

International Principles and Obligations Concerning The Right to Access and Use Contracts for The Use of Vehicles in International Traffic under The International Rail Transport Legal System

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Abstract

Thailand promotes the development of a rail transport system for the carriage of goods and passengers by rail both domestic and international traffic. The rail transport operators in Thailand must be licensed by the Department of Rail Transport of Thailand for the use of infrastructure systems and railway vehicles as means of transport for goods and passenger carriages. The findings indicated that the International Agreement on Rail Transport of the Intergovernmental Organization for International Carriage by Rail (OTIF) and the Organization for Cooperation of Railways (OSJD), defines the principles of rights, duties, and responsibilities of the contractual carrier, Infrastructure Manager and business operators related to the utilization of the railway infrastructure. These principles must be transformed into Thailand's rail law development for the implementation of

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international technic and standards on rail transport operation. Even though Thailand is not yet a member state of either OTIF or OSJD, however, such legal principles will be able to apply as a model law for development concerning law for the promotion and control of the utility infrastructure and the vehicles both domestic and international rail traffic. Based on the major findings, the results suggest that as follows: (1) Thailand must enact rail transport law of the Department of Rail Transport of Thailand; (2) the Department of Rail Transport must enact sui generis law as the regulation to specify the access and utilization of infrastructure and vehicle contracts; (3) and to specify the rights, duties, liabilities, dispute resolution, and limitation of actions of the contractual carrier, infrastructure manager and business operators to support sustainable economic development.

Keywords: International Railway Law, Railway Contract Law, COTIF, OSJD

หลักการและพันธกรณีระหว่างประเทศเกี่ยวกับสิทธิในการเข้าถึง และการใช้ประโยชน์จากการทำสัญญาการใช้งานของยานพาหนะ ในการจราจรระหว่างประเทศภายใต้ระบบกฎหมาย ระหว่างประเทศว่าด้วยการขนส่งทางราง

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บทคัดย่อ

ประเทศไทยส่งเสริมการพัฒนาระบบการขนส่งสินค้าและคนโดยสารทางรางทั้งภายในประเทศและระหว่างประเทศ ผู้ประกอบกิจการขนส่งทางรางต้องได้รับใบอนุญาตประกอบกิจการจากกรมการขนส่งทางรางในการใช้ประโยชน์จากระบบโครงสร้างพื้นฐานและการเดินรถเพื่อการขนส่งสินค้าและคนโดยสารทางรางจากการศึกษาพบว่า ความตกลงระหว่างประเทศว่าด้วยการขนส่งทางรางขององค์การระหว่างรัฐเพื่อการขนส่งทางรางระหว่างประเทศ และองค์การเพื่อความร่วมมือในการขนส่งทางราง กำหนดหลักเกณฑ์เกี่ยวกับสิทธิหน้าที่ และความรับผิดชอบตามกฎหมายของผู้รับขนส่ง ผู้จัดการโครงสร้างพื้นฐานและผู้ประกอบธุรกิจอันเกี่ยวกับการใช้ประโยชน์จากระบบโครงสร้างพื้นฐานทางราง หลักการดังกล่าวควรนำมาปรับใช้เป็นหลักสำหรับการพัฒนาหลักกฎหมายขนส่งทางรางของประเทศไทย ไม่ว่าจะเป็นการกำหนดมาตรฐานระหว่างประเทศทางเทคนิคหรือแม้แต่มาตรฐานในการประกอบกิจการขนส่งทางรางก็ตาม ถึงแม้ว่าประเทศไทยจะยังมิได้เข้าเป็นภาคีสมาชิกไม่ว่าจะเป็นองค์การขนส่งทางรางระหว่างประเทศใด ๆ เลยก็ตาม แต่หลักการดังกล่าวสามารถนำมาปรับใช้ในฐานะที่เป็นต้นแบบการพัฒนาเกี่ยวกับการส่งเสริมและการควบคุมกำกับการใช้ประโยชน์จากยานพาหนะและโครงสร้างพื้นฐานทางราง ไม่ว่าจะเป็นในการเดินรถภายในประเทศ

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หรือระหว่างประเทศก็ตาม การศึกษาครั้งนี้เสนอแนะว่า (1) ประเทศไทยต้องประกาศใช้กฎหมายขนส่งทางราง ของกรมการขนส่งทางราง (2) กรมการขนส่งทางรางต้องประกาศใช้กฎหมายเฉพาะในรูปแบบกฎหมาย ลำดับรองในการกำหนดสิทธิในการเข้าถึงและการใช้ประโยชน์จากสัญญาการใช้ประโยชน์จากยานพาหนะ และโครงสร้างพื้นฐานทางราง และ (3) ต้องกำหนดกฎหมายเฉพาะเกี่ยวกับการกำหนดสิทธิ หน้าที่และความรับผิดชอบของผู้รับขน ผู้จัดการโครงสร้างพื้นฐานและผู้ประกอบธุรกิจขนส่งทางรางเพื่อส่งเสริมการพัฒนา เศรษฐกิจที่ยั่งยืน

คำสำคัญ: กฎหมายขนส่งทางรางระหว่างประเทศ กฎหมายสัญญาขนส่งทางราง องค์การขนส่งทางราง ระหว่างประเทศ

Introduction

The rail transport system development is Thailand's concept and strategy for economic growth for supporting foreign investment and international trade through domestic and international rail transportation whereas the geography of Thailand is linked with Laos, Myanmar, Cambodia, and Malaysia. (Exim, 2013)

The development concept complies with Sustainable Development Goal 8, which aims to promote sustainable and inclusive economic growth through improving labor productivity and developing technology and innovation for production. To achieve these goals, emphasis must be placed on strengthening entrepreneurship, creating jobs, and implementing policies to combat illegal labor, slavery, and human trafficking. (Office of the National Economic and Social Development Council, 2019) This will lead to full and productive employment and decent work in compliance with Goal 9 by promoting continually introducing innovations to society such as the development of energy-saving technologies, the invention of innovations, Industrial technology development that is environmentally friendly, development of digital technology including the perfect transportation and infrastructure system that facilitate the crossing of frontiers for people, goods and services carried by rail, which are key factors of the improvement of the quality of life and economic growth of Thailand. (Faculty of Science, Mahidol University, 2019)

In the present day, Thailand has increasingly progressive development concerning its transport infrastructure network, which is reflected in the World Competitiveness Ranking conducted by the International Institute for Management Development [IMD], which reports that Thailand's competitiveness in terms of infrastructure to support freight and logistics is improving by multimodal transportation networks. (Office of the National Economic and Social Development Council, 2019)

However, Thailand's legal mechanisms and systems have not yet developed in compliance with the international rail transport standards and legal system, whether it is the development of a draft law on rail transport business and the Transit-Oriented Development [TOD] draft laws that support the development of areas surrounding stations. In addition, Thailand has not yet entered into any member state of an international rail transport agreement.

