

Organisation intergouvernementale pour les transports internationaux ferroviaires (OTIF)

Zwischenstaatliche Organisation für den internationalen Eisenbahnverkehr (OTIF)

Intergovernmental Organisation for International Carriage by Rail (OTIF)

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Draft proposal for

## Appendix H to COTIF

# Uniform Rules concerning the safe operation of trains in international traffic

Version 2, for discussion at CTE 10 Date of document: 13.04.2017

Text appearing in rectangles is for explanatory purposes only. The rectangles will be deleted from the Uniform Rules. Where relevant the text may be kept as explanatory notes.

#### Explanatory note

#### Introduction

While COTIF traditionally deals mainly with international railway traffic that is based on the exchange of vehicles at border stations, it may also develop further to support interoperability in terms of complete trains crossing borders. This type of operation has the potential to improve the efficiency of rail transport hugely by reducing transit times and costs as a result of limiting the number of stops and organisational interfaces.

Reliable and fast transport is of increasing importance to the business of companies and the economy of States. Rail competes in international traffic with other modes of transport, i.e. road, inland waterways and air which, due to their system architecture, are less dictated by interfaces between both technical systems and organisations. In order for rail transport to remain competitive, it is inevitable national rail systems must become more aligned and interconnected so that trains can interoperate on them.

It seems inevitable that States will have to conclude mutual agreements for trains coming from one State to run on the infrastructure in another State.

One part of these agreements would have to deal with ensuring safety of the rail system when infrastructure managers have to work together with different railway undertakings. It would not be helpful if several such agreements were concluded bilaterally without coordination. It would instead be more efficient to develop rules and principles at intergovernmental level. This would ensure a harmonised and coordinated approach to connect railway systems for the benefit of international railway traffic.

#### General purpose and scope of the draft new Appendix

The purpose of the new Appendix is to provide general principles and responsibilities for the cross-border operation of trains for States that already fully apply APTU and ATMF.

Since its inception, ATMF has dealt with the procedure for the admission of railway vehicles to international traffic, including which rules are applicable to these vehicles and the responsibilities for correctly using and maintaining these vehicles.

The provisions are based on and intended to be compatible with the provisions applicable to the rail system of the European Union.

#### Complementary to ATMF

ATMF was last revised in 2014 and entered into force in July 2015. The trigger for this revision was the increasing technical freedom for the construction of vehicles, particularly freight wagons. As the UTP for freight wagons had increasingly functional requirements to allow innovation, it could no longer be taken for granted that all types of freight wagons could be safely coupled and operated together in a train. ATMF was therefore revised to clarify the responsibilities for train composition and the correct use of vehicles. This resulted in a new Article 15a, which defines the mutual responsibilities between railway undertakings, keepers and infrastructure managers. This new Article 15a, in combination with the responsibilities for entities in charge of maintenance in Article 15, sets out the legal requirements to ensure that:

- Each vehicle has an Entity in Charge of Maintenance (ECM) assigned to it which ensures that the vehicle is in a good state of maintenance;
- ECMs for freight wagons must be certified in accordance with Annex A to ATMF;
- All vehicles within a train composition will be used within their conditions and limits of use, under the responsibility of the railway undertaking;
- Trains are composed by railway undertakings in such a way that they can be safely operated;
- Trains are only operated on compatible infrastructure and it is the task of the railway undertaking to ensure this.

ATMF contains all the elements to ensure that that not only vehicles, but also the composition of a train composed in one State, do not have to be called into question by other States. The actual operation of trains is not in the scope of ATMF.

