

The technical Appendices to COTIF International admission and use of rail vehicles

BAKU, May 2016 Bas Leermakers Head of the technical department

Content



6

CTE: workflow for the development of rules

Admission of rail vehicles and their use and exchange in cross-border traffic Principles

APTU and ATMF: Important principles and aims

International harmonisation

• Develop and adopt harmonised technical requirements for the admission of vehicles to international traffic

Separation of powers

• Set the competence for approving vehicles at government level (not railway companies)

International admission of vehicles

A vehicle approved by one Contracting State can be used internationally

Definition of responsibilities

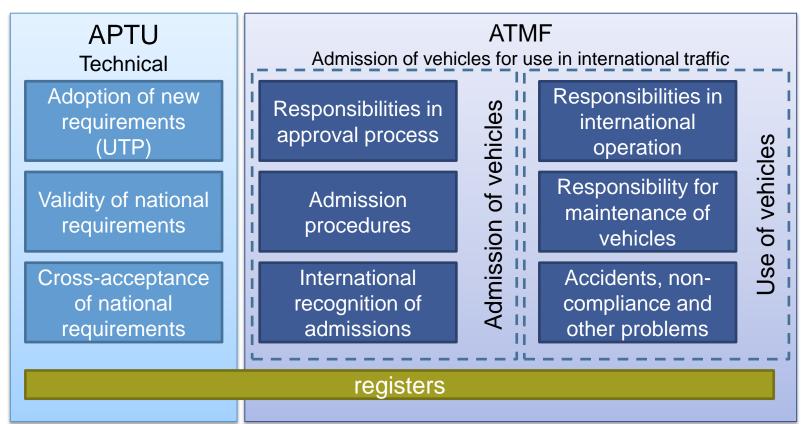
 Definition of responsibilities for the use of vehicles; in particular for railway undertakings (RU), entities in charge of maintenance (ECM) and keepers

Equivalence with EU

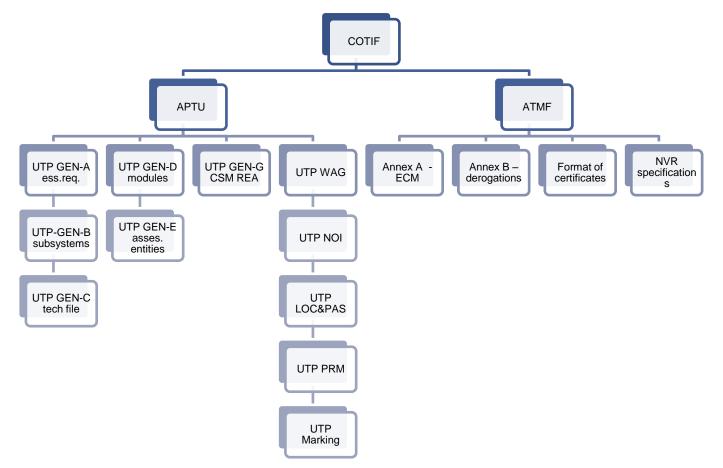
• Establish compatibility with EU railway regulations for all of the above

APTU and ATMF

Summary of scopes

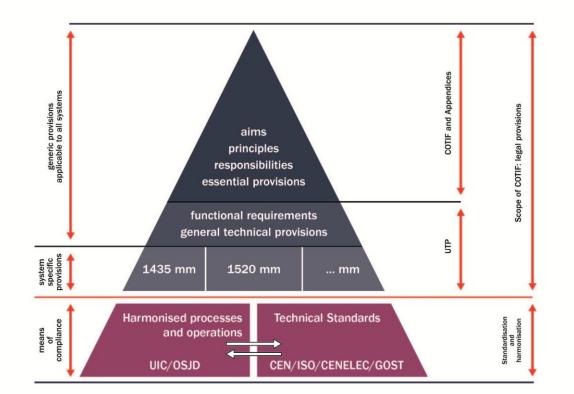


APTU and ATMF: technical Appendices and their subsidiary rules



Legal pyramid





The UTP/TSI set as many functional requirements as possible, leaving room for innovation and business choices.

However, at the level of interfaces, detailed technical solutions are required.

Standardisation is the task of standardisation bodies such as ISO, CEN, CENELEC.

Additional harmonisation may be decided at the business level, e.g. UIC.