Thus, the research questions are as follows: Should Thailand be a member state of the international agreement of OTIF or OSJD organization?, and Should Thailand promptly enact sui generis law to promote the regulator of state to regulate the utilization of the vehicle in internal and international rail traffic?

This paper will examine specific international rail law related to Principles concerning the Contract of Use of Vehicles and Infrastructure in International Rail Traffic of OTIF and the concept of the International Rail Transport Law development, OSJD's Draft Convention on International Through Railway Traffic [Draft OSJD Convention] as it plays a major role to set common rules and legal systems in managing the international rail transport system among member states. (Calme, 2016 ; Interreg Central Europe, 2019) Then, analyze legal problems and obstacles related to the development of legal systems in compliance with international rail transport in Thailand, and lastly, propose policy recommendations for the development of rail transport law and regulation.

Research Methodology

This research used documentary research by comparative analysis of the International Agreement on Rail Transport of the Intergovernmental Organization for International Carriage by Rail (OTIF) and the Organization for Cooperation of Railways (OSJD) and collecting and studying information gleaned from various sources such as papers, official websites, and relevant articles. This research adopted a qualitative approach. The information will be thoroughly analyzed especially the provisions of the International Agreement of OTIF and OSJD concerning the analysis of problems and obstacles, the role of Thailand in enacting specific laws to promote the regulator of state to regulate the utilization of the vehicle in international rail traffic. Finally, the proposals will also be considered focusing on drawing a sui generis law, and policy recommendations will also be made for the Thai Government if it decides to be a member state of an international agreement.

Research Findings and Discussion

A Comparative Principles and Obligations of the Contracts of Use of Vehicles in International Rail Traffic and the Contracts of Use of Infrastructure in International Rail Traffic

This part will be analyzed and compared by the principle and obligation concerning the Contracts of Use of Vehicles and the Contracts of Use of Infrastructure in International Rail Traffic between 2006 the Convention concerning International Carriage by Rail [COTIF] and the 2015 Draft OSJD Convention of OSJD (BGBl. III, 2006) and it will be discussed on the concept of the contracts of use of vehicles and the contracts of use of infrastructure in international rail traffic. Moreover, it will be also discussed the principles and obligations concerning the right, duty, and liability of the use of vehicles and the infrastructure.

Principle, Obligation, and Liability concerning the Contracts of Use of Vehicles in International Rail Traffic on Appendix D of COTIF and Annex 5, Annex 6, and Annex 7 of OSJD

Principle, obligation, and liability concerning contracts of use of vehicles in International Rail Traffic Agreements and the General Provision on the Standard of Use of Vehicles in International Rail Traffic on use of freight wagons and passenger coaches in International Rail Traffic Agreements.

1) The Concept of the Contracts of Use of Vehicles in International Rail Traffic Agreements

The study found that the international agreements of both the OSJD and COTIF stipulate the same criteria, service standards, and liability for damage arising from the rail transport service. It can be seen that the concept of the Appendix D Uniform Rules concerning Contracts of Use of Vehicles in International Rail Traffic (CUV) [Appendix D of COTIF] in Article 1 and Article 2 of Appendix D of COTIF (OTIF, 2019), which this agreement aims to set standards for the operation of rail transport in the territory of OSJD member states, whether it is operated by the state enterprise or private sector. (International Rail Transport Committee CIT, 2015)

Meanwhile, Annex 5 General Provision on Railway Rolling Stock in International Traffic [Annex 5 of Draft OSJD Convention] specify concept and idea to sets standards for providing safety services to passengers and using infrastructure or international rail transport operation among member states (Calme, 2016) such as Paragraph 1 of Annex 5 of Draft OSJD Convention specifies the scope of application and interpretation to all railway rolling stock in international traffic, which covers all locomotives, freight wagons, passenger coaches, including passenger coaches, including Paragraph 2 of Annex 5 of Draft OSJD Convention do not be permitted to operate in international through railway traffic in case of rolling stock which does not meet the safety standard regulation that requirements for rail operation specify by domestic legislation or international agreements amongst OSJD members states.

2) The General Provision on the Standard of Use of Vehicles in International Rail Traffic on Use of Freight Wagons and Passenger Coaches in International Rail Traffic Agreements

The study found that principles of the use of freight wagons and passenger coaches are set in Annex 5, Annex 6 General Provisions on Use of Freight Wagons in International Traffic [Annex 6 of Draft OSJD Convention] and Annex 7 General Provisions on Use of Passenger Coaches in International Traffic [Annex 7 of Draft OSJD Convention] However, these liability principles on the use of freight wagons and passenger coaches do not specify in Appendix D of COTIF.

2.1) The Principles on Duty, and Liability on the Use of Freight Wagons in International Traffic in Annex 5 and Annex 6 of OSJD

The study found that the concept of the Provision on the Use of Freight Wagons in International Traffic of Annex 6 of the Draft OSJD Convention has specified stakeholder relationships either amongst railway companies or between wagon processors and railway business operators on the use of freight wagons for performing carriage obligation. Moreover, this Annex also set the scope and interpretation of railway companies, wagons, wagon keepers, railway companies using a wagon, railway infrastructure, home stations, etc. (Calme, 2016)

Moreover, paragraphs 3.1 of Annex 5 of the Draft OSJD Convention specify the requirements for OSJD member states, which must lay down national provision for an application to all rolling stock concerning the markings and inscriptions stuck to wagon or coach bodies of rolling stock, the signals which mark the head end of a train, the equipment for the use of hand brakes for freight wagons in case of emergency incidents, the materials used in the production of either parts or components of rolling stock, and the rolling stock gauge on OSJD members' railway infrastructure.

Meanwhile, paragraphs 3.3 of Annex 5 of the Draft OSJD Convention specify the requirements to OSJD member states, which also enacts the requirements applicable to traction rolling stock concerning the devices for communications between the driver and the control center, electricity on elements of the railway infrastructure and the production of compressed air, and the driving of trains following the tonnage rating using in the railway infrastructure system of OSJD Members, etc.