#### Interoperability beyond the EU

At the General Assembly of 2015, the Secretary General launched the idea of establishing a legal basis in COTIF to support interoperability beyond the EU. Interoperability in this context means the safe and uninterrupted movement of trains on and between the rail systems of neighbouring States. In practical terms, interoperability means that a railway undertaking would be able to run a complete train from its

point of departure in one State to the destination in another State without technical or operational reasons to stop at the border(s).

following discussions with partner organisations and at the Committee of Technical Experts, the Secretariat suggests developing interoperability beyond the EU along two parallel paths:

- 1. The operational and safety provisions concerning, in particular, railway undertakings and infrastructure managers, in order to ensure that trains are operated safely, including the certification and supervision of railway undertakings and the certification of ECMs for freight wagons.
- 2. The network access conditions, setting out the conditions in a State for railway undertakings to operate trains in that State, including e.g. licensing, charges and capacity allocation.

The Secretariat of OTIF suggests dealing with these two subjects in two separate new Appendices to COTIF. This document concerns the first point. Point two should be analysed separately in order to establish whether it is necessary and feasible.

The reason for separating the two subjects is that the first subject is not conditional on the second.

Even without network access conditions agreed at international level, States can themselves define or agree in bi- or multilateral agreements the access conditions for their networks. Also, it would not be a problem if one State were to conclude different access agreements with different neighbouring States.

The approach to safety and operation should, on the contrary, be harmonised as much as possible, so that a modern and efficient approach to safety is adopted and the proliferation of different, incompatible approaches to safety is avoided.

#### Proposed scope of the draft new Appendix H

In order to support the aims of interoperability beyond the EU, provisions should be developed which can be applied in addition to ATMF. Where the scope of ATMF covers the approval and use of vehicles in international traffic, the new Appendix should cover the operation of trains composed of vehicles which are covered by ATMF. The provisions of the draft new Appendix are based on the following principles:

- The new Appendix should be applied only by States that have organised their railway system and applicable legislation in accordance with the ATMF provisions. It would, for example, be based on the assumption that all vehicles in a train are admitted to operation and have an ECM assigned to them. As a consequence of applying the new Appendix:
  - Responsibilities for ensuring railway safety are clearly assigned;
  - The railway system will be organised in such a way that the infrastructure manager, in the meaning of ATMF, has to work with different railway undertakings;
  - The safety and operational rules applicable to railway undertakings and to infrastructure manager(s) are public;
  - There is a process for the safety certification of railway undertakings [and the Secretary General is notified of all certified railway undertakings?];
  - All railway undertakings and the infrastructure manager(s) will have established their safety management systems, which will be subject to supervision on behalf of the State.
- Without prejudice to the responsibilities of keepers and ECMs in the scope of ATMF, railway undertakings and infrastructure managers would have shared responsibility for ensuring that trains are operated safely, each of them within a clearly defined area.
- The Committee of Technical Experts would be competent to harmonise provisions on the following subjects:
  - $\circ$  Safety and operational rules concerning the operation of trains in international traffic;
  - Provisions applicable to railway undertakings and infrastructure managers concerning the implementation of a safety management system and the monitoring of its correct application;
  - The safety certification of railway undertakings;
  - The supervision of safety management systems by or on behalf of the States;

#### Planning

The subject of interoperability was presented to and discussed by the Committee of Technical Experts in 2016. It supported the general principle and asked the standing working group Technology to develop the concept further. This draft new Appendix is the result of this work.

The draft new Appendix could be reviewed by the Committee of Technical Experts in 2017 and subsequently by the 26<sup>th</sup> Revision Committee (probably at the beginning of 2018). The approval of a new Appendix is subject to decision by the General Assembly, which is scheduled to convene in autumn 2018.

#### Modifications to COTIF as a consequence of the new Appendix

In addition to the draft new Appendix, the base Convention should also be amended in order to refer to the new Appendix and establish competences and procedures for modifying it. Modification of the base Convention would include the following provisions:

- Article 2 Aim of the Organisation: § 1 add a new letter e) to describe the aim of the new Appendix. Current letters e) and f) should be renamed f) and g) and current letter f) should be amended to include new letter e).
- Article 6 Uniform Rules: § 1 add a new letter h) to describe the Uniform Rules of the new Appendix. Current letter h) should be renamed i).
- Article 20 § 1 should be amended to give the Committee of Technical Experts the competence to take decisions in accordance with the relevant Articles of the new Appendix and deal with all other matters assigned to it in accordance with the new Appendix.
- Article 33 § 4 add a new letter h) and a new § 7 to define the competences concerning the new Appendix.
- Article 35 Decisions of the Committees: § 6 add a new letter d).

