STUDY ON BORDER CROSSING PRACTICES IN INTERNATIONAL RAILWAY TRANSPORT

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INTRODUCTION

Transport is the key driver of economic development; however, it contributes about a quarter to the global carbon dioxide emissions. Road transport alone contributes to roughly three quarters of the transport related emissions. The current trends in transport, therefore, are clearly unsustainable and there is an urgent need for proactive policy initiatives to encourage environmental friendly and energy efficient modes of transport.

Moreover, the overland transport is expected to increase rapidly in the coming years. OECD estimates indicate that the total freight transport is expected to triple by 2050 as compared with 2015. In the ESCAP region, land transport freight is expected to increase by a factor of 3.2, accounting for over two thirds of all surface freight globally. The road transport freight is projected to increase 3.4 times, which is twice higher rate than the 1.7 times projected for railway freight transport.¹

The adoption of 2030 Agenda for Sustainable Development has provided renewed emphasis on sustainable transport solutions to achieve the Sustainable Development Goals. Sustainable transport involves enabling integrated intermodal transport systems that use different modes of transport according to their strength. Such systems encourage mode complementary instead of mode competition. The outcome document of the United Nations Conference on Sustainable Development ‘the future we want’ reiterated the central role of transport in sustainable development and further emphasized development of energy efficient sustainable transport solutions.

Railway transport provides efficient way of movement of goods that can successfully support international trade while offering an environmentally friendly transport. The need for such a transport has never been greater. In general, transport costs for rail transport are lower than the costs of road transport, particularly over long-distance transport of goods in large volumes.

The number of block container trains organized along China - Europe routes is rising rapidly, from 17 freight trains in 2011 to 1705 in 2016, and from 2 routes in 2011 to 39 in 2016². The success of the container train services organized in the last decade have confirmed that the goods can be transported between Asia and Europe by railways in almost the half of the time taken by maritime transport. The Asia - Europe railway container traffic has a potential to reach up to one million TEUs annually, which will be about 2 per cent of the estimated overall container traffic between Europe and Asia by 2020.³

Despite the efforts for improvement of physical transport connectivity, the railway networks remain underutilized due to both technical and institutional factors. The

² http://www.globaltimes.cn/content/1046043.shtml
³ OSJD, 2014, Best practices to improve efficiency of international carriage by rail in Eurasia
comparative advantages of the railway transport are still not fully harnessed and more initiatives need to be undertaken to strengthen international railway transport.

To support rising land transport, countries in the ESCAP region are implementing numerous national as well regional initiatives to ramp up the required transport infrastructure that would further strengthen transport linkages among the countries. Some of the important initiatives in this direction include: The Belt and Road Initiative, launched by China in 2013, aims to promote the connectivity and support development of connectivity networks. The Silk Road Economic Belt, a land component of the initiative, focuses on several regional road and railway corridors that will: connect China, Central Asia, Russia and Europe; link China with the Persian Gulf and the Mediterranean Sea through Central Asia and West Asia; and connect China with Southeast Asia, South Asia and the Indian Ocean. The projects under Belt and Road initiatives include transport infrastructure investments and cooperation in transport facilitation.

The Kazakhstan’s economic policy Nurly Zhol - the Path to the Future announced in 2014 is addressing development and modernization of transport and logistics infrastructure, as well as other areas such as industry, energy, housing and support of small and medium businesses.

Railway Transport Development strategy of Russian Federation for 2030, first elaborated in 2008 and revised in 2013, defines strategic goals such as integrated transport space in the Russian Federation and integration into the international transport system. Several implementation mechanisms in the field of coordination, financing, monitoring, public-private partnership and improvement of legal base of the transport industry are also included.

As a result of these initiatives huge funds are expected to flow to improve transport connectivity among the ESCAP countries and further improvement of international railway transport. There are many factors that directly impact the competitiveness of the railway freight traffic services. Efficient international railway transport depends on the physical connections as well as institutional arrangements among the national railway networks for international freight train operations.

The railway transport is constantly under threat of substitution with other modes of transport. There are many factors that directly impact the competitiveness of the railway freight traffic services in international transport. The railway transport heavily depends on the infrastructure of the railway network but non-physical barriers also hamper efficient movement of goods by railways. The ESCAP member countries have recognized the importance of elimination of non-physical barriers with Resolution 71/7 on “Adoption of Regional Cooperation Framework for Facilitation of International Railway Transport” that identified key issues and proposed areas for cooperation among member countries to facilitate international railway transport.
The Intergovernmental Agreement on the Trans-Asian Railway Network that entered into force in 2009 has identified the railway lines of international importance in the region, including border crossing points and gauge interchange stations, where customs clearance other border crossing processes are carried out. This agreement signaled the readiness of governments to cooperate on railway projects of international importance and work together on the development of efficient rail transport corridors to serve growing intra-regional trade.

Physical and non-physical barriers at rail border crossings cause excessive and often inordinate delays, high costs and uncertainties in the entire transport process. According to a report by Asian Development Bank in 2014 for selected railway border crossings it takes in average 32.6 hours to cross a border by rail.\(^4\)

The Regional Cooperation Framework for Facilitation of International Railway Transport underscores the need for member countries to work together to develop efficient international railway transport by addressing identified fundamental issues and cooperation in identified areas of interest. Most of the fundamental issues and areas of cooperation identified in the framework closely relate to the border crossing.

Border crossings are major bottlenecks for seamless international railway transport. Inefficient border crossing processes and procedures are one of the main causes for significant delays and increased transport costs, and they diminish the comparative advantages of the railway transport.

At border crossing points several critical processes and procedures take place such as transfer of wagons and goods between neighboring railways, change of locomotive and crews, technical inspections and control of compliance with railway transport standards. Neighboring railways often operate under different legal regimes and different standards. At some border crossing points, it is necessary to address time-consuming break of gauge issue.