In addition, the principles of Annex 6 of the Draft OSJD Convention also set several standards for the use of freight containers. First, Wagons were designed to be used for the carriage of goods on Article 6 of Annex 6 of the Draft OSJD Convention. Second, the container's signs, the number of the wagon, the wagon keeper, and an indication of the home station must be displayed on the wagon, which is specified by Article 3 of Annex 6 of the Draft OSJD Convention. Third, the wagon delivery must conclude between the railway company and another railway company and must also be recorded in documents concerning names of railway companies as contracting parties, the numbers of the wagons, and the date and time of wagon delivery, which is specified by Article 4 Annex 6 of Draft OSJD Convention. Forth, the wagons are suitable and stable whilst in use, which is specified by Article 5 Annex 6 of the Draft OSJD Convention. Fifth, company liability for compensation of all repairing and maintenance costs. in connection with Article 5 Annex 6 of the Draft OSJD Convention (Economic and Social Commission for Asia and the Pacific [ESCAP], n.d.)

It is worth noting that OTIF's international agreements do not prescribe the principles concerning details of the wagon utilization contracts as those set out in the international agreements in Annex 6 of the Draft OSJD Convention, which provides the principles, duties, and responsibilities in several provisions, whether the display of signs, handover of wagon duties of the company, duty to maintenance and repair wagons, etc.

In addition, the international agreement provides the liability that results from the fault of the railway operator from damage to or loss of a wagon, the operator must be liable for such damage or loss. This principle is provided by Article 7 of Appendix D of COTIF, in line with the principles outlined in Article 7 of Annex 6 of the Draft OSJD Convention. However, in case of the operator will be able to prove that such loss or damage was not a failure on its part, the operator shall not be liable *for any* damage or loss in Article 4, Part 1 of Appendix D of COTIF, which corresponds to the principles outlined in Article 7 of Annex 6 of the Draft OSJD Convention. (Organization for Co-Operation between Railway [OSJD], 2018)

Notwithstanding, these liability and exclusion principles, the parties may otherwise conclude into an agreement for excluding or limiting their liability following the principles outlined in Article 4 and Section 5 of Appendix D of COTIF and Article 7 and Paragraph 5 of Annex 6 of Draft OSJD Convention only in case of the damage is caused by the operator's negligence, However, this exceptional clause may not apply in case of it is proved that the loss or damage from failure by intention, recklessness, and operator foreseeable that such loss or damage would probably occur. (Working Party on Rail Transport, Group of Experts on Unified Railway Law, 2010).

However, the COTIF's International Agreement provides in Article 9 of the Appendix D of COTIF for the liability of the company from servants and other persons, which are acting within the scope of their functions and the right of recourse and subrogation of action in Article 8 of Appendix D of COTIF (OTIF, 2018), including the prescription period for exercising limitation of claims within 3 years from the day of loss of or damage was discovered or damage occurred that specify by Article 12 of Appendix D of COTIF (OTIF, 2011). Meanwhile, Annex 6 of the OSJD international agreement does not specifically prescribe such a principle.

On the other hand, the OSJD's International Agreement defines liability in detail more than COTIF's International Agreements such as dispute resolution by the court, judicial jurisdiction which is outlined in Article 10 of Annex 6 of the Draft OSJD Convention, and the exercise of the right to such claims must act within 3 years from the day on which the circumstances giving rise to the claim have occurred, which specified by Article 11 of Annex 6 of the Draft OSJD Convention. Meanwhile, Appendix D of COTIF does not provide for the specific dispute resolution and limitation for claim periods as those set out in Annex 6 of the Draft OSJD Convention.

2.2) The Principles, Duty, and Liability on Use of Passenger Coaches in International Traffic only specified by Annex 5 and Annex 7 of OSJD

The study found that paragraph 3.2 of Annex 5 of the Draft OSJD Convention specifies the general principles on technical standards to be applied to passenger rolling stock concerning public health, safety on vehicles, especially for disabled people, a communication system between passengers and train crew, emergency brake system Electrical systems in passenger coaches, etc.

Meanwhile, Annex 7 General Provisions on Use of Passenger Coaches in International Traffic [Annex 7 of Draft OSJD Convention] set the fourth standard criteria concept related to the use of passenger coaches in Article 1 of Annex 7 of Draft OSJD Convention. It establishes the rights and duties among the railway companies that operate the rail transport business and coach keepers based on ownership or another legal basis of the passenger coaches. (Calme, 2016).

Besides, Article 2 of Annex 7 of the Draft OSJD Convention specifies the scope of application and interpretation to apply to railway companies, coaches, coach keepers, and Railway companies using a coach, maintenance, and lost coach. (ESCAP, n.d.). Meanwhile, the COTIF's International Agreement does not specifically provide the technical standards related to the use of passenger coaches by rail.

In addition, Annex 7 of the Draft OSJD Convention also prescribes principles and standards for the use of international rail passenger coaches regarding the Signs and inscriptions on passenger coaches on the numbers of coach, the sign of the coach keeper that may be made through electronic mark which specifies by Article 3 of Annex 7 of the Draft OSJD Convention, passenger coaches delivery that must be concluded by agreement between the railway companies and recorded in documents, which must specify details as follows the names of the company parties, the numbers of the passenger coaches, and the date and time of passenger coach delivery as defined by Article 4 of Annex 7 of the Draft OSJD Convention.

Moreover, the maintenance and repair of passenger coaches in Article 5 of Annex 7 of the Draft OSJD Convention stipulate that the passenger coach keeper must ensure that the passenger coaches are suitable and stable while operating safely and that the coaches must be in good technical operations. However, the parties may otherwise agree on other conditions. (Organization for Co-Operation between Railway [OSJD], 2018)

Meanwhile, the liability for the use of passenger coaches is not specified by the COTIF's Agreement as the OSJD's International Agreement, it can be seen that the OSJD International Agreement does set forth liability principles in several matters as follows:

First, in case of damage to or loss of the coaches, the railway company must be fault liability for such incidents, however, in case of the company will be able to prove that such loss or damage was not caused by fault on its part, the company do not liable for any damages occur as provided by Article 6 of Annex 7 of the Draft OSJD Convention.

However, Article 6 of Annex 7 of the Draft OSJD Convention also specifies the limited liability of compensation for damages in 2 cases as follows: In the first case, the railway company shall be liable for not more than the value of the passenger carriage available in the market at the time of the loss. In the second case, if the passenger coaches are damaged, Article 6 of Annex 7 of the Draft OSJD Convention also provides that the remedies shall be limited to the cost of the repair of the passenger coaches, however, to compensate for this damage, the rail transport company and the owner of the passenger carriage may otherwise conclude into an agreement that provided for in Article 6 of Annex 7 of the Draft OSJD Convention.