In addition to the draft new Appendix H and the modifications to the base Convention, ATMF may also need to be amended, in particular Article 16 dealing with accidents, incidents and severe damage. It might be necessary for investigations to be carried out independently of any railway undertaking, infrastructure manager or other operational actors.

#### Not in the scope of the draft new Appendix: access conditions

The actual cross-border operation of trains relies not only on the 'technical and safety' elements as set out in this draft new Appendix H, but also on the possibilities and conditions for railway undertakings to have access to the rail network of a State. These provisions, referred to as access conditions, would not be part of the scope of this new Appendix H.

Access conditions are meant to include elements such as:

- How to offer consistent conditions of access to the network
- Allowing foreign railway undertakings to operate on the network
- Availability and publication of track access charges and network statement
- How to provide consistent access to essential facilities
- Liability of railway undertaking in the framework of an international service
- Insurance requirements and conditions.

Even without internationally harmonised access conditions, it might be in the interests of States to promote the operation of international trains on their networks, including access to facilities and services required for such operation. This assumption implies that interoperability could be established even without harmonising access conditions at the level of COTIF. With regard to train drivers' licences, it is debatable whether or not this should be covered in the new Appendix. On the one hand it relates to operational and safety provisions to ensure that trains run safely, but on the other hand it has a labour market aspect that probably does not belong in the scope of the new Appendix.

As railway undertakings which operate trains internationally will in principle do this with the objective of making profit, each State would need to define its conditions for access to the network based on international principles.

The Secretariat suggests that the 26<sup>th</sup> Revision Committee should discuss whether it is necessary to develop access conditions under COTIF, with the help of a working group if need be. If it is concluded that access conditions are to be developed, the subject should be considered by the General Assembly in 2018.

#### Use of the new Appendix concerning the safe operation of trains in international traffic

Access conditions can be set by each State individually, or agreed bilaterally or multilaterally between States. The international operation of trains might be possible even if access conditions are not fully harmonised.

The proposed new Appendix with safety and operational provisions could be very useful, even in the absence of harmonised access conditions. Different models for granting access to networks, whether based on an open market model or a more restricted model, would benefit from a harmonised approach to safety and operational responsibilities.

Table of amendments		
Version	Date	Description
1	23.1.2017	Draft for review by WG TECH 30
2	14.3.2017	Draft for review by CTE 10

### Uniform Rules concerning the safe operation of trains in international traffic (Appendix H to the Convention)

#### Article 1 Scope

The new Appendix should be applied in combination with ATMF. The new Appendix is not intended to be applied without also applying and implementing ATMF. States that have made a declaration not to apply ATMF should not apply the new Appendix either.

ATMF deals with the admission and continued operational fitness of vehicles by defining, among other elements, the tasks and responsibilities of keepers, railway undertakings and entities in charge of maintenance, and the composition of trains.

The new Appendix covers the cross-border operation of trains which are composed in accordance with ATMF.

It is necessary to distinguish between the operational, technical and safety provisions required to establish interoperability of trains (part of the draft new Appendix) and the access conditions to enable railway undertakings to operate on the territory of a State (not in the scope of the draft new Appendix).

These Uniform Rules lay down requirements concerning the safe operation of trains in international traffic, including safety certification and supervision.

#### Article 2 Definitions

The definitions in Article 2 should supplement those in APTU and ATMF. A similar principle of reference was used in APTU.

Where possible, the new definitions are in accordance with the definitions used in EU law.

