



Economic Commission for Europe**Inland Transport Committee****Working Party on Rail Transport****Group of Experts towards Unified Railway Law****Twenty second session**

Geneva, 7-9 July 2020

Item 2 of the provisional agenda

Execution of the Mandate of the Group of Experts**Needs for unified railway provisions****Note by the secretariat****I. Introduction**

1. The Group of Experts towards Unified Railway Law (Group of Experts) concluded that the Unified Railway Law (URL) should possibly be developed as a system of conventions (see ECE/TRANS/SC.2/2019/4, para 16). In this context, the Group of Experts further concluded that it should consider issues relevant for international carriage of goods by railways whose legislative unification is crucial and justified to facilitate international carriage by railways between Europe and Asia, or between COTIF and SMGS areas.

2. Among issues proposed for legislative unification are the use of wagons/rolling stock, and/or use of infrastructure.

3. This document is prepared to provide a brief analysis of the purposes of legal frameworks such as COTIF and SMGS on the use of wagons/rolling stock, and use of infrastructure, as well as pronounce the practices in rail carriage between Europe and Asia in view of technical differences in rail infrastructure. It finally raises points for a discussion on the needs for legislative unification in addition to the provisions on the contract of carriage for cargo by rail between COTIF and SMGS systems.

II. Brief analysis of the purposes of legal frameworks in COTIF and SMGS on use of wagons/rolling stock, and use of infrastructure**Use of vehicle/wagons**

4. The purpose of the law on the use of vehicle/wagon (COTIF CUV and SMGS Section III) is to regulate liability between the railway undertakings and the vehicle keepers when the vehicles owned by keepers are used by railway undertakings as means of transport for

international carriage based on bi or multilateral contracts (COTIF) or bilateral contracts (SMGS). The following liabilities apply:

- loss or damage to a vehicle, or
- loss or damage caused by the vehicle.

At the same time, it is important to take into account that all CUV provisions on liability are not binding. Therefore, they are suppressed by the provisions of the General Contract on the Use of Wagons (GCU) agreed between numerous wagon keepers and railway undertakings.

Use of rolling stock

5. The purpose of the law on the use of rolling stock is to provide technical standards to which the rolling stock should adhere to in order to be admitted for use in international carriage. Such are defined in COTIF ATMF and APTU and OSJD Leaflets.

Use of infrastructure

6. The purpose of the law on the use of infrastructure such as COTIF CUI is to regulate the contractual relations between the railway undertakings and infrastructure managers for the use of infrastructure as well as the obligations and liabilities arising from these contractual relations. The obligations impose on the railway undertaking to be authorized to carry out railway operations and, in doing so, to use vehicles that meet safety standards.

7. SMGS does not contain any provisions on the use of infrastructure except that it specifies in Article 38 that the carrier is responsible for activities of its employees and other entities whose service the carrier is using. The infrastructure manager is considered to be such an entity.

Analysis

8. From merely the analysis of the purposes, it appears that in both COTIF CUV and SMGS Section III the purposes for the laws are similar.

9. The purposes for the availability of technical standards are equivalent.

10. Then, there are no corresponding laws about the use of infrastructure. Furthermore, a purpose of such laws may be different depending on whether rail undertakings are separated from rail infrastructure or not.

III. Practices in rail carriage between Europe and Asia in view of technical differences in rail infrastructure

11. The carriage of freight between Europe and Asia requires a specific service connected to rail gauge change between standard gauge (1435mm) and the so-called Russian gauge (1520mm). Two technologies are available to enable continuation of carriage for cargo:

- Handling technology, and
- Shifting technology.

12. The handling technology is about transshipping cargo from vehicles of one gauge to vehicles of another gauge. Cargo/container reloading or cargo pumping or pouring are methods of transshipment depending on cargo type.

13. The shifting technology is about exchanging vehicle running gear on vehicles (exchange of wheels or buggies) or by using self-adjusting wheel sets (variable gauge system) on vehicles.