Several mandatory regulatory and security controls have to be completed at the rail border crossing stations from both sides of the border by competent agencies such as: customs, border guards, immigration, quarantine and sanitary inspections. The lack of coordination among relevant stakeholders at border crossing points is a major impediment to smooth international railway transport that leads to duplication of inspections and cumbersome documentation.

Simplification, standardization and harmonization of the legal, technical and operational requirements relevant for processes and procedures at railway border crossings is very demanding and challenging endeavor that requires mandate given by the governments for actions and cooperation at both national and cross-border level.

\(^4\) ADB, Central Asia Regional Economic Cooperation (CAREC) Program; 2015; CAREC Corridor Performance and Monitoring and Measurement (CPMM): Annual Report 2014
Accordingly, this study is an attempt to support member countries in enhancing the efficiency of railway transport by ascertaining good practices for border crossings for international railway transport.

The expression “railway border crossing” used in this framework refers to railway stations where railway operations as well as customs, immigration, quarantine and other regulatory formalities, necessary for moving of goods, rolling stock and people from one country to another are finalized. The railway border crossing is a broad term that includes several distinctive and some related terms used in various countries and include railway border/frontier station, border interchange station, railway bogie exchange/transfer station, border crossing checkpoint, border crossing control point/station/office.

This study is developed under the project on “Harmonization of rules and regulations for facilitation of international railway transport” financed by the Government of the Russian Federation. The study provides a general overview of the existing border crossing practices in international railway transport based on online research/desk research of the available resources and study visits to several selected railway border crossings.

The study identifies the issues and the good practices in field of border crossing through railway transport. Possible solutions for addressing identified issues include: use of information and communication technologies for information sharing; enforcing controls and facilitating railway transport through use of advance information systems; risk management; and non-intrusive inspections.

Several layers of cooperation are also addressed such as: between neighboring railways, between railways and Customs, between forwarders/customs brokers and Customs, among national border crossing agencies and between neighboring Customs and other regulatory authorities.

The study intends to support efforts of the governments in the region for harmonization of border crossing processes, and thereby facilitating international rail freight transport. They could serve as a tool for broadening the understanding of options for improvement of efficiency at the railway border crossing points.

Given numerous initiatives to promote connectivity between Asia and Europe, it is expected that volumes of freight traffic will be increased in the future and efficient facilitation of processes at railway border crossing will be a priority for railways to make it reliable mode of transport.

The study would support planning and coordination of the activities for introduction of improved border crossing practices by railway transport at national or cross-border level.
The study is structured as follows:

**Chapter 1** provides a review of the current international/regional, subregional and bilateral instruments on railway transport pertaining to border crossing by railway. OSJD agreements and COTIF convention are addressing many railway related legal and technical issues. Some of the WCO conventions and instruments (e.g. Revised Kyoto Convention), even though do not have special focus on railway transport, nevertheless have an important role in providing a guidance on harmonized principles for facilitation applicable for customs formalities at railway border crossings. Several subregional and bilateral agreements, as well as relevant provisions with direct impact on the organization of the border crossing procedures and processes are highlighted in this Chapter. The Regional cooperation framework for facilitation of international railway transport in ESCAP region is also presented.

**Chapter 2** identifies major railway border crossings in the region and documents the existing processes and procedures. Most of analyzed border crossings are located on Trans-Asian Railway Network. Brief country level overviews are presented as well. This part also catalogs the major challenges in cross border and transit transport by railway.

**Chapter 3** gives an overview of recommended good practices supported with practical examples identified with the analysis of rail border crossings at the region and over the world. Such practices include use of advance information systems, risk management and use of non-intrusive inspections.

**Chapter 4** examines existing performance indicators relevant for border crossing by rail already available as result of regular or ad hoc performance measurement exercises. This chapter suggests introduction of harmonized monitoring mechanism that can support tracking the progress of the activities based on Regional Cooperation Framework for the Facilitation of International Railway Transport.

**Annex 1** lists the legal instruments (international, regional and sub-regional) on railway transport pertaining to border crossing by railway.

**Annex 2** lists the recommendations for simplification and harmonization of customs procedures relevant for operations at railway border crossings based on Revised Kyoto Convention.

**Annex 3** identifies railway border crossing points along Trans Asian Railway Network.

**Annex 4** presents a case study of non-ESCAP railway border crossing point.

**Annex 5** provides a non-exhaustive list of bilateral agreements relevant for cross border railway transport and customs cooperation.
Annex 6 consists of questionnaire developed for collection of information relevant for country overview and for selected railway border crossing stations regarding railway border crossing issues.

Annex 7 provides an overview of railway border crossing issues at selected railway border crossing stations reviewed in this Study.

Annex 8 provides an example of comprehensive railway border crossing performance-monitoring questionnaire.
1 LEGAL FRAMEWORK ON BORDER CROSSING BY RAILWAY

To facilitate international railway transport several legal instruments exist at various levels (e.g. international, regional, sub-regional, multilateral, bilateral or national), and in different forms (e.g. conventions, agreements, protocols, codex, laws, and sub-laws). A comprehensive overview of such institutional arrangements is presented in ESCAP Monograph Series on Facilitation of International Rail Transport in Asia and the Pacific published in 2013.5

The Annex 1 of this Study provides a list of the legal instruments pertaining to border crossing in railway transport, including information on: status and entry into force; number of contracting parties and identification of the individual parties from the ESCAP region.

Some of the legal instruments include provisions relevant for railway border crossings in so far that they regulate completion of border crossing formalities, carried out by the parties concerned, while the goods and the rolling stock move across the borders. This chapter highlights such instruments and provisions for facilitated movement of freight trains across the borders.

A International Conventions and Agreements

1. Railway transport conventions and agreements

The agreements developed by Organization for Cooperation between Railway (OSJD) and the Convention concerning International Carriage by Rail (COTIF) are the two international legal regimes on international railway transport of goods. Presently there are 14 contracting parties to the SMGS Agreement and seven contracting parties to COTIF from the ESCAP region. Four countries of the ESCAP region are member of both organization, however many countries from the region do not participate in either of them.