The concept of interoperability within the EU and interoperability as envisaged by these draft Uniform Rules differs in that EU law establishes one EU single railway system, whereas these draft Uniform Rules envisage interoperability between multiple national (or international) rail systems. There is no such thing as an "OTIF rail system", so the specifications have to be suitable for application in individual States or a group of States (EU).

With regard to vehicles operated internationally, a vehicle can and will be part of multiple rail systems, depending on where it is operated.

For the purposes of these Uniform Rules, their Annex(es) and the UTP, in addition to the terms defined in Article 2 of ATMF, and Article 2 of APTU, the term

- a) "Certification Authority" means the national or international entity responsible for issuing safety certificates to railway undertakings;
- b) "Certified railway undertaking" means a railway undertaking that holds a safety certificate issued by a Certification Authority;

- c) "interoperability" means the ability to perform safe and uninterrupted movement of trains within a rail system and from and to other rail systems, while these trains accomplish the required levels of performance;
- d) "monitoring" means the arrangements put in place by railway undertakings or infrastructure managers to check that their safety management system is correctly applied and effective;
- e) "rail system" means, in each Contracting State, the network consisting of lines, stations, hubs and terminals intended for international rail traffic and all vehicles likely to travel on all or part of the network;
- f) "safety certificate" means the evidence that the railway undertaking concerned has established its safety management system and that it is able to operate safely in the intended area of operation;
- g) "safety management system" means the organisation, arrangements and procedures established by an infrastructure manager or a railway undertaking to ensure the safe management of its operations;
- h) "supervision" means the arrangements put in place by the Supervision Authority to oversee safety performance of a railway undertaking after it has received a safety certificate;
- i) "Supervision Authority" means the national or international entity responsible for supervising the correct application of the safety management system.

#### Article 3 Operational and safety requirements

The operation of trains in international traffic must be standardised as much as possible in order to ensure the highest level of safety, interoperability and efficiency.

Only a certified RU may operate trains in international traffic. International traffic means traffic which requires the use of an international train path or several successive national train paths situated in at least two States and coordinated by the infrastructure managers concerned. This requirement does not apply to a RU which operates a domestic train with vehicles which are operated internationally.

RUs and IMs should have shared responsibility for the safe operation of trains. The MSs must ensure this in their national laws. In the EU this principle is implemented through the Safety Directive.

Each RU and IM should have an SMS. As there are no OTIF provisions concerning the safety management system, pending harmonised provisions, each State may require implementation as it deems fit. However, it is important that each actor monitors the correct application of its SMS.

The terminology and concepts have been chosen to mirror the provisions defined in EU law, so that the gradual transposition and consecutive further development of e.g. Common Safety Methods on certification, monitoring and supervisions is possible. Contracting States must aim for the highest practicable degree of uniformity in the provisions concerning operational and safety requirements for the operation of trains in international traffic.

As long as there are no unified COTIF provisions, States apply their own rules concerning operations, such as SMS and supervision. These national rules should be published by each State to allow a RU that wants to operate in a particular State to become familiar with these rules. It would probably not be necessary for OTIF to publish the rules applicable in each State. The aim is gradually to harmonise these rules in the form of Annexes to these UR.

- § 1 Trains shall be operated in international traffic in accordance with the operational and safety requirements set out in these Uniform Rules.
- § 2 Without prejudice to the responsibilities of Entities in Charge of Maintenance of railway vehicles, Contracting States shall ensure that on their territory the responsibility for the safe operation of trains in international traffic and the control of risks associated with it is laid upon the infrastructure manager(s) concerned and the railway undertaking(s) which operate(s) the train.
- § 3 Contracting States shall require all railway undertakings and infrastructure managers involved in the operation of trains in international traffic on their territory to have implemented a safety management system and to monitor its correct application.
- § 4 Contracting States shall ensure that all binding operational and safety rules are published and made available to railway undertakings and infrastructure managers.
- [§ 5 Contracting States shall inform the Committee of Technical Experts of initiatives to establish rules that could jeopardise the implementation of this Appendix.]