Second, in case of liability for loss or damage arising from passenger coaches, Article 7 of Annex 7 of the Draft OSJD Convention also stipulates fault liability of coach keeper for loss and damage arising from coaches, however, in case of the company will be able to prove that such loss and damage was not caused by the keeper, the company do not liable for any damages occurred.

Third, in the case of liability for the consequences of the actions of employees and other persons outlined by Article 8 of Annex 7 of the Draft OSJD Convention, the rail transport companies and the coach keepers are responsible for the consequences of the actions of employees whose are performing their duties in the official employment When it appears that such person has performed the duty as assigned Railway companies and coach keepers shall be responsible for persons in their employment and other persons.

Fourth, regarding dispute resolution and judicial jurisdiction on Article 9 of Annex 7 of the Draft OSJD Convention, the dispute shall be resolved by a court where the defendant is domiciled, unless otherwise agreed by the parties. In addition, the exercising period for actions is stipulated by Article 10 of Annex 7 of the Draft OSJD Convention and action must be made within 3 years from the date of the circumstances giving rise to the claim occurred.

It is worth noting that Appendix D of COTIF Principles does not provide for the specific dispute resolution and limitation claim periods as those set out in Annex 7 of the Draft OSJD Convention.

The Principle, Obligation, and Liability concerning Contracts of Use of Infrastructure in International Rail Traffic on Appendix E of COTIF and Annex 4 of OSJD

The study found that COTIF's international agreements contain contractual requirements for the utilization of infrastructures such as the content and form of the contract, and the binding and termination of the contract, while the OSJD's international agreements, do not specify such provisions.

Appendix E Uniform Rules concerning Contracts of Use of Infrastructure in International Rail Traffic (CUI) [Appendix E of COTIF] has aim to specify the same standards for the use of transport infrastructure contracts in OTIF's Member states, which outlined in Article 1 of Appendix E of COTIF to support the application of the provisions in the Uniform Rules concerning the Contract of International Carriage of Passengers by Rail (CIV-Appendix A to the Convention) and the Uniform Rules Concerning the Contract of International Carriage of Goods by Rail (CIM-Appendix B to the Convention) (United Kingdom, 2003). Article 3 of Appendix E of COTIF defines the scope of enforcement of the use of rail infrastructure, which means the railway lines and fixed installations. It is also addressed to managers, carriers, employees, or other persons who provide transportation services in the performance of the contract, the license granted by a State, and safety certificate, etc.

It is worth noting that the principles specify by Article 4 of Appendix E of COTIF are of public order and Bono mores provisions. No State Party may enact domestic legislation which, directly or indirectly, renders the principles outlined in this Appendix E of COTIF ineffective in that State Party territory. Such domestic law which is contrary to such public order and Bono mores provisions are void. (The association of European Rail Infrastructure Managers [EIM], 2014).

However, States Parties may, in certain instances, enact exceptional principles for non-applicability of the principles, which is specified by the Uniform Rules in Article 2 of Appendix E of COTIF and it is without prejudice to the principles of public order and *Bona fides* provisions specified by Article 4 of Appendix E of COTIF. Although damages are life, body or sanitary, or mental health, in case of it appears that such damage meets two criteria: firstly, the victim has the nationality of the State in question; and secondly, the victim has a regular residence in the State in which such damage occurred.

Whereas the concept of Annex 4 General Provisions on Railway Infrastructure in International Traffic [Annex 4 of Draft OSJD Convention] is to set the technical standards and safe operation provisions related to passenger coach and freight trains in international traffic which specify by Paragraph 1 and 2 of Annex 4 of OSJD (Calme, 2016). In addition, this principle also set forth technical measures to ensure unrestricted safety and must be always available for passenger and rail transport services, speed rating requirements, tonnage rating, and train headways laid down including railway infrastructure services for the different track gauges. In addition, Annex 4 of the Draft OSJD Convention also defines the scope of application of the railway infrastructure included as follows: railway tracks, bridges, tunnels, signaling devices and communications, energy supply, equipment ensuring the safe operation of coaches and rolling stock, and railway stations such as platforms passenger terminals and surrounding areas, etc.

Meanwhile, paragraph 3 of Annex 4 of the Draft OSJD Convention stipulates that the duty of the infrastructure manager must ensure that the equipment operating is maintained in good working condition and suitable for using together with paragraph 4 of Annex 4 of Draft OSJD Convention, also stipulates the duty of infrastructure manager to provide and prepare equipment and facilities for use at railway stations. Platforms shall also be equally available to the public whether it is for providing services to vulnerable groups or persons with physical and intellectual disabilities to receive convenient and equal services.

1) Domestic legislation to enforce the content and form of contracts for the utilization of rail transport infrastructure.

The study found that Annex 4 of the Draft OSJD Convention does not prescribe the principles of contracting for the utilization of infrastructure in the rail transport operation. On the other hand, Appendix E of COTIF specifies the content, details, and form of the contract including contractual obligations, contract termination, non-applicable laws, duties of carriers and infrastructure managers, contract termination, etc.

As a preliminary observation, Article 5 of Appendix E of COTIF requires member states to enact domestic legislation governing the legal relationship between the infrastructure manager and carrier or any other person who transports passengers or cargo. Such contracts must be made in writing, and contain necessary details about the terms of utilization, both in terms of compliance with the measures of the management's technical terms and financial terms.

Article 5 bis of Appendix E of COTIF also requires member states to enact domestic legislation to apply to the rights, obligations, and liabilities relating to rail operators, who are licensed to operate, and it also includes the infrastructure manager (OTIF, 2017). In addition, Article 6 of Appendix E of COTIF also establishes the specific duty of carriers to managers. Managers are empowered to require operators to show valid licenses and safety certificates for rail. (OTIF, 2018).

Meanwhile, the Termination of the contract in Article 7 of Appendix E of COTIF provides for the power of infrastructure managers to terminate an operation contract when it appears that first, the carrier does not authorize to carry by rail, second, the service personnel and vehicles do not meet safety standards requirements. On the other hand, the principle in Article 7 of Appendix E of COTIF also provides that the transport operator may use the right to revoke the contract in case of the manager is no longer right and responsible for managing the railway infrastructure.

However, the principles in Article 7 of Appendix E of COTIF also provide that each party may terminate the contract in case it appears that the contract in force has materially breached the terms relating to the safety of passengers or goods. The party causing such termination shall be liable to the other party for any damage or loss resulting

from such activity unless it will be able to prove that such loss and damage were not the fault liability of the party who failed to comply with the provisions of the contract. (The association of European Rail Infrastructure Managers [EIM], 2014).