The OSJD Agreements (e.g. SMGS) and COTIF Convention (e.g. CIM) have established two distinct rail freight traffic regimes. They have many similar and compatible rules; (e.g. rules on transport of dangerous goods); however, they are diverse in some areas. For example, some issues are regulated in one regime but not in other (e.g. sealing) or there are differences in regulation (e.g. status of the contract for carriage of goods).6

Both regimes are comprehensive and provide legal frameworks that cover various aspects of railway transport, including contract of carriage and consignment note and


6 Dr. Mansur Pour Rafsendjani and Christian-Thomas Stempfle, 2007, Study of Compliance Regarding EU-Railway Law and OSJD-Railway Law
use of wagons, which are relevant for border crossing processes.

1.1. OSJD Agreements

Contract for carriage of goods and consignment note

Out of nine agreements concluded within the framework of OSJD most relevant for freight transport and border crossing by railway is the Agreement on the International Goods Transport by Rail (SMGS). The agreement introduces a formal contract for carriage of goods with obligation to set and publish transport tariffs.⁷,⁸

It provides a single contract for carriage of goods and a single consignment note for rail freight traffic among contracting parties at the respective territories where OSJD/SMGS rules apply. At the border stations between the SMGS countries it is not required to conclude new contract or issue new consignment note.

The single contract/consignment note identifies the contractual carrier with whom the consignor has concluded the contract of carriage as well as successive carrier(s) that shall take over the goods at specified border stations. With acceptance of the goods and the consignment note at the border crossing, successive carriers(s) will become a party of the contract and liable to continue with carriage of goods under the same contract/consignment note.⁹

The OSJD/SMGS agreement stipulates the content and details for processing of consignment note, including the actual form of the consignment note.¹⁰ The OSJD/SMGS rules require using the eight-digit harmonized nomenclature of goods (GNG). The OSJD GNG is based on classification under the WCO Harmonized System (HS), Combined Nomenclature of the EC customs union (CN), which corresponds to the Harmonized Commodity Code (NHM) of the International Union of Railways (UIC).

The OSJD/SMGS rules provide legal bases for introduction of electronic exchange of consignment notes data. The OSJD/SMGS Agreement defines that consignment note may be produced in electronic form, based on agreement between the railway and the consignor.¹¹

In addition to the consignment note other railway documents relevant for border crossing processes are wagon list and if applicable container list. The OSJD/SMGS Agreement details the rules for use of wagon lists and container lists including their

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⁷ SMGS Agreement Art.7-8 and 14 to 16
⁸ Transport tariffs are regulated with OSJD Agreement on the International Railway Transit Tariff (MTT) and Agreement on the Uniform Transit Tariff (ETT)
⁹ SMGS Agreement Art.14 paragraph 5
¹⁰ SMGS Agreement, Appendix 1 – Rules of carriage of goods (Annex 1)
¹¹ In accordance with Article 15 paragraph 4 of the SMGS Agreement
actual forms.\textsuperscript{12}

The OSJD/SMGS Agreement includes the rules on transport of dangerous goods\textsuperscript{13} and details issues such as acceptance of dangerous goods for transport, classification, marking, packing and use of dangerous goods codes in the consignment note.\textsuperscript{14}

**Use of wagons**

The Agreement on rules for the use of wagons in international traffic (PGW) is another OSJD agreement relevant to border crossing. The OSJD rules are very detailed, the OSJD/PGW Agreement has a large number of annexes, it defines the forms that have to be used in various instances when dealing with wagons, and it provides technical graphics and other details.

The issues relevant for border crossing procedures are provisions for handing over of wagons and transfer of liability between railways at border stations as well as provisions for technical interoperability and acceptance of wagons and border crossings.

The OSJD/PGW agreement details the rules for handover of wagons depending on the need for reloading and break of gauge. For example, if the reloading is needed handover of wagons should be done in general at the station of the receiving railways. The form of the wagon list is prescribed as well as the rules for checking the numbers of the wagons, signing and stamping the list of wagons during the handover process.\textsuperscript{15} The rules relating to technical admission of vehicles to circulate in international traffic, technical requirements and standards are detailed under the Agreement as well.

**Use and access to the infrastructure**

The OSJD rules do not regulate the use and the right of access to the railway network for independent carriers, and this issue is subject of national legislation.

1.2. **COTIF**

**Contract for carriage of goods and consignment note**

With the COTIF Convention the uniform rules concerning the contract of international carriage of goods by rail (CIM) are laid down in its Appendix B. In accordance with COTIF/CIM the contract of international carriage of goods by rail is a consensual contract, with the consignment note being only a documentary proof. A great degree of contractual freedom is permitted in order to offer flexibility, enabling the parties to the

\textsuperscript{12} SMGS Agreement, Appendix 1 – Rules of carriage of goods (Annex 2 and 3)

\textsuperscript{13} SMGS Agreement: Art. 9 and Appendix 2 - Rules of carriage of dangerous goods

\textsuperscript{14} SMGS Agreement: Art. 20, 21

\textsuperscript{15} PGW Agreement, Appendix B – Art.4
contract of carriage to contractually agree certain conditions (e.g. itinerary, transit periods, surcharges).  

The opportunity to have single contract for carriage of goods and to have single consignment note for rail freight traffic among contracting parties at the respective territories where COTIF/CIM rules are applicable is provided as well. At the border stations between the COTIF/CIM countries it is not required to conclude new contract and to issue new consignment note.

The single contract/consignment note identifies the contractual carrier with whom the consignor has concluded the contract of carriage, as well as successive carrier(s), if applicable, that shall take over the goods at specified border stations. With acceptance of the goods and the consignment note at the border crossing, successive carrier(s) will become a party of the contract and liable to continue with carriage of goods under the same contract/consignment note. The carrier may also entrust the performance of the carriage, in whole or in part, to a substitute carrier, nevertheless the carrier will remain liable in respect of the entire carriage.