14. The European Agreement on Important International Combined Transport lines and related Installations (AGTC Agreement) provides list of gauge interchange stations for combined transport, among them, the gauge interchange stations between 1435-1520mm gauges on the rail lines from Europe to Asia such as:

- Line C-E 20: Malaszewicze (PL) – Brest (BY) and Zabaikalsk (RU) – Manchzhuria (CN);
- Line C-E 24: Dostyk (KZ) – Alashankou (CN);
- Line C-E 30: Medyka (PL) – Mostiska (UA);
- Line C-E 40: Čierna nad Tisou (SK) – Chop (UA);
- Line C-E 50: Záhony (HU) – Chop (UA).

15. These gauge interchange stations except Malaszewicze, Čierna nad Tisou offer both services for vehicle running exchange and cargo transshipment. Malaszewicze, Čierna nad Tisou offer the cargo transshipment only.

16. It is understood that handling technology – cargo transshipment – is the practiced technology for cargo carried in containers. In such a case there is no transfer of vehicles between COTIF and SMGS systems except to the transshipment stations for the period of transshipment.

17. The shifting technology may be the preferred technology for cargo consisting of dangerous goods and transported in special wagons. This is due to the fact that for such goods the handling technology (pumping or pouring) generates additional safety and environmental pollution risk and is time consuming.

18. The shifting technologies such as self-adjusting wheel sets when present on all vehicles allow full trains to travel across a gauge break. In such a case, a train passes through a gauge changing facility where the wheels are unlocked, moved closer together or further apart and relocked again. This technology allows time savings compared to vehicle running gear exchange: for a cargo train of 32 vehicles an exchange of vehicle running gear takes 12 hours versus 4 hours for the same train with vehicles equipped with the variable gauge system (c.f. EU Intergauge project).

19. While the gauge switch time saving can be considerable, this comes at extra costs. Such are linked with vehicle exploitation and high repair and maintenance costs.

20. The high costs may be a reason for which the gauge switching technologies so far have not been widely embraced in cargo transport. Another reason may be that potential gains from gauge change time savings could not be achieved due to time losses for custom controls.

21. From economic perspective, it is considered in the sector that higher gains are achieved from carriage of cargo in containers or swap bodies and their transshipment between so called flat vehicles of different gauges than from using vehicle gauge change technology. In addition, with the availability of tank containers, shifting technologies can be avoided, without the need of pumping or pouring but simply through container transshipment.

IV. Basis for legislative unification

22. The legislative unification may be considered in the context of what are the existing and planned operational practices in rail carriage between Europe and Asia given the infrastructural differences - gauge break from 1435mm to 1520mm.

23. Depending on the operational practice and its further development, the vehicle exchange between COTIF and SMGS systems may or may not be necessary. In the latter case, i.e. no vehicle exchange, it may appear redundant to undertake unification efforts for the law on the use of freight vehicles in international traffic.

24. In such a case, also unification of vehicle-related technical regulations and elaboration of a common law on the use of infrastructure may be redundant.

25. Should the operational practice favour exchange of freight vehicles between the current COTIF and SMGS systems, in such a case, availability of unified and/or common laws on the use of vehicles, and the use of infrastructure as well as common technical standards might be required to facilitate the activities of railway undertakings, which should allow them to offer better services to their customers.

26. In this context, the following points should be reflected upon:

- What are the operational practices railways are using and are interested to develop for cargo carriage across gauge breaks?
- Would such practices in a medium- to long-term lead to a possibility to move entire cargo trains across gauge breaks?
- Given that the practice would allow to move entire cargo trains across gauge breaks, what should be the purpose for a common law on the use of infrastructure?
- Given that the practice would focus on cargo carriage in containers and transshipment of containers at the gauge breaks, could the AGTC Agreement play a more significant role in facilitating the carriage of cargo between Europe and Asia both with regard to technical characteristics of the networks and operational targets – e.g. through assessment of progress achieved?
- Given the practice alluded in the previous point, shouldn't the focus be given to unified/common provisions for digitalization of documents in cargo carriage by rail rather than on laws for the use of wagons/rolling stock and infrastructure?