Operational actors and their responsibilities in the international use of vehicles

COTIF provisions related to the vehicle and its use

As defined in ATPU and ATMF

COTIF/UTP vehicle requirements which allow compliant vehicles to be used in international traffic:

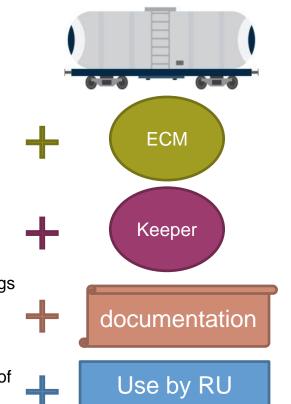
- Vehicle technical requirements set out in TSI/UTP related to rolling stock (WAG/LOC&PAS/PRM)
- Vehicle marking

Provisions which concern the 'ecosystem' of the vehicle:

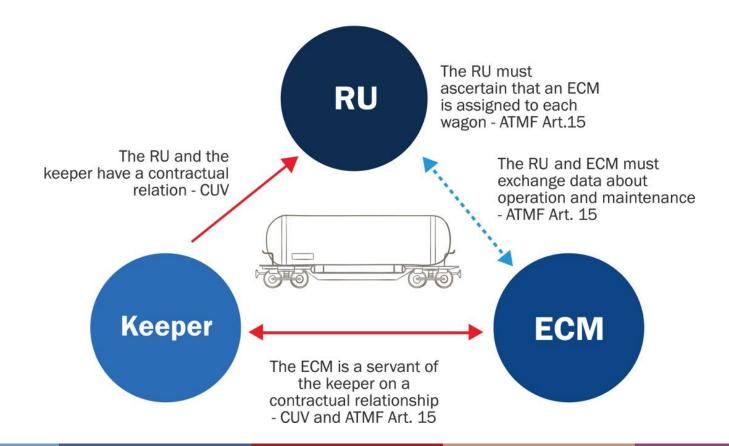
- ECM for maintenance
- Documentation such as the technical file
- > Information exchanges between keeper, ECM and railway undertakings

Provisions which concern the correct use of the vehicle:

Requirements related to train composition, conditions and limits of use of vehicles, etc., as set out in the TSI OPE, for example



Principle relations and tasks for the exchange of vehicles

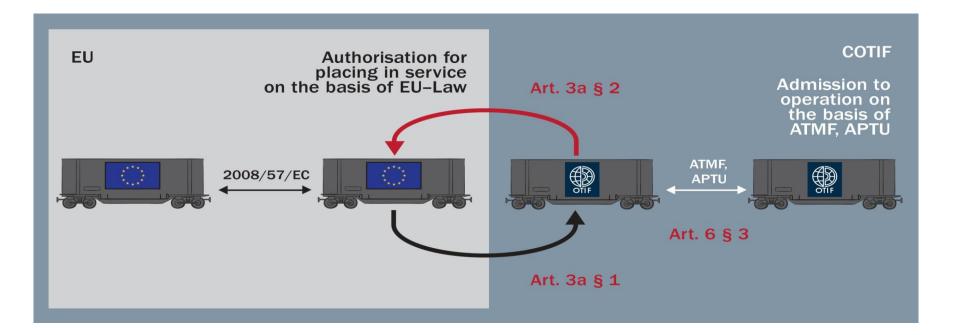


Equivalence with EU provisions

Equivalence principle



Vehicle admission according to ATMF Articles 3a and 6



EU TSI and COTIF UTP

13

Name

Application for vehicles

Treatment of interoperability constituents

TSI – Technical Specification for Interoperability

Mandatory to comply with before selling or using a new railway product on the EU market

IC are assessed separately, so they can be marketed in the EU



UTP – Uniform Technical Prescription

Compliance not mandatory in itself

Compliance with UTP results in the right to admit or use a vehicle in international traffic

Depending on applicable national law, IC may also be assessed as part of the subsystem. (COTIF is not a market regulation)

Conceptual differences

Between COTIF and the EU operational safety provisions



Safety and Interoperability in a single system

- Responsibilities for safe operation for the **system** shared by IM and RU (plus tasks and responsibilities attributed to other actors, such as ECM)
- Safety Management Systems for RU and IM
- Roles and duties of authorities (NSA, NIB)
- Common Safety (levels) Targets
- Interface arrangements between RU and IM set out in operational provisions (OPE TSI)

EU has a **risk-based system approach**, where RU and IM share the responsibility of safe operation and each of them must have an SMS. Exchange of vehicles between different networks

- Applies to international rail traffic → interface between different rail systems
- Provisions for the admission and use of vehicles
- Harmonised conditions under which the vehicles can be used and trains can be operated in different railway networks
- Overall safety management not in scope of COTIF

COTIF is **rule-based** and works on the concept that **compliant vehicles** can be operated in different (national/regional) railway networks.

Vehicle admission

Tasks, responsibilities and procedures



APTU and ATMF

Required division of competences

• Member States of OTIF that apply ATMF are required to have:

16

- A competent authority
- And may designate, recognise or accredit:
 - An assessing entity
 - An ECM Certification body
 - CSM assessment body
- Or make use of the latter services from entities in other Member States

Main actors for verification, admission and operation

Verification

Applicant

- Entity that asks for the Certificate to operation for a vehicle
- Not defined which entity; could be RU, manufacturer, or other entity.