The COTIF/CIM rules define mandatory particulars of the consignment note content, but leave the design of the consignment note within the competence of international associations of carriers, in practice the International Rail Transport Committee (CIT). The COTIF/CIM rules refer to description of the nature of the goods, however do not regulate the use of classification and nomenclature of goods description.

The COTIF/CIM provisions on electronic CIM consignment note are based on equal treatment between electronic version and the paper-based document from functional point of view, which provides legal bases for introduction of electronic exchange of consignment notes data.

The COTIF/CIM rules applies for multimodal transport when international carriage being the subject of a single contract includes:

- carriage by road or inland waterway in internal traffic of a Member State as a supplement to transfrontier carriage by rail;
- carriage by sea or transfrontier carriage by inland waterway as a supplement to carriage by rail (when the maritime/inland waterway services are included in the CIM list of services).

**The carriage of dangerous goods**

16 COTIF, Appendix B – CIM Art. 6 and 7  
17 COTIF, Appendix B – CIM Art. 26  
18 COTIF, Appendix B – CIM Art. 7  
19 In accordance with Article 6 paragraph 9 of Appendix B of COTIF Convention.
The Regulation concerning the International Carriage of Dangerous Goods by Rail (RID) forms Appendix C to COTIF, and has an annex, which details particulars to be entered on the transport document (e.g. consignment note) for dangerous goods. The RID specifies classification of dangerous goods, use of packaging, use of tanks, consignment procedures including marking and labeling, use of means of transport. The RID also prescribes a multimodal dangerous goods form.

**Contract of use of wagons**

The COTIF convention addresses the issue of the contract of use of wagons/coaches as means of transport for carriage with Appendix D to the Convention, Uniform Rules concerning Contracts of Use of Vehicles in International Rail Traffic (CUV).

The COTIF/CUV rules lay down basic liability rules and requirements concerning signs and inscriptions on the vehicles. Based on these rules parties to the contract of use, keepers of vehicles and railway undertakings, agree on detailed rules, including operational aspects. Based on COTIF/CUV three associations International Union of Railways (UIC), International Union of Wagon Keepers (UIP) and European Rail Freight Association (ERFA) developed a multilateral contract - the General Contract of Use for Wagons (GCU). GCU Bureau is responsible for administration of GCU.

**Admission of vehicles for traffic**

Appendix G to the Convention, The Uniform Rules concerning the Technical Admission of Railway Material used in International Traffic (ATMF), set out the principles, objectives and procedures of technical admission of railway vehicles. The uniform technical specifications concerning the construction and operation of vehicles and of infrastructure, contained in the Annexes of the Appendix F to the Convention, Uniform Rules concerning the Validation of Technical Standards and the Adoption of Uniform Technical Prescriptions applicable to Railway Material intended to be used in International Traffic (APTU), constitute the basis of technical admission.

**Contract of use of infrastructure**

The COTIF rules address the issue on use of infrastructure in international rail traffic in Appendix E to the Convention. The provisions from this Appendix provide very general rules, in particular liability regime. The access conditions to the infrastructure are not regulated by the COTIF.

1.3. **Initiatives on unification of railway transport regimes**

The legal regimes established by OSJD Agreements and by COTIF facilitate the

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20 COTIF, Appendix E - Uniform Rules concerning the Contract of Use of Infrastructure in International Rail Traffic (CUI)
railway transportation of goods, however, the railway border crossings, where the goods transferred from one railway transport regime to another, represent potential bottlenecks for seamless railway transport.

In order to enable interoperability between OSJD/SMGS and COTIF/CIM regimes, a common CIM/SMGS consignment note has been developed in cooperation between CIT and OSJD.\(^{21}\) The CIM/SMGS consignment note integrates the consignment notes for both systems; it is based on UN Layout Key and represents an aggregate of requirements laid down for CIM and SMGS consignment notes.

With the CIM/SMGS consignment note, the goods can be transported across the territories of jurisdictions of both systems, subject to the two separate contracts of carriage (CIM and SMGS) using single consignment note. The existence of both contracts of carriage is simultaneously confirmed by the common consignment note CIM/SMGS. Despite the present absence of a harmonized international legal framework for Eurasian rail transport, the CIM/SMGS consignment note represents a practical legal “bridge” between the two legal frameworks.

At the border crossings between territories where the change from one to other legal framework is applied (SMGS to CIM or vice versa), re-consignment is no longer necessary and re-writing of data from one type of consignment note to other is no longer required. The use of CIM/SMGS consignment offers possibility to streamline railway processes at border crossings, which use to be compulsory re-consignment points.

The provisions for electronic consignment note are applicable for common CIM/SMGS consignment note as well. Ongoing work on the electronic CIM/SMGS consignment note, and development of legal, functional and technical specifications is expected to support the use of paperless transport documents in the future.\(^{22}\)

A common CIM/SMGS wagon list and CIM/SMGS container list have been also created in cooperation between CIT and OSJD to provide further simplification of international freight traffic.\(^{23}\)

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\(^{21}\) The common CIM/SMGS consignment note was introduced by International Rail Transport Committee (CIT) CIM/SMGS Consignment Note Manual (GLV CIM/SMGS), applicable with effect from 1 September 2006; available at: http://www.cit-rail.org/en/freight-traffic/manuals/?id=639 and SMGS Agreement, Art. 13 and Appendix 6 – Guidance on CIM/SMGS consignment note

\(^{22}\) Technical Specifications for the Electronic CIM/SMGS Consignment Note published as Recommendations to undertakings intending to use an electronic version of the CIM/SMGS consignment note; applicable with effect from 8 July 2009; available at: http://www.cit-rail.org/en/freight-traffic/manuals/?id=639

\(^{23}\) Appendices 7.1 to 7.4 of CIM/SMGS Consignment Note Manual (GLV CIM/SMGS); available at: http://www.cit-rail.org/en/freight-traffic/manuals/?id=639
2. **Customs related Conventions**

2.1. **Revised Kyoto Convention**

The WCO Revised Kyoto Convention\(^{24}\) is one of the most important instruments for harmonization and simplification of customs procedures. Even though the Convention does not have provisions exclusively for railway transport, it is relevant for customs formalities at railway border crossings. The Revised Kyoto Convention includes standards, transitional standards and recommended practices, which are not directly applicable, but provide guidance on principles that the countries must use while adjusting their national customs legislation.