2) Liability from the utilization of railway infrastructure in rail transport operation

The study found the COTIF's International Agreement specifically provides for liability arising from the use of railway infrastructure as follows: liability of infrastructure managers and carriers for damage to life and bodily injury, claims, and limitation of actions, form, amount of damages and interest, nuclear incidents, dispute resolution, etc. Meanwhile, the OSJD's international agreement does not specifically provide the liability arising from the utilization of the rail infrastructure.

2.1) Liability of Infrastructure Managers and Liability of Carriers

Appendix E of COTIF has stipulated the liability of infrastructure managers and carriers in Article 8 Section 1 of Appendix E of COTIF (OTIF, 2011), which has specified the liability for all damage to life, body, mental, or property while using the infrastructure by the Uniform Rules on Carriage of Passengers and Luggage (CIV) and the Uniform Rules on Carriage of Goods (CIM).

However, Article 8 of Appendix E of COTIF provides for an exception clause that infrastructure managers are not liable for damages in three cases as follows: (OTIF, 2011).

First, the damages caused are not the fault liability of the infrastructure manager in which results from damages by the carrier, rise to the loss or damage caused by circumstances not connected with the management of the infrastructure manager, including it could not avoid and be unable to prevent, which is outlined in Section 2 a) of Article 8 of Appendix E of COTIF.

Second, the damages caused by the carrier's actions and not the fault liability of the infrastructure manager as outlined in Section 2 b) of Article of Appendix E of COTIF, in which the infrastructure manager has exercised due care in the nature and circumstances of the case, which cannot be avoided or is the result of which prevention cannot be taken.

Third, regarding the damages caused by nuclear incidents under Article 17 of Appendix E of COTIF, the infrastructure manager must not be liable for damages arising under the Uniform Rules and Appendix E of COTIF when it appears that any other person is legally liable and respond which is provided by sui generis domestic law.

Meanwhile, the liability of the carrier in Section 1 of Article 9 of Appendix E of COTIF also provides for liability for damage to life, body, metal, or property which is caused by the carrier during the use of the infrastructure. (The association of European Rail Infrastructure Managers [EIM], 2014). However, Section 2 a) of Article 9 of Appendix E of COTIF specifies for the following three exemptional clauses that the carrier will not be liable for damage that occurred (OTIF, 2011).

First, it is not the fault liability of the carrier under Section 2 a) of Article 9 of Appendix E of COTIF, which has exercised caution by the nature and circumstances, which is a situation that cannot be avoided or cannot be prevented, or which is the fault of the victim or a third party.

Second, in case of fault liability of infrastructure manager or by the order given by the manager and it is not the fault of the carrier, especially, the carrier cannot be avoided or where prevention cannot be taken according to Section 2 b) of Article 9 of Appendix E of COTIF.

Third, regarding the damages caused by nuclear incidents under Article 17 of Appendix E of COTIF, the carrier must not be liable for damages arising under the Uniform Rules and Appendix E of COTIF when it appears that any other person is legally liable and respond which is provided by sui generis domestic law.

2.2) Characteristic of liability for damage to life and bodily injury

The study found that Article 11 of Appendix E of COTIF sets forth the liability for damages of life in line with general tort law principles. The liability includes any expenses resulting from the death. The cost of transporting the body and the funeral expenses but in case of damages in case of personal injury such as non-immediate death or case of bodily or mental injury, Article 12 of Appendix E of COTIF is defined the compensation for damages as follows: any necessary expenses for the treatment and transport of the patient including any damages about the financial loss, total or partial loss of ability to work or necessary expenses occurred (OTIF, 2011).

In addition, in filing a lawsuit under Article 25 of Appendix E of COTIF specify that the period of limitation for actions in case of death is not more than 3 years from the day after the day the death occurred, but it is not more than 5 years from the day after the day of the accident. However, in case of bodily injury or loss of property, Article 25 of Appendix E of COTIF provides that the right of claim shall not exceed three years from the date on which the loss or damage occurred.

It is worth noting that a remedy measures for body damage, Article 13 of Appendix E of COTIF does not only limit the indemnity as provided by principles of Article 13 of Appendix E of COTIF but also allows other remedy manners that can be considered under the Domestic laws of the member states in which the damage has occurred.

Table 1: Summarized the International Legal Principles, Obligations, and Liability concerning the Contracts of Use of Vehicles and Infrastructure in International Rail Traffic

Legal Issues	OTIF Rules	OSJD Rules	Notice
1. Contracts of Use of Vehicles	1. the concept of the Appendix D Uniform Rules concerning Contracts of Use of Vehicles in International Rail Traffic 2. The scope of application and interpretation to all railway rolling stock of Appendix D	1. The concept of General Provision on Railway Rolling Stock in Annex 5 of Draft OSJD 2. List of requirements applicable to all rolling stock	OTIF and OSJD provide the same general provision and concept to enforce among member states
1.1 Freight Wagons and Passenger Coaches	No specific and general provision	1. The concept of General Provision on the Use of Freight Wagons in International Traffic of Annex 6 2. Scope and interpretation in Annex 6	- COTIF do not specify legal measure and technical standard - OSJD provide in detail the Use of Freight Wagons, signs and mark,

Table 1: Summarized the International Legal Principles, Obligations, and Liability concerning the Contracts of Use of Vehicles and Infrastructure in International Rail Traffic (Continue)

Legal Issues	OTIF Rules	OSJD Rules	Notice
		3. The provision for an application to Use of Freight Wagons 1) Signs and inscriptions on wagons 2) Handover of wagons 3) Upkeep and repair of wagons 4) Conditions governing the use of wagons	delivery of wagon and container, maintenance, and repair of wagons. These principles will be implemented in domestic law as a model law for development.
1.2 Liability for using Freight Wagons and Passenger Coaches	1. Liability in case of loss of or damage to a vehicle caused by a vehicle. 2. Liability for servants and other persons 3. Subrogation right 4. Limitation of actions	1. Liability in case of damage to or loss in Appendix 6 1) Liability in case of damage to or loss of a wagon 2) Liability for loss or damage caused by a wagon 2. Dispute resolution 3. Limitation period	- OTIF specifies general fault liability from using a wagon in line with the liability in OSJD. - OTIF also set forth the liability of the operator and also specifies case of loss of or damage to a vehicle and from the vehicle, etc. These provisions may be used for implementation as sui generis law; however, OSJD does not specify the specific provision.

