' standing working group in November 2020, together with a transitional measure.

Periodic inspections and intermediate inspections of tanks for the carriage of refrigerated liquefied gases

6.8.3.4.6, which governs the frequency of periodic and intermediate inspections of tanks for the carriage of refrigerated liquefied gases, has led to difficulties in application, as it

is not clear whether the entire paragraph relates to tanks for the carriage of refrigerated liquefied gases and whether the first intermediate inspection already has to be carried out four years (tank-wagons)/three years (tank-vehicles)/two and a half years (tank-containers) after the initial inspection.

The representative of the gas industry explained that in practice, the first intermediate inspection was carried out six years (tank-vehicles) or eight years (tank-wagons and tank-containers) after the first periodic inspection. As refrigerated gases are neither corrosive nor toxic, the tank experts were of the view that no undesirable effects or dangerous situations were anticipated if no intermediate inspection is performed after the first inspection.

There was also consensus that tank-containers should be treated like tank-wagons and tank-vehicles and that the intermediate inspections on tank-containers should be performed at fixed intervals and not according to decisions taken by the competent authority. As a result of this fundamental regulatory change for tank-containers, a transitional measure is being included, which enables tank-containers still to be used after 1 July 2023 if the six-year cycle of intermediate inspections is maintained from no later than this date on.

Indication on the tank of the gas actually loaded

RID/ADR 4.3.3.3.2 stipulates that on tanks, battery-wagons/battery-vehicles or MEGCs, only the particulars specified for the gas loaded or just discharged must be visible and that all particulars concerning other gases must be covered up. On the other hand, for multipurpose tanks, 6.8.3.5.6 stipulates that the proper shipping

names and, where appropriate, the technical names of the gases to whose carriage the tank is assigned must be inscribed.

The working group on tanks was of the view that the information on the gas loaded or just discharged can be obtained from the transport document and the orange-coloured plates, so 4.3.3.3.2 can be deleted. However, owing to the folding panels used on tank-wagons, which comply with standard EN 15877-1:2012 on the marking of railway vehicles and which are also mentioned in other parts of RID, some concern was expressed with regard to deleting 4.3.3.3.2 for tank-wagons. As a result, this provision can only be deleted for tank-wagons if this is confirmed by the RID Committee of Experts' standing working group.

Thermal insulation on tanks

Special provision TE 14 applies to UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S. and requires that the thermal insulation required for the carriage of these substances, which is in direct contact with the shell, must have an ignition temperature that is at least 50°C higher than the maximum temperature for which the tank was designed.

According to information from the representative of Russia, there are tank-wagons on which the heating system is fitted to the outside of the tank. There was consensus that in these cases, the insulation material fitted to the external surface of the heating elements must correspond to the temperature of the heating elements.

Heat treatment of materials for the manufacture of welded shells

6.8.2.1.10 contains a provision that water-quenched steel may not

be used for welded steel shells. Although in RID this provision applies to tank-containers as well as tank-wagons, it does not appear in ADR.

The representative of Russia pointed out that for the design and construction of tanks, reference is made to standard EN 14025, which says that the material of tanks must correspond to standard EN 13445-2, which does not preclude water-quenched steel.

It was agreed that in principle, water-quenched steels may be used if they are sufficiently ductile and have good weldability.

Materials of tanks for the carriage of highly concentrated nitric acid

With regard to the carriage of highly concentrated nitric acid with more than 70% acid content (UN 2031), the representative of Russia pointed out that RID/ADR specifies different materials requirements for packagings, portable tanks and RID/ADR tanks for the carriage of this substance. The body and heads of drums or jerricans had to be made of aluminium with a purity of at least 99% or of an aluminium alloy, whereas no particular materials requirements were specified for portable tanks in this case. For RID/ADR tanks, special provision TC 6 only specifies that aluminium not less than 99.5% pure can be used.

The representative of Russia proposed to include aluminium alloys in the scope of special provision TC 6. Research and laboratory tests had shown that the rate of corrosion of aluminium alloys in highly concentrated nitric acid is comparable to that of aluminium not less than 99.5% pure. It was pointed out that the compatibility of the shell material in general is dealt with in 4.3.2.1.5 and 6.8.2.1.9. It was confirmed that in essence, special provision

TC 6 contains an exemption from calculating the wall thickness and limits the wall thickness to 15 mm. The Joint Meeting saw no reason not to permit this exemption for suitable aluminium alloys that have better mechanical properties than pure aluminium.

The adoption of Russia's three proposals at the RID/ADR/ADN Joint Meeting is an exceptionally good example of successful cooperation between organs of different legal regimes in rail transport. In Euro-Asian rail transport, the carriage of dangerous goods is dominated by two legal systems: RID in the Member States of OTIF and SMGS Annex 2, which is applied in the Member States of OSJD (Organisation for the Cooperation of Railways).