Direct references to railway matters are provided only at few definitions regarding “transport units”\(^ {25}\) and “means of transport for commercial use”\(^ {26}\), however standards and recommendations from the General Annex and Specific Annexes are applicable for customs procedures regarding all means of transport including for railway transport. Some of the topics covered such as: arrival of goods in a customs territory, customs transit, transshipment and temporary admission have importance for border crossing procedures and formalities.

The Annex 2 of this Study lists the recommendations for simplification and harmonization of customs procedures relevant for operations at railway border crossings based on the Revised Kyoto Convention.

The relevant standards and recommendations address wide range of issues, including:

- formalities at common border crossings, such as: correlation of business hours/competence; joint customs controls; juxtaposed customs office;
- coordinated and simultaneous controls of customs and other competent authorities;
- lodging of the goods declaration / supporting documents by electronic means using recommended international standards;
- limited requirements (only to those deemed necessary) for data of the goods declaration / supporting documents;
- restrained requirements for translation of particulars in supporting documents;
- pre-arrival lodgment/checking of goods declaration;
- use of commercial/transport documents as descriptive part of customs declaration or as customs declaration for transit;
- providing simplified procedures for authorized operators;

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\(^{24}\) World Customs Organization (WCO), The International Convention on the Simplification and Harmonization of Customs procedures (Kyoto Convention) (1973) (as amended on 26 June 1999)

\(^{25}\) Revised Kyoto Convention, Specific Annex E Chapter 1 Customs transit - Definitions (E8./ F8)

\(^{26}\) Revised Kyoto Convention, Specific Annex J Chapter 3 Means of transport for commercial use - Definitions (E3./ F3)
simplified temporary admission formalities for means of transport.

2.2. Customs Convention on Containers

The Customs Convention on Container (1972) does not address directly railway transport however it is applicable for containerized transport by railway. The Convention addresses the issues for: standardized marking of containers; temporary admission of containers; and approval of containers for transport under Customs seal. The Annex 4 of the Convention details the regulations on technical conditions applicable to containers, which may be accepted for international transport under Customs seal.

2.3. Other Customs related Conventions

The Convention on International Customs Transit Procedures for Carriage of Goods by Rail under Cover of SMGS Consignment Notes was adopted in 2006 however the Convention has not entered into force yet. The objective of this Convention is to establish an international Customs transit procedure for the carriage of goods under cover of a SMGS Consignment Note.

The Convention addresses following issues:

- requirements for transport documents (e.g. to contain particulars necessary for control, to be presented to the competent authorities);
- use of Consignment Note, which bears a special mark (stamp) as Customs transit document;
- responsibilities of the railway companies, as well as guarantee waiver option;
- formalities at customs offices of departure, transit and destination.

The WCO Convention on Temporary Admission (Istanbul Convention) contributes to simplification and harmonization of the Customs temporary admission procedure that includes procedure for means of transport and railway rolling stock; together with their normal spare parts, accessories and equipment carried on board means of transport (including special equipment for the loading, unloading, handling and protection of cargo). The Convention provides possibility for temporary admission with total conditional relief from import duties and taxes and without application of import restrictions or prohibitions of economic character. Temporary admission could be granted without a customs declaration or security being required.

3. Conventions on Facilitation and Harmonization on Frontier Controls

The International Convention to Facilitate the Crossing of Frontiers for Goods Carried by Rail (1952) is specifically focused on rail transport. The Convention advocates facilitation of crossing the frontiers for goods carried by railway by:
considering possibilities for establishment and operation of frontier stations where examinations are carried out by the two adjoining countries;

- endeavors to reduce the time for the Customs and other examinations, particularly in the case of fast freight; transport in international transit; perishable goods, livestock and other goods for which rapid transport is essential, goods dispatched by fast international trains, and heavy goods dispatched in train-loads;

- agreements to establish special measures for speeding up examination of goods in international transit, including mutual recognition of customs seals and introducing standard international Customs declaration form.

The International Convention on the Harmonization of Frontier Controls of Goods (1982) aims to facilitate international movement of goods through reduction of requirements, as well as the number and duration of border crossing controls by national and international co-ordination.

The Annex 9 of the Convention targets the facilitation of border crossing procedures for international rail freight and introduces the guidelines and recommendations on:

- facilitation of the procedures for border crossing by officials and other persons engaged in international railway transport;
- minimum requirements for border (interchange) stations;
- coordination of actions and cooperation between adjacent countries at border (interchange) stations;
- establishing a mechanism for reciprocal recognition of control;
- introduction of general rule not to physically examine the goods in properly closed and sealed rolling stock units/containers with option of selective controls based on risk evaluation and management;
- use of simplified controls at border (interchange) stations; and moving the controls to the stations of departure and destination;
- endeavor to reach a maximum reduction of the time limits for technical operations involving the reception and transfer of trains at border (interchange) stations and all types of controls;
- use of the CIM/SMGS railway consignment note as customs document.

**B Regional Agreements and Initiatives**

1. **Trans-Asian Railway Network**

The Intergovernmental Agreement on the Trans-Asian Railway Network represents a coordinated plan for development of railway lines of international importance in the region that includes:
▪ existing lines currently in use, and
▪ railway lines under construction, or planned, that are intended to be used for regular international transport in the future.

The Agreement identifies the railway lines of the international importance and sets guiding principles related to technical characteristics of the Trans-Asian Railway network such as providing adequate capacity for efficient international movements and technical interoperability of the railway lines of neighboring countries.