Table 1: Summarized the International Legal Principles, Obligations, and Liability concerning the Contracts of Use of Vehicles and Infrastructure in International Rail Traffic (Continue)

Legal Issues	OTIF Rules	OSJD Rules	Notice
			<ul style="list-style-type: none"> - On the other hand, OSJD specifies in detail more than the principle of OTIF such as liability and responsibility from wagon and vehicle, dispute resolution, etc. - OTIF principle also provides a limitation period in line with of OSJD principle.
1.3 The use of passenger coaches in international traffic	No specific provision	1. The concept of the General Provisions relating to the use of passenger coaches in international traffic. 2. Scope and interpretation in Annex 7 3. The provision for an application to Use of passenger coaches 1) Signs and inscriptions on coaches 2) Handover of coaches 3) Maintenance and repair of coaches	<ul style="list-style-type: none"> - OTIF does not specify in detail the use of passenger coaches in international traffic, however, OSJD set forth principles on using passenger coaches such as Signs on coaches, coach delivery, duty to repair and maintenance, etc.

Table 1: Summarized the International Legal Principles, Obligations, and Liability concerning the Contracts of Use of Vehicles and Infrastructure in International Rail Traffic (Continue)

Legal Issues	OTIF Rules	OSJD Rules	Notice
1.4 Liability on the use of passenger coaches in international traffic	No specific provision	1. Liability in Annex 7 1) Liability in case of damage to or loss of a coach 2) Liability for loss or damage caused by a coach 3) Responsibility for employees and other persons 2. Dispute resolution by the Judiciary system 3. Limitation period	- OTIF does not specify in detail the use of passenger coaches in international traffic in line with OSJD. - OSJD set forth the principle on Liability in case of damage to or loss of a coach or damage caused by a coach, liability of employees and other persons, etc. These principles may be used as a model law for implementation and development as <i>sui generis law</i> .
2. Contracts of Use of Infrastructure in International Rail Traffic	1. The concept of Appendix E 2. The scope and interpretation in Appendix E	1. The concept of General Provisions on Railway Infrastructure in International Rail Traffic in Annex 4 2. The requirements of the technical standard of Infrastructure in international rail traffic	OTIF and OSJD provide the same general provision and concept to enforce among member states

Table 1: Summarized the International Legal Principles, Obligations, and Liability concerning the Contracts of Use of Vehicles and Infrastructure in International Rail Traffic (Continue)

Legal Issues	OTIF Rules	OSJD Rules	Notice
2.1 Provision of Contracts of Use of Infrastructure in International Rail Traffic	1. The technical standards and safe operation provisions 2. the scope of enforcement of the use of rail infrastructure 3. Termination of the contract	No specific provision	- OTIF set forth principles to conclude the contract on the use of railway Infrastructure, however, OSJD does not specify in detail these responsibilities and liabilities. - OTIF provides the term, form, content, obligation and legal binding, termination of the contract. These principles also use as a model law for implementation as <i>sui generis law</i> .
2.2 Liability from Contracts of Use of Infrastructure in International Rail Traffic	1. Liability of Use of Infrastructure in International Rail Traffic 2. liability in case of bodily loss or damage 3. Liability of the infrastructure manager and carrier 1) Liability of the infrastructure manager 2) Liability of the carrier and employee 4. Form and amount of damages	No specific provision	- OTIF provides the principles on responsibility and liability of using rail infrastructure, however, OSJD has no specific provision. - OTIF also set forth the content of the contract such as the liability of the infrastructure

Table 1: Summarized the International Legal Principles, Obligations, and Liability concerning the Contracts of Use of Vehicles and Infrastructure in International Rail Traffic (Continue)

Legal Issues	OTIF Rules	OSJD Rules	Notice
	5. Limitation of actions		manager and carrier on damages to life, body, and mental health, and also provide principle on claiming damages and limitation of action. These principles also use as a model law for implementation as <i>sui generis law</i> .

Problems and Obstacles, the Role of Thailand in Enacting Specific Laws to Promote the Regulator of State to Regulate the Utilization of the vehicle in International Rail Traffic.

The study found Thailand does not yet stipulate a mechanism and a specific legal system that set forth rules and procedures for the use of rail transport vehicles and the utilization of railway infrastructure.

Thailand's rail transport system is still governed by the State Railway of Thailand law, which has been in force for at least 60 years. The State Railway of Thailand Act, B.E. 2494, and its amendments is a law aimed to establish the State Railway of Thailand under the supervision of the Ministry of Transport of Thailand. This law has four main objectives as follows: first, rail transport operations and properties were transferred by the Department of Railways to the State Railway of Thailand as a state enterprise, which was specified by Section 6 of the State Railway of Thailand Act B.E. 2494 under the supervision of the Ministry of Transport of Thailand. Second, the growth of the rail transport operations by transporting passengers and rail freight as well as conducting other businesses, which are beneficial to the state

and the people, which is specified by Section 9 of the State Railway of Thailand Act, B.E. 2494, amended by Act (No. 6), B.E. 2535. Third, determine the service fee rates in the rail transport operations, providing services and conveniences for using various services of the railway business, including organizing the method of payment for such services. Fourth, organizing the provision of safe services and using rail transport services in terms of various conveniences of the rail transport operations.

Although the State Railway of Thailand Act B.E. 2494 and its amendments will be no specific legal measures directly and comply with the standards outlined in international agreements of OTIF and OSJD, however, the construction of a new railway line must be approved by the State Railway of Thailand and the Cabinet before proceeding, which is specified by Section 39, amended by Act (No. 7), B.E. 2543. It may be said that this provision complies with international law concerning railway infrastructure investment and must be approved and authorized by the regulations of the state.

Meanwhile, the State Railway of Thailand Act B.E. 2494 and its amendments do not stipulate other principles related to rail transport investment and operation promotions and related to rights, duties, and liabilities arising from the utilization of the railway infrastructure and vehicle services. Section 25 of this Act stipulates that the committee of the State Railway of Thailand has the power and authority to lay down the policy and control the operation and business of the State Railway of Thailand as follows: first, power to lay down regulations concerning the provision under Section 9, second, the power to lay down regulations on the recruitment, appointment, and removal of employees of the state enterprise, third, power to lay down regulations on the operational regulations of the State Railway of Thailand and regulations on disciplinary action and punishment of employees of the state enterprise, fourth, the determination of standard rates for service fees, use of services, and various conveniences of the railway business and operations.

Even though, Thailand is attempted to develop the rail transport system in compliance with international technic standards for supporting the economic development of international and internal trade and investment that supports the movement of goods and services both around the territory and among neighboring countries. Thailand passed the law for establishing the Department of Rail Transport of Thailand in 1997, however,

the development of the rail transport legal system also remains in form of a drafting law, but it has not yet been passed and enforced for supporting and promoting the infrastructure system investments as well as stipulated legal liability arising from using the rail transport operations following international carriage by rail.