For more than twenty years, in discussions with OSJD the Secretariat of OTIF has endeavoured to achieve extensive harmonisation of the two legal systems. Its representatives take part in an advisory capacity in all OSJD meetings on the transport of dangerous goods and, inter alia, ensure that the provisions, which are now mostly harmonised, do not diverge from each other as the result of new provisions being adopted, unless differing operating conditions make the divergence absolutely necessary.

In 2018, the Member States of OSJD decided to transfer all the provisions for 1520 mm gauge tank-wagons to a new chapter of SMGS Annex 2 and completely to align the requirements for standard gauge tank-wagons and tank-containers with RID. Since then, tank experts from the OSJD states have been working on the new chapter under Russia's leadership. It is based

largely on the requirements for standard gauge tank-wagons, but takes account of particular operating conditions of the broad gauge railways and different climate zones.

This work gave rise to several questions, which also concerned the construction and testing provisions for standard gauge tank-wagons. The Secretariat of OTIF encouraged the representative of Russia to raise these questions under the agenda item dealing with the harmonisation of RID and SMGS Annex 2 at the RID Committee of Experts' standing working group. The representative of Russia agreed to prepare a corresponding document, despite the fact that the Russian Federation does not itself apply RID and only takes part in meetings of the standing working group in its capacity as a Member State of OTIF. The standing working group welcomed the questions from Russia. However, as many of the ambiguities broached in the provisions required more in-depth expertise and partly concerned tank-containers and tank-vehicles as well, the standing working group asked the representative of Russia to address these issues to the Joint Meeting's working group on tanks. As a result, five proposals were produced, three of which the Joint Meeting adopted directly following preliminary discussion at the working group on tanks (for details, see the main article on the autumn session of the Joint Meeting). Another proposal dealing with ambiguities in calculating the minimum wall thickness of the shell will be examined further at the next session. The three adopted proposals, which materialised thanks to continual and intensive exchanges between the competent organs of OTIF

and OSJD, result in a clear improvement to the provisions, not least because they adapt them to the latest status of technological research and development. They are the outcome of successful cooperation, whose main aim is to ensure continuous harmonisation of the two sets of regulations, RID and SMGS Annex 2.

Proposals to amend RID/ADR/ADN

Amendment of special provision 591

Special provision 591, which is assigned to UN Number 1794 (Lead sulphate with more than 3% free acid), currently stipulates that lead sulphate with not more than 3% free acid is not subject to the provisions of RID/ADR/ADN. This prevents lead sulphate with not more than 3% free acid from being classified as a substance of Class 9, classification code M7.

The Joint Meeting accepted a proposal from Germany only to state in special provision 591 that lead sulphate with not more than 3% free acid is not subject to the provisions of Class 8. When necessary, this allows lead sulphate with not more than 3% acid to be classified as an environmentally hazardous substance.

Amendment of RID/ADR Chapter 1.2

Based on a proposal from Portugal, all the explanations of abbreviations and acronyms will be moved from 1.2.1 (Definitions) to a new 1.2.3. This reflects the IMDG Code, where this separation has already existed for some time. As Portugal's original proposal was submitted on the basis of RID/ADR 2019, a few fine adjustments still have to be made.

UN 1043 FERTILIZER AMMONIATING SOLUTION with free ammonia

According to special provision 642, UN number 1043 may not be used for the carriage of fertilizer solution with free ammonia in European land transport, unless this substance is carried in a transport chain that includes a maritime or air transport leg.

In RID/ADR, UN numbers 2672, 2073 and 3318 are available for the carriage of ammonia solutions, depending on the concentration of ammonia.

Certain problems arise in the carriage of UN number 1043 – a dissolved gas of Class 2 – in a transport chain. For example, 2.2.2.2.2 states that dissolved gases, except UN numbers 1001, 2073 or 3318, are not accepted for carriage.

The Joint Meeting decided to include UN number 1043 in 2.2.2.2.2, with a cross-reference to special provision 642, in order to ensure that the entry “UN 1043 Fertilizer ammoniating solution with free ammonia” is only used in the cases set out in 1.1.4.2. A note will be included in special provision 642 specifying which UN numbers are available in RID/ADR for the carriage of ammonia solutions. In Table A of RID, classification code “4A” will be entered in column (3b), as is already the case in ADR.

UN 1345 RUBBER SCRAP or RUBBER SHODDY, powdered or granulated

Spain had noticed that the name and description of UN number 1345 differ between RID/ADR/ADN and the UN Model Regulations. In the UN Model Regulations, the description contains information relating to the grain size and rubber content. The UN Model Regulations assume that only substances

whose grain size does not exceed the specified value of 840 µm are hazardous.

The Joint Meeting supported aligning the name and description of UN number 1345 with the UN Model Regulations.