The border crossing points at existing railway lines along the Trans-Asian Railway Network are listed in Annex 3 of this Study.

2. Regional Cooperation Framework for Facilitation of International Railway Transport (ESCAP)

The Regional Cooperation Framework for facilitation of international railway transport (2015) adopted with ESCAP resolution 71/7 provides a guidance to the member countries and their development partners in facilitation and harmonization endeavors for international railway transport across the region.

The Regional Cooperation Framework identifies four fundamental issues in the facilitation of international railway transport and eleven areas for cooperation among member countries to support facilitation of international railway transport. All identified fundamental issues and areas for cooperation in the facilitation of international railway transport are highly relevant for freight border crossing by railways.

With the Regional Cooperation Framework, each of the fundamental issues are briefly described; targets for facilitation are established; and processes needed to reach the targets are identified. The areas for cooperation are elaborated as well, including general description of existent conditions, options for operationalization of cooperation, desired outcomes and expected effects of cooperation efforts with regard to facilitation of international railway transport.

<table>
<thead>
<tr>
<th>Fundamental Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards for railway infrastructure, facilities and equipment</td>
</tr>
<tr>
<td>Break-of-gauge</td>
</tr>
<tr>
<td>Different legal regimes for railway transport contracts</td>
</tr>
</tbody>
</table>
Areas for Cooperation

- Coordination of regulatory controls / inspections at border-interchange stations
- Participation in international railway organizations
- Formulation of subregional and bilateral agreements
- Collaboration to standardize cross-border railway operations
- Use advance passenger/cargo information system(s)
- Arrangement for exchange of wagons
- Use of new technologies in train operations as well as in container tracking
- Develop human resources for cross border railway operations
- Establishment of dry ports and maintenance hubs at/near the border stations
- Simplification of intermodal interface of railways with other transport modes
- Promotion of corridor approach
- Work towards paperless railway freight transport

Implementation of the Regional Cooperation Framework is expected to support growth of regional and subregional connectivity and at same time to streamline transport processes at the border crossings, reduce inordinate delays and transport costs.

C Subregional Agreements

1. Eurasian Economic Union

With the progress of Eurasian integration processes and introduction of the Eurasian Economic Union 27 many legal instruments related to railway transport have been developed. The Customs Union and Common Economic Space have been established between Belarus, Kazakhstan and Russian Federation and the process of transferring border controls on the external borders started in 2011.

Presently the Treaty on the Eurasian Economic Union (2014) is the main legal instrument that among all other issues is addressing the Customs Union 28 and transport. 29 The Treaty also includes Annex 24 - Protocol on Coordinated (Agreed) Transport Policy, concerning all modes of transport including railway transport; and Annex 2 to the Protocol with regard to Procedure for Regulating Access to Rail

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28 Part Two Customs Union and particularly Section VI Functioning of the Customs Union

29 Part Three Common Economic Space and particularly Section XXI Transport
Transport Services, including two related annexes.\textsuperscript{30}

The provisions regarding principles of functioning of the Customs Union mandate application of common customs regulation, and in general free movement of goods between the territories of the Member States, without the use of customs declarations and state control (transport, sanitary, veterinary-sanitary, phytosanitary quarantine).\textsuperscript{31}

The Agreement on Customs Code of Customs Union (2009) has introduced common comprehensive legal framework in the Customs Union. The Customs Code includes many aspects relevant for railway freight border crossings, such as:

- presentation of preliminary information by the carrier (railway) in electronic form regarding: the goods intended for transportation across the customs border; means for the international transportation, which carry these goods (train, wagons, container); the time and place of arrival of goods in the customs territory of the Customs Union or departure from it;
- principles of performing the customs control based on selectivity and risk management and presentation of documents and information necessary for the performance of customs control in writing and (or) in electronic form;
- transportation of goods through the customs border and notification of arrival of goods in the customs territory of the Customs Union, including documents and to be presented to the Customs authorities for international transportation by railway such as: shipping (carriage) documents; transfer slip for the railway rolling stock; commercial documents available to the carrier identifying the transported goods. The carrier has a right to submit the documents in the electronic form and obligation to provide translation of the particulars presented in documents made out in other languages;
- Customs declaration including transit declaration and presentation of documents during customs declaring of goods;
- Types of customs procedures including provisions on customs transit. The measures ensuring the compliance with the customs transit procedure does not include requirement for guarantee of payment of customs duties and taxes in a case when the goods are transported by railway.

A new Agreement on Customs Codex of the Eurasian Economic Union was signed in April 2017, which is presently going through the internal procedures for ratification in each of the Member States.

The Agreement on special conditions of customs transit of goods carried by railway within the customs territory of the Customs Union (2010), facilitates customs transit

\textsuperscript{30} Annex 1: Rules for Access to Rail Transport Infrastructure within the Eurasian Economic Union and Annex 2 Rules for the Provision of Rail Infrastructure Services within the Eurasian Economic Union.

\textsuperscript{31} Article 25 of the Treaty on the Eurasian Economic Union (2014)
providing the use of SMGS or CIM/SMGS railway consignment note, as well as commercial and customs documents as a transit declaration. Electronic copy of the transit declaration should be submitted to the customs authorities.

With the Decision on Introduction of mandatory pre-arrival information on goods imported in single customs territory of the Customs Union by railway transport (2013) the carriers are obliged to submit necessary information no later than 2 hours before moving through the customs border.