The study found that the Department of Rail Transport is the responsible authority for controlling, supervising, and setting service standards such as train operators, sky trains, driver licenses, and fare rates. This draft law specified the role and powers of the Department of Rail Transport as a regulating organization for rail transport operations. It also determines the use of power by law enforcement and imposes administrative measures and specifies administrative and criminal penalties. Meanwhile, the draft law also has established mechanisms and legal measures to promote, control and regulate the utilization of vehicle contracts in railway traffic in many matters.

This draft law authorizes the Minister of Transport to exercise the power to regulate ministerial regulations in several issues on Section 4 of the Rail Transport Act B.E. as follows:

First, the determination of criteria, methods, and conditions for the use of railroad and necessary assets for the rail transport business. Second, determination of methods and conditions for connecting multimodal transport either rail, air, water, land transportation, bus station, distribution centers, cargo accommodation, land ports, industrial estates, and other related parts. Third, determination of the standardization of rail transport, duties, and powers of the Department of Rail Transport.

In addition, the draft law under Section 13 (8) of the Rail Transport Act B.E. also prescribes safe service in several technic standards, such as technical operation standards, safety standards, rail transport standards, specification standards testing, standards Inspection and assessment standards, railroad maintenance standards, personnel standards, rail transport business operations, other standard services required.

Moreover, It also stipulates the powers of the ministers to coordinate rail transport cooperation with relevant domestic and international agencies as well as setting the power to formulate policies to promote and support the rail transport operation. This principle complies with the principles in Appendix E of COTIF regarding the utilization of the infrastructure in rail transport operations. Although the OSJD's international agreement does not prescribe such principles.

However, these principles in the Draft Rail Transport Act B.E. does not yet specify the details of the legal principles applicable to the contract consistent with the principles outlined in Appendix E of COTIF, whether it is the content and form of the contract, the binding and termination of the contract, etc.

It is worth noting that The Draft Rail Transport Act B.E. concept is the promotion of the utilization of rail transport business following the principles in Appendix E of COTIF, but this draft law has not yet stipulated the legal principles and measures relating to contracts and legal liability of service providers or providers of liability of infrastructure manager those are specifically based on the principles of Appendix E of COTIF. Because its necessary to further develop the legal regimes regarding contracting and the liability of infrastructure managers and rail service operators.

The study found that this Draft Law only specifies the criteria that operators must be complied by law and regulation in case they would like to operate a rail transport business, it must be permitted and obtained a license to operate a rail transport business by the Minister under Section 38 of the Draft Rail Transport Act B.E. and specify types of licenses for rail transport operators under Section 39 of the Draft Rail Transport Act B.E. that there are 4 types as follows: type 1, specific rail transport operation license, type 2, specific railway transport license, type 3 license for rail transport operation and railway transport license, and type 4 license for other related railway businesses as announced by the rail committee. The classification of such license complies with the promotion of contracts for the utilization of rail and infrastructure as specified in Appendix E of COTIF.

However, technical service standards such as technical measures to ensure the safety of passenger transport and rail freight operations, speed rating requirements, loading rate, the train headways laid down, the differences in track gauges, tracks, bridges, tunnels, communications equipment, electric power distribution systems, railway stations, and platforms terminal and surrounding area that outlined in paragraph 2 of Annex 4 of the Draft OSJD Convention, (Calme, 2016)

The study found that It is necessary to regulate the rules for controlling and supervising with legal measures and the liability for rail utilization of infrastructure manager and carrier in the Ministerial Regulation, however, they have not yet appeared such legal measures and principles in Draft Law, which is consistent with international agreements of OTIF and OSJD, The question is how and why it will be defined?

Although, the Draft Rail Transport Act BE under Section 51, will legislate for the rail transport business and operator that are specified by international agreements on many matters, whether the duty of the licensee must operate the business following the types and conditions specified in the license, the determining that the operation of the rail transport business shall be following the rail transport standards, assignment of duty to provide services to service users with equality, the right to collect fees, fares, transportation costs, and costs for utilization of the rail and infrastructure systems in Annex 4 of the Draft OSJD Convention.

However, the draft law has no specific legislation on the role, duties, and responsibilities of the rail transport operator, service providers, infrastructure managers, and employees of the operator, especially remedy measures for damages arising from the operations of rail transport following international principles and standards, which defined in Annex 7 of the Draft OSJD Convention.

Conclusion

International agreements of OTIF include the principles outlined in Appendix D-Uniform Rule concerning contracts of use of vehicles and Appendix E-Uniform Rule concerning contracts of use of Infrastructure. These principles aim to protect the civil rights of the consumers from damages occurred from the use of rail transport vehicles and infrastructure. It can be said that these principles specified by the Uniform Rules of OTIF are more focused on the protection of consumer rights than the rail transport operators' rights in both Appendix D and Appendix E.

Meanwhile, international agreements of OSJD outlined in the General Provisions on Railway Infrastructure of Annex 4 on rolling stock and Annex 5, as well as the use of freight wagons of Annex 6 and Annex 7, which aim to harmonization on the international technical service standards among member states and must implement to domestic law on contracting the use of vehicles in international traffic in compliance with the international agreements on utilization rail infrastructure concerning safety and service standards. The study found that these international principles focus on the harmonization of legal measures and principles for solving problems in a “practical service” rather than defining the “right to access” the rail infrastructure of the operators on how to proceed or how to enter the rail transport business commercially.

The OSJD's International Agreement does not focus on recognizing the "right of the private entity" in commercial rail transport, Annex 4, 5, 6, 7 and "rights of access" to the rail transport industry, and "contracts for the use of vehicles in international traffic". Thus, these rights must be considered domestic legal basis based on authorizing or approving businesses rather than on the principles of international agreements.

Nevertheless, no matter what the principles of international law prescribe, Member States, given the benefits expected from their accession to such international agreements, It is necessary to implement principles of international law to domestic law that can be used as tools for promoting, controlling, and regulating rail transport operations of entrepreneurs who are interested in the rail transport industry and the related service industry involved either the management of commercial interests of stations and infrastructure in the rail transport sectors in member states concerned.

Although Thailand has set policies and strategies for the development of international rail transport as well as the establishment and determination of the role of the Department of Rail Transport of Thailand as a regulatory organization for the operation and service of the rail infrastructure and transport system. However, such strategies and policies are still unable to produce concrete results for success because there is still a lack of measures and legal mechanisms to promote, control, and supervise the internal and international rail transport business and operator to support the development of an efficient foreign trade, economic and investment system in line with the international rail transportation standards.