Assessing entity

• Entity that performs the conformity assessment of a vehicle

Manufacturer

• The end responsible for the design and production of a vehicle



Operation

Keeper

- Holds the Certificate of Operation
- Designates an ECM

Railway undertaking

- Is responsible for the correct use of the vehicle
- Provides the ECM with information on the operation of the vehicle

ECM

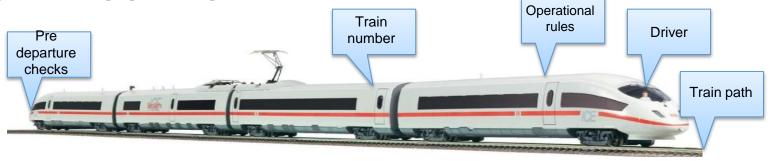
• Ensures that the vehicle is in a safe state of running

Interoperability: the cross-border operation of trains The next step for COTIF?

What is a train

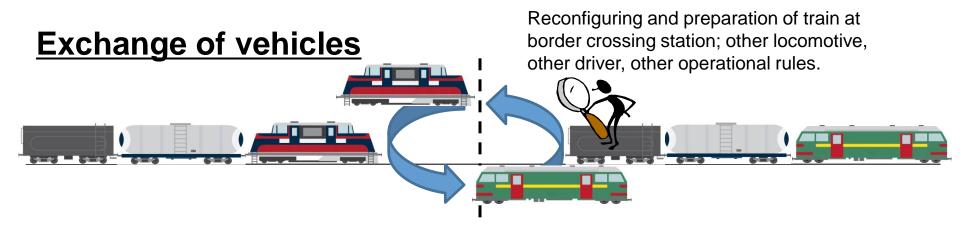
The difference between a railway vehicle and a train

- w) "railway vehicle" means a vehicle suitable to circulate on its own wheels on railway lines with or without traction;
 - Vehicles, e.g.: •Locomotive •Freight wagon •Passenger coach •Train sets
- ee1) "Train" is a formation provided with traction, consisting of one or more railway vehicles and prepared for operation;





Operational concepts for international rail traffic



Interoperability

Train preparation at point of departure

Uninterrupted train movement across border, without changing train configuration or driver 20



The four levels of international railway regulation

4

Market regulation

The conditions under which a State provides access for foreign railway undertakings to operate trains Can e.g. be based for market opening and competition, but also e.g. for reciprocity and cooperation Market regulation is <u>not in the scope of COTIF</u>

3

Interoperability: the cross-border operation of trains

Ensure that trains can be operated across borders without technical or operational barriers Means that a national infrastructure manager accepts foreign railway undertakings on its network Requires harmonised interfaces between infrastructure operation and train operation

2

Admission of rail vehicles and their use and exchange in cross-border traffic

Ensure that rail vehicles can be operated across borders CUV: Contractual provisions between keeper and carrier APTU and ATMF: requirements and responsibilities for the construction, approval and maintenance of vehicles

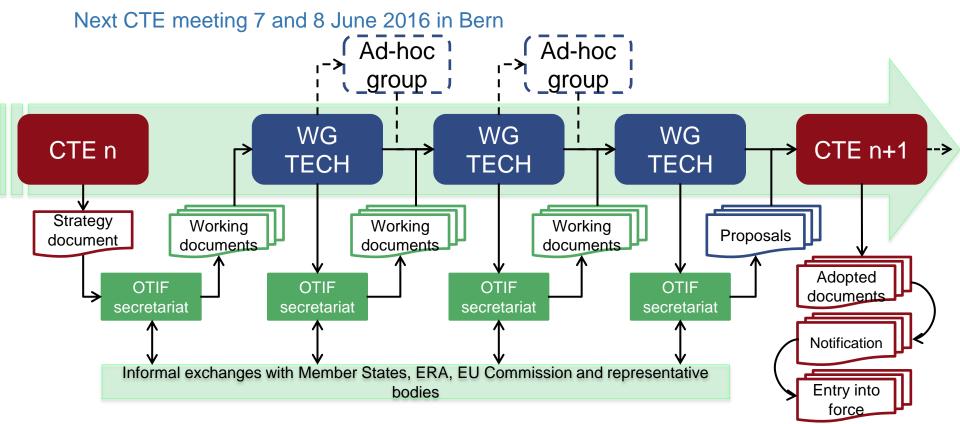
International carriage of goods or passengers by rail

Provide confidence for passengers and freight customers to use rail transport Contractual law CIM and CIV – contractual relations between carrier and their customers Regulations concerning the carriage of dangerous goods (RID)

Committee of Technical Experts

Workflow for the development of rules

Working process of the CTE



23

Thank you for your attention





Organisation intergouvernementale pour les transports internationaux ferroviaires Zwischenstaatliche Organisation für den internationalen Eisenbahnverkehr Intergovernmental Organisation for International Carriage by Rail

Gryphenhübeliweg 30 CH - 3006 Berne www.OTIF.org Bas Leermakers + 41 (0) 31 259 10 25 Bas.leermakers@otif.org