At the Eurasian Economic Union level, there are large number of other agreements, decisions and recommendations with border crossing relevance that regulate various aspects of railway transport of goods, customs and other regulatory clearances such as: administrative assistance between customs authorities; exchange of advance information on goods and transport means; use of electronic copies of customs documents; customs transit and transit declaration; equipment on checking posts, etc. 32

2. Commonwealth of Independent States (CIS) 33

Several CIS arrangements regulate railway border crossing issues in:

- railway transport coordination among authorities such as: implementation of particular provisions from SMGS Agreement among CIS countries and other neighboring countries; tariff agreement of railway administrations; rules of carriage of dangerous goods, goods in specialized containers, goods carriage in open-top rolling stock, carriage of perishable goods; 34 and
- customs cooperation, such as: single goods nomenclature, exchange of advance information on goods and transport means, unification of customs rules form movement of goods and transport means under transit procedure, confidentiality rules, etc. 35

3. TTFA

The Economic Cooperation Organization (ECO) Transit Transport Framework Agreement (TTFA) (1998) covers provisions for transit transport by road, rail, inland waterway, multimodal, and for access to ports. The Agreement aims to facilitate the movement of goods and provides necessary facilities for transit through the territories of the Contracting Parties. About railway transport, the ECO TTFA provisions include: general conditions for rail transport; prescribed transit routes (Annex I); and minimum

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32 Available at Law Portal of Eurasian Economic Union https://docs.eaeunion.org/en-us/
33 Presently the Commonwealth of Independent States (CIS) includes: Azerbaijan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine. More information on CIS is available at: http://www.cis.minsk.by
technical characteristics of railway transit routes (Annex III).

The ECO TTFA advocates providing adequate facilities and related installations needed at border crossing points and gauge interchange stations, as well as smooth and expeditious movement of traffic in transit that includes efforts to:

- establish border stations with control areas which are physically adjacent, and arranged in such a way that means of transport and goods can be examined at the same place, so that repeated unloading and reloading may be avoided;
- ascertain adequate manpower resources for speedy completion of formalities;
- coordinate working hours of adjacent frontier posts;
- provide reliable telecommunication services and
- adopt a uniform set of consignment notes/way bills.

The rules and procedures for international freight traffic should be formulated keeping in view the provisions of the Agreement on International Carriage of Goods (SMGS), COTIF/CIM, and within the framework of OSJD and OTIF. The rules for the use of wagons also require keeping in view the agreement of the OSJD regarding this.

The ECO TTFA promotes establishment of a customs transit system for the cargo and means of transport in accordance with the relevant international customs conventions for facilitating the movement of goods in their territories and implementing measures to simplify the customs control of means of transport and goods (Annex VII). An endeavor to limit the number of documents and reduce to the extent possible, procedures and formalities required for their traffic in transit is stressed as well.

The Annex VII to the Agreement on Customs Control also provides minimum requirements for customs seals and regulates the acceptance of customs seals affixed by Customs authorities of the other Contracting Parties, or of a third country that comply with those requirements.

4. TRACECA

The Basic Multilateral Agreement on International Transport for Development of the Europe-the Caucasus-Asia corridor (1998) was agreed under the initiatives of the program for Transport Corridor Europe Caucasus Asia (TRACECA). The Agreement regulates the international transport of goods and passengers under different modes of transport, including railway transport.

With the Basic Agreement, the right for transit of international means of transport and goods is granted among contracting parties. An Inter-Governmental Commission is established to regulate the issues regarding the implementation and the application of the Basic Agreement. Several technical annexes are integral part of the Basic Agreement.
The Technical Annex on International Railway Transport promotes multilateral recognition of documents and cooperation at the level of competent authorities of the contracting parties in facilitation of border crossing operations.

The Technical Annex on Customs and Documentation Procedures recommends introduction of harmonized format for the customs declaration for goods, in the UN aligned form and provides exemption from requirements for customs deposits, bank guarantees, financial risk insurance policies, railway guarantees for transit of goods by railway transport.

The Technical Annex on The International Customs Transit Procedures for the Carriage of Goods by Rail Using the SMGS Railway Bill recognizes the SMGS railway bill as a customs transit document; provides exemption for national railway companies from the obligation to furnish a guarantee; and introduces simplified procedures at Customs offices of transit, active on the territories of contracting parties.

5. ASEAN

The Protocol 6 on Railway Border and Interchange station (2011) is one of nine protocols of the ASEAN Framework Agreement on Facilitation of Goods in Transit (1988). The Protocol 6 is not in force yet. The Protocol includes provisions for several aspects of railway operations, such as:

- adequate facilities and personnel for transit procedures, rolling stock inspection and other procedures, to be provided at assigned border and interchange stations;
- harmonization and simplification of cross-border procedures where possible (e.g. coordinated working hours and a commitment to comply with weight restrictions on the route);
- operational arrangements, including the number and schedule of through freight trains, routes, locations for locomotive servicing (e.g. the trains running to or from interchange stations to be hauled by locomotives of the contracting party on whose lines the train is travelling, responsibility for making the locomotives available based on the agreed schedule).

D Bilateral agreements on railway transport

Many bilateral agreements in ESCAP region address different aspects relevant for bilateral and international railway transport, border crossing issues and customs cooperation.

Some of the bilateral agreements specifically regulate rail services and processes at border railway stations. Such example is the Rail Services Agreement between Ministry of Industry, Commerce and Supplies, Government of Nepal and Ministry of Railways, Government of India (2004). The Nepal-India Rail Services Agreement identifies the rail route and the border crossing where rail services are available. It also provides
details on: train schedules, maintenance of railway tracks and wagons, movement of
dangerous and offensive articles, running of trains and shunting activities, maintenance
of interchange records, preparation and exchange of Wagon Interchange Summary and
Container Interchange Summary lists etc. In addition, several annexes to the Agreement
provide detailed procedure to be followed for imports and exports including
examination and clearance.

Several bilateral agreements on transit in the ESCAP region regulate the freedom of
transit issues, and define mutually agreed routes and points of entry or exit. For
example, the Treaty of Transit between the Government of Nepal and the Government
of India (1978), the Protocol to The Treaty of Transit and the Memorandum to the
Protocol to the Treaty of Transit define traffic-in-transit and provide operational details
for implementing the procedure for traffic-in-transit.