UN 2015 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED with more than 70% hydrogen peroxide

In RID/ADR/ADN, there are two entries for hydrogen peroxide, which divide this UN number into solutions with more than 60% and not more than 70% hydrogen peroxide and solutions with more than 70% hydrogen peroxide. In RID/ADR/ADN, UN number 2015 only covers aqueous solutions, whereas in the UN Model Regulations, it also covers the pure substance.

The Joint Meeting decided also to include “hydrogen peroxide, stabilized” in the name of UN number 2015. In Table A, this will be added to the first entry, which applies to hydrogen peroxide solution with a lower water content and prescribes stricter conditions of carriage.

UN 1872 LEAD DIOXIDE

Lead dioxide is an oxidizing substance of Class 5.1 and, in contrast to the UN Model Regulations, has the subsidiary hazard of toxicity in RID/ADR/ADN. A test carried out by Germany showed that there are no reliable indications for acute toxicity that would justify assigning the subsidiary hazard of Class 6.1. The Joint Meeting agreed to delete the subsidiary hazard of toxicity. The conditions of carriage contained in Table A will be adapted to the other substances to which classification code O2 and packing

group III are assigned. In particular, carriage in bulk will be allowed.

Tanks and bulk containers with a low capacity

The Note to RID/ADR/ADN 5.3.2.1.5 allows the carriage of tanks with a maximum capacity of 3,000 litres in closed wagons and sheeted wagons/closed vehicles and sheeted vehicles without having to affix orange-coloured plates to both sides of the carrying wagon/carrying vehicle. Consequently, only marking of the wagon/vehicle with placards is prescribed and carriage is comparable to the carriage of dangerous goods in large packagings (IBCs or large packagings).

However, for open wagons/vehicles carrying tanks with a maximum capacity of 3,000 litres, the provisions of 5.3.2.1.5 still apply. These wagons/vehicles must bear an orange-coloured marking if the orange-coloured plates affixed to the tank are not clearly visible from outside the wagon/vehicle.

This results in different treatment of the marking of closed wagons and sheeted wagons/closed vehicles and sheeted vehicles on the one hand and the marking of open wagons/vehicles on the other, which, according to Switzerland, is not justifiable from the point of view of safety. In addition, 5.3.2.1.5 does not apply just to the carriage of tanks, but also to the carriage of bulk containers (these were newly included in the 2019 edition). The Note should therefore be amended so that the exemption from marking applies to all types of wagons/vehicles on which tanks or bulk containers with a low capacity are carried.

The Joint Meeting supported Switzerland’s proposal to extend the exception dealt with in the Note to 5.3.2.1.5 to bulk containers and also to multiple element gas containers (MEGC). An orange-

coloured marking is also no longer required for open wagons and vehicles.

Risk management framework for the inland transport of dangerous goods

Together with delegations of the Joint Meeting, the European Union Agency for Railways (ERA) has developed framework risk assessment guidelines for the inland transport of dangerous goods. The guidelines can be applied to all three land transport modes and have now been published on the websites of the European Commission and ERA.

These framework guidelines offer all categories of potential users, including the authorities, a harmonised method for risk assessment and a harmonised decision-making process, as well as principles that have to be taken into account in the preparation of robust risk management decisions.

The Joint Meeting agreed to refer to these framework guidelines in RID/ADR/ADN. However, the Joint Meeting rejected ERA's proposed replacement of the current reference to the Generic Guideline for the Calculation of Risk inherent in the Carriage of Dangerous Goods, which appears in footnote 20 to RID 1.9.3 and footnote 1 to ADR 1.9.4. Application of these guidelines is voluntary.

Exemptions for UN number 3536

Special provision 389 says that the entry UN 3536 LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNITS only applies to cargo transport units in which lithium ion batteries or lithium metal batteries are installed and which are designed only to provide power external to the unit. According to the definition in RID/ADR 1.2.1,

a cargo transport unit may be, *inter alia*, a wagon, a vehicle or a container. According to the definition in the ADR Agreement, a vehicle can either be a tractor unit or a trailer.

Special provision 389 also contains provisions on how the batteries are to be attached in the cargo transport unit in such a manner as to prevent short circuits, accidental operation, and significant movement relative to the cargo transport unit under the shocks, loadings and vibrations normally incident to carriage. These requirements correspond to packing instruction P 903 (2).

Switzerland was of the view that batteries installed in cargo transport units are no different from the batteries of the other four entries for lithium batteries (UN numbers 3090, 3480, 3091 and 3481) and that the same provisions and potential exemptions should apply to them as well. Assigning transport category 2 might be of particular interest for trailers in which less than 333 kg of lithium batteries are installed. The effect of this would be that there would be no need for a dangerous goods safety advisor, ADR driver training, orange-coloured marking on the vehicle, placarding, instructions in writing, etc.