#### Article 4 Certification Authority

Each State should establish a Certification Authority with responsibility for the certification of railway undertakings and should notify the Secretary General of it. It should be independent from railway undertakings and infrastructure managers.

The Supervision Authority and the Certification Authority may be incorporated into the same organisation, but may also be separate. Within the EU, for example, the EU Agency for Railways will act as the Certification Authority, while the National Safety Authority of each State will perform supervision.

When certifying or re-certifying railway undertakings, the Certification Authority must take into account all relevant information gathered in the process of supervision by the Supervision Authority and the two authorities must cooperate to this end.

- § 1 Each Contracting State shall ensure that a Certification Authority independent from any railway undertaking and infrastructure manager is established.
- § 2 Each Contracting State shall notify the Secretary General of its Certification Authority in at least one of the Organisation's working languages and keep the information up-to-date.
- § 3 The Secretary General shall publish the information referred to under § 2 on the website of the Organisation in the language(s) of notification.

Article 5 Safety certification of railway undertakings

This Article concerning the certification of RUs is addressed to States.

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Certification should be based on harmonised provisions as far as they exist.

A future Annex on Common Safety Methods for certification should provide such provisions.

A list of certified railways in each State and the scope of each certificate should be made publicly available for reasons of transparency, both for States and for RUs and in order to have an overview of the application of these Uniform Rules.

Question for discussion: should infrastructure managers also be subject to uniform provisions concerning safety certification (authorisation)?

What will be included in the UR concerning safety certification? Explain.

- § 1 Contracting States shall only permit the operation of trains in international traffic on their territory by Railway Undertakings whose safety certificate is valid on their territory.
- § 2 Safety Certificates for the operation of trains in international traffic shall be issued in accordance with the provisions set out in these Uniform Rules.
- § 3 When issuing Safety Certificates to Railway Undertakings which are already certified in other States, Certification Authorities

[shall take into account the results of]

[are permitted to use the results of]

[shall accept the results of]

assessments made by the Certification Authority of other States. Certification Authorities shall cooperate to this end.

- § 4 Contracting States may conclude agreements which provide for mutual recognition of Safety Certificates, or parts thereof, issued by the Certification Authority of the other State(s), provided that the assessment criteria according to which the safety certificate was issued ensure compliance with the criteria applicable in those States. Such agreements shall be notified to the Secretary General. The Secretary General shall publish this information. Conditions for mutual recognition of Safety Certificates, or parts thereof, may also be set out in an Annex to these Uniform Rules.
- § 5 Contracting States shall ensure that Certification Entities publish a list of the Railway Undertakings whose safety certificate is valid on their territory concerning the operation of trains in international traffic, including the exact scope of each certificate and keep this list up-to-date.

#### Article 6 Supervision

Each State should supervise the SMS of RUs for which it has issued a certificate.

Supervision is the task of the Supervision Authority. The Supervision Authority and the Certification Authority may be incorporated into the same organisation, but may also be separate. Within the EU, for example, the EU Agency for Railways will act as the Certification Authority, while the National

Safety Authority of each State will perform supervision.

Certification should be based on harmonised provisions as far as they exist.

A future Annex on Common Safety Methods for supervision should provide such provisions.

The Supervision Authority must provide all relevant information to the Certification Authority and the two Authorities must cooperate.

- § 1 Each Contracting State shall ensure that a Supervision Authority independent from any railway undertaking and infrastructure manager is established.
- § 2 The correct application of the safety management system of railway undertakings shall be supervised by the Supervision Authority in accordance with these Uniform Rules.
- § 3 Each Contracting State shall notify to the Secretary General their Supervision Authority in at least one of the Organisation's working languages and keep the information up-to-date.
- § 4 The Secretary General shall publish the information referred to under § 3 on the website of the Organisation in the language(s) of notification.