The agreements define requirements for use of specific documents and necessary
control measures. For example, the Memorandum to the Protocol to the Treaty of
Transit between Nepal and India introduces a requirement for presentation of Nepalese
import license/letter of credit or official Nepalese certification on the Customs Transit
Declaration for transit through India and regulates the details on signatures and seals.

The bilateral agreements on customs cooperation usually are not specific to border
crossing by railway transport however they often include many relevant issues. For
example, the Agreement between India and Pakistan on Cooperation and Mutual
Assistance in Customs Matters (2012) includes:

- endeavor to facilitate trade and ensure expeditious clearance of cargo under the
  law through: proper and adequate infrastructural facilities at the entry and exit
  Customs stations; security risk assessment profiling; and use of information
  technology;
- application of electronic risk management systems;
- Joint customs Border Liaison committees established by the customs
  Administrations at each point of border crossing to ensure close coordination.

The Annex 5 of this Study provides a non-exhaustive list of bilateral agreements that
are relevant for cross border railway transport and customs cooperation.

Fragmentation of international railway transport based on different legal regimes and
numerous bilateral arrangements could pose challenge to the seamless international
railway transport because of different rules, documents and practices. The organization
of the railway operations at the railway border crossings where there is a change from
one legal regime to another is burdened with creation of new railway transport
documents.

**Figure 1: Fragmented legal regime for railway transport**
Customs requirements and the border crossing requirements of other government agencies imposed with national legislation differ from country to country. Lack of regional arrangement on customs railway transit procedure, multiple and diverse border crossing requirements cause inordinate delays at railway border crossings. Certain harmonization can be achieved by following the internationally recognized standards and recommendations such as those introduced with International Convention on the Harmonization of Frontier Controls of Goods (1982) and the WCO Revised Kyoto Convention.
Figure 2: Fragmented legal regime for railway transport
2 REVIEW OF RAILWAY BORDER CROSSING PROCEDURES AND PRACTICES

There are 59 pairs or 118 railway border crossings along the Trans Asian Railway network as identified in Annex 3 of this study. The railway border crossings in the ESCAP region while having numerous similarities in terms of border crossing operations and formalities also have significant differences between them.

The need to deal with a gauge difference is one of the main distinctive characteristics of the border crossing. The border crossings, which are main break-of-gauge points along Trans Asian Railway Network in the ESCAP region, are listed in the Table 2 below. The capacity to support efficient break of the gauge activities, such as reloading facilities and equipment, including bogie exchange facilities, is important characteristic of border crossings that have to deal with gauge difference.

Table 2: Break of gauge border crossings at TAR network

<table>
<thead>
<tr>
<th>Break of Gauge (mm)</th>
<th>Border Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,435 - 1,000</td>
<td>Hekou (China) - Lao Cai (Viet Nam)</td>
</tr>
<tr>
<td></td>
<td>Pingxiang (China) - Dong Dang (Viet Nam)</td>
</tr>
<tr>
<td>1,435 - 1,520</td>
<td>Alashankou (China) - Dostyk (Kazakhstan)</td>
</tr>
<tr>
<td></td>
<td>Erenhot (China) - Zamyn Uud (Mongolia)</td>
</tr>
<tr>
<td></td>
<td>Manzhouli (China) - Zabaykalsk (Russian Federation)</td>
</tr>
<tr>
<td></td>
<td>Suifenhe (China) - Grodekovo (Russian Federation)</td>
</tr>
<tr>
<td></td>
<td>Astara (Islamic Republic of Iran) - Astara (Azerbaijan)</td>
</tr>
<tr>
<td></td>
<td>Jolfa (Islamic Republic of Iran) - Djulfa (Azerbaijan)</td>
</tr>
<tr>
<td>1,435 - 1,676</td>
<td>Sarakhs (Islamic Republic of Iran) - Saraks (Turkmenistan)</td>
</tr>
<tr>
<td></td>
<td>Incheboroun (Islamic Republic of Iran) - Gudriolum Turkmenistan</td>
</tr>
<tr>
<td></td>
<td>Dogukapi (Turkey) – Akhuryan (Armenia)</td>
</tr>
<tr>
<td>1,435 - 1,676</td>
<td>Mirjeveh (Islamic Republic of Iran) - (Koh-i-Taftan) Pakistan</td>
</tr>
</tbody>
</table>

Other important characteristic of the border crossings is their location. If the border crossing is located at the intersection of rail and road corridors, consequently it could provide capacities for reconfiguring of a train and marshaling operations (rail yards, side lines, equipment and systems), as well as capacities for road-to-rail and rail-to-road reloading (intermodal terminal, reloading equipment etc.).

Maximum capacity to handle certain amount of traffic is characterized by number and type of railroads between border stations at the border crossing and capacity of receiving and dispatching yards. Capability for dealing with specific types of cargo e.g. containerized goods, bulk goods, and heavy loads depend on infrastructure and equipment available at the border crossings.
The number of border crossings along transport routes, related delays and uncertainties of dwell time experienced at the railway border crossings are very important factor for the attractiveness of the rail corridors.

Table 3: Main Corridors and border crossing along them

<table>
<thead>
<tr>
<th>Corridor</th>
<th>No of BC</th>
<th>Name of Border Crossing (BC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Trans-Siberian corridor (across Russian Federation)</td>
<td>None</td>
<td>Manzhouli (China) - Zabaykalsk (Russian Federation)</td>
</tr>
<tr>
<td>a. Connection with China</td>
<td>1</td>
<td>Erenhot (China) - Zamyn Uud (Mongolia)</td>
</tr>
<tr>
<td>b. Connection with China, Mongolia</td>
<td>2</td>
<td>Sukhbaatar (Mongolia) - Naushki (Russian Federation)</td>
</tr>
<tr>
<td>c. Connection with China, Kazakhstan</td>
<td>1 (+1)</td>
<td>Alashankou (China) - Dostyk (Kazakhstan) + one (or more) border crossings between Kazakhstan - Russian Federation (with limited border control under Eurasia CU rules)</td>
</tr>
<tr>
<td>2. Trans-Asia-