The Joint Meeting decided to assign transport category 2 to UN number 3536.

Reports of informal working groups

Informal working group on reducing the risk of a BLEVE

The report of the last session of the informal working group on reducing the risk of a BLEVE contains six recommended measures to prevent boiling liquid expanding vapour explosions (BLEVE) in future. These measures are partly of a preventive nature, to prevent

the accident itself, and partly of a mitigating nature, in order to minimise the effects of an accident that has already occurred and to prevent the accident leading to a BLEVE:

- a. Installation of metallic mudguards to prevent the propagation of tyre fires to other areas of the vehicle. Metallic mudguards are already prescribed for MEMUs (mobile explosives manufacturing unit).
- b. Installation of engine fire suppression systems, which are also prescribed for MEMUs already.
- c. Installation of safety valves, which are effective in preventing a BLEVE, with the exception of cases where the tank is subject to a very intense localised heat source. Even in cases where the tank is subjected to an intense localised heat source, the safety valve can provide additional time for the area to be evacuated or external cooling to be applied, which may also prevent a BLEVE from occurring.
- d. Introduction of technical devices for general traffic safety, such as Advanced Emergency Braking Systems (AEBS) and the Lane Departure Warning Systems (LDWS). For example, the accident in Bologna (6 August 2018) could have been completely prevented with these measures.
- e. Screening in between cabin and tank in order to prevent transferral of the thermal load from a cabin fire to the tank.
- f. Use of expanded aluminium alloys in the tank. This reduces the kinetic energy of the gas and leads to heat absorption through the large surface area of the mesh.

The Joint Meeting agreed to prioritise measures a), b) and c). In view of the dates for the mandatory application of safety provisions for new heavy goods vehicles already adopted by the World Forum for Harmonization of Vehicle Regulations (WP.29), the Joint Meeting saw no need to expedite measure d) for dangerous goods vehicles. The Joint Meeting agreed to investigate measure e) further. Measure f) was not considered further owing to the uncertainty in terms of its effectiveness, the effects on maintenance and inspections and the costs resulting from the use of this material. Apart from these measures, the Netherlands recommended investigating the thermal coating further.

In memory of Mr Klaas R. Tiemersma



The Joint Meeting noted with great sadness that Mr Klaas R. Tiemersma (Netherlands) had passed away on 20 August 2020. For more than twenty years, Mr Tiemersma had played an active role at the Joint Meeting and the RID Committee of Experts as a member of the Dutch

delegation. The chairman expressed the Joint Meeting's condolences to the Dutch delegation and to Mr Tiemersma's family.

Next session

The next Joint Meeting will be held from 15 to 19 March 2021. It will continue its work on the 2021 edition of RID/ADR/ADN.

Jochen Conrad
Katarina Burkhard

CALENDAR OF OTIF'S MEETINGS IN 2021

DATE	EVENT	ORG	LOCATION
15 - 19 March	RID/ADR/ADN Joint Meeting	UNECE	Berne - Switzerland (HYBRID MEETING)
13 - 15 April	Working Group of Legal Experts; 4 th session		Berne - Switzerland (HYBRID MEETING)
13 - 15 April	Ad hoc Committee on Cooperation; 4 th session		Berne - Switzerland (HYBRID MEETING)

EVENTS WITH OTIF PARTICIPATION IN 2021

DATE	EVENT	ORG	LOCATION
13 January	Topical Working Group on Derailment Detection Devices (DDD)	ERA	(REMOTE MEETING)
18 - 19 January	Working party Telematics Applications Freight TSI	ERA	(REMOTE MEETING)
19 January	Working Party on the revision of TSIs	ERA	(REMOTE MEETING)
27 January	EU International Passenger Rail Platform	European Commission	(VIDEO-CONFERENCE)
28 January	Topical Working Group digital automatic coupler	ERA	(REMOTE MEETING)
9 - 10 February	Railway Interoperability and Safety Committee (RISC)	European Commission	Brussels - Belgium
9 - 12 February	Working Group on Annex 2 to SMGS "Provisions for the Carriage of Dangerous Goods"	OSJD	Warsaw - Poland
22 - 23 February	37 th Gefahrgut-Tage		Hamburg - Germany
23 - 26 February	Inland Transport Committee	UNECE	Geneva - Switzerland
23 - 24 February	Working Party Telematic Applications for Freight TSI	ERA	(REMOTE MEETING)
9 March	Working Party on the revision of TSIs	ERA	(REMOTE MEETING)
9 - 10 March	UIC Group of Experts on the Carriage of Dangerous Goods	UIC	(VIDEO-CONFERENCE)
30 - 31 March	Working party Telematic Applications for Freight TSI	ERA	(REMOTE MEETING)



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