According to the development concept of *sui generis* law to promote the controlling and supervising measures the rail transport business and the operator will challenge how the success of the government's goal concerning strategy and social and economic development policy, and decent work in compliance with the principles of sustainable development goal that will lead the nation to success and to create economic growth and job security. Especially investment and business operations both rail infrastructure system and transport operation, that is resulting from the rail transport business and investment to support the economic development of Thailand in compliance with the legal principles and technical standards of OTIF and OSJD's international agreements, and Thailand should be a member state of the international agreement of OTIF or OSJD organization to ensure that the right of investors, business operators, and consumers must be protected by *sui generis* railway law.

Recommendation

This paper proposes policy recommendations and the solution to problems and obstacles to the utilization and rail transport operations in Thailand in compliance with the technical service standards and international railway law as follows:

First, Thailand must accelerate the Draft Rail Transport Act B.E. to enter into force urgently.

Especially, it must be defined as a core strategy of the Ministry of Transport that is important to support economic development, international trade, and investment.

Second, Thailand should regulate sui generis law as Ministerial Regulation regarding the determination of technical service standards that are consistent with concluding contracts with government and private sectors for the utilization of railway infrastructure including the right, obligations, and responsibilities of operators, employees of the operator, and Infrastructure managers from the damages occurred by passenger and freight carriage contracts following the principles of international agreements of both OTIF and OSJD.

Third, Thailand should regulate sui generis law as Ministerial Regulation regarding that corresponds to the use of vehicles for rail transport, whether it is a passenger coach, or container, setting technical service standards that are consistent with safety, coaches, and container identification sign, including stipulating the rights, duties, responsibilities and exemptional clauses of liability of the infrastructure manager and operators in providing passenger and freight transport services by rail, determination of recourse and subrogation rights, determining of the judicial jurisdiction, and lastly, also determining of the limitations for the exercise of claims, which are consistent with the principles of international agreements of both OTIF and OSJD.

Lastly, Thailand should be a member state of the international agreement of OTIF or OSJD organization to ensure that the right of investors, business operators, and consumers in the usage of vehicles in international rail traffic.

References

- BGBL. III, (2006). *Protocol of 3 June 1999 for the Modification of the Convention concerning International Carriage by Rail (COTIF) of 9 May 1980 (Protocol 1999)*. https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2006_III_122/COO_2026_100_2_279649.pdf
- Calme, S. (2016). *Relationship Between the EUROPEAN UNION Railway Transport Law and the Railway Protocol*. https://www.law.ox.ac.uk/sites/files/oxlaw/sandie_calme_-relationship_between_eu_railway_transport_law_and_the_rail_protocol_0.pdf
- Economic and Social Commission for Asia and the Pacific [ESCAP]. United Nations. (n.d.). *Monograph Series on Transport Facilitation of International Railway Transport in Asia and the Pacific*. (First Edition). https://www.unescap.org/sites/default/files/pub_2681_ch4.pdf
- EU Monitor. (2016). *Directive 2016/2370-Amendment of Directive 2012/34/EU as regards the opening of the market for domestic passenger transport services by rail and the governance of the railway infrastructure*. <https://www.eumonitor.eu/9353000/1/j9vwik7m1c3gyxp/vkaaf311rkW4>
- EXIM. (2013). *Take a train tour of ASEAN*, EXIM Thailand E-News. Vol. 8, No. 9 (September, 2.13). https://www.exim.go.th/eximinter/e-news/11332/enews_september2013_tips.html
- Faculty of Science, Mahidol University. (2019). *Sustainable Development Goals*. <https://science.mahidol.ac.th/sdgs/sdgs-17/>
- International Rail Transport Committee CIT. (2015). *Uniform Rules concerning Contracts of Use of Vehicles in International Rail Traffic (CUV)-Appendix D to COTIF*. https://www.cit-rail.org/secure-media/files/documentation_en/cuv/1_nachtrag_cuv-1999-f-d-e.pdf?cid=224516
- Interreg Central Europe. (2019). *Assessment of Railway Transport System in the TRITIA Area*. <https://www.interreg-central.eu/Content.Node/D.T3.1.4-Assessment-of-rail-transport-system.pdf>
- Kozmava, Z. (n.d.). *Organisation for Co-Operation Between Railways (OSJD)*. https://www.carecprogram.org/uploads/2015-RWG-Meeting-P13_OSJD_EN.pdf

- Office of the National Economic and Social Development Council. (2019). *Thailand and Sustainable Development*. <https://sdgs.nesdc.go.th/>
- Organization for Co-Operation between Railway (OSJD). (2018). *Report on the Activities of the Organization for Co-Operation between Railways for 2017*. <https://osjd.org/api/media/resources/c/51/121/1539>
- OTIF. (2011). *Central Office Report on the Revision of the Convention concerning International Carriage by Rail (COTIF) of 9 May 1980 and Explanatory Reports on the texts adopted by the Fifth General Assembly*. http://www.otif.org/fileadmin/user_upload/otif_verlinkte_files/07_veroeff/03_erlaeut/COTIF_Rapport_explicatif_01_01_2011_e.pdf
- OTIF. (2017). *COTIF in the framework of ESCAP*. <https://www.unescap.org/sites/default/files/Presentation%20by%20OTIF.pdf>
- OTIF. (2018). *Railway Contract Law*. https://otif.org/en/?page_id=180
- OTIF. (2019). *Uniform Rules concerning Contracts of Use of Vehicles in International Rail Traffic (CUV)*. http://www.otif.org/fileadmin/user_upload/otif_verlinkte_files/07_veroeff/03_erlaeut/rpex99-ru-cuv-e.pdf
- The Association of European Rail Infrastructure Managers (EIM). (2014). *Position Paper: Revision of COTIF-UR CUI (Appendix E) Main aspects*. <https://eimrail.org/wp-content/uploads/2019/07/Position-Paper-OTIF-Revision-on-UR-CUI.pdf>
- United Kingdom. (2003). *Explanatory Notes Railways and Transport Safety Act 2003*, <https://www.legislation.gov.uk/ukpga/2003/20/notes/division/4/8/data.xht?view=snippet&wrap=true>
- Working Party on Rail Transport, Group of Experts on Unified Railway Law. (2010). *Use of Wagons in International Rail Transport under CIM/SMGS: Current Status and Outlook*. Prepared by the International Union of Railways (UIC). Document EG URL No. 4. United Nations Economic Commission for Europe and Executive Committee. https://unece.org/DAM/trans/doc/2010/sc2/ld4_080710e.pdf