#### Article 7 Safety management and the operation of trains

This Article is addressed to the operational actors.

ATMF already governs the responsibilities for train composition and the correct use of vehicles, so this new Appendix H should not have to cover these matters.

RUs should operate trains only within the scope of their certificate, which could e.g. be limited to certain lines or types of traffic.

The operational actors (RU and IM) should each implement the rules correctly, including the establishment of their safety management system and the monitoring of its correct application and cooperate to ensure safety.

The CSM on monitoring can be transposed into an Annex, so that they become part of these UR.

- § 1 Railway undertakings shall operate trains in international traffic only within the scope of their Certificates.
- § 2 Infrastructure managers and railway undertakings involved in the operation of trains in international traffic shall control all safety risks associated with their activities.
- § 3 Infrastructure managers and railway undertakings involved in the operation of trains in international traffic shall cooperate to ensure that trains in international traffic under their responsibility are operated safely.
- § 4 Infrastructure managers and railway undertakings involved in the operation of trains in international traffic shall establish their safety management system and monitor its correct application in accordance with these Uniform Rules.

#### Article 8 Annexes and recommendations

This Article defines the process and competences for making proposals and adopting specifications within the scope of these UR. It also enables recommendations to be made.

Annexes may be developed step-by-step, starting quickly with the adoption of principles and developing detailed provisions as a next step.

If this new Appendix is adopted, the Articles of the base Convention referred to in § 3 should also be modified in order to provide the competences at that level.

The application referred to in § 4 can also be made by the SG according to Article 21 § 4 of the base Convention.

It is anticipated that the following subjects will be developed as Annexes to this Appendix:

- Elements of the SMS
- Common Safety Method on Conformity Assessment to be applied by Certification Entities
- Common Safety Method on Monitoring to be applied by Railway Undertakings
- Common Safety Method on Supervision to be applied by Supervision Authorities
- Conditions for mutual recognition of Safety Certificates, or parts thereof.
- § 1 The Committee of Technical Experts shall be competent to adopt Annexes to these Uniform Rules in order to implement the requirements of these Uniform Rules in a harmonised way.
- § 2 The preparation of Annexes shall be the responsibility of the Committee of Technical Experts assisted by appropriate working groups and the Secretary General on the basis of applications made in accordance with § 4.
- § 3 The Committee of Technical Experts shall decide whether to adopt an Annex in accordance with the procedure laid down in Articles 16, 20 and 33 § 6 of the Convention. The decisions shall enter into force in accordance with Article 35 §§ 3 and 4 of the Convention.
- § 4 An application for adoption of an Annex or a provision amending it may be made by:
  - a) any Contracting State;
  - b) any regional organisation as defined in Article 2 x) of ATMF;
  - c) any representative international association for whose members the existence of the Annex is indispensable for reasons of safety and economy in the exercise of their activity.
- § 5 The Committee of Technical Experts may recommend methods and practices relating to the safe operation of trains in international traffic.

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#### Article 9 Declarations

If a particular Contracting State is unable to apply the harmonised provisions developed as Annexes to these UR, this State may make a declaration to this end. The principles are similar to those of Article 9 APTU.

- § 1 Any Contracting State may, within a period of four months from the day of notification of the decision of the Committee of Technical Experts by the Secretary General, make a reasoned declaration notifying him that it will not apply the Annex to these Uniform Rules, so far as it concerns the railway infrastructure or part of it situated on its territory and the traffic on that infrastructure.
- § 2 The Contracting States which have made a declaration in accordance with § 1 shall not be taken into account in determining the number of States which must formulate an objection in accordance with Article 35 § 4 of the Convention, in order that a decision of the Committee of Technical Experts should not enter into force.
- § 3 A State which has made a declaration in accordance with § 1 may withdraw it at any time by notification to the Secretary General. This withdrawal shall take effect on the first day of the second month following the notification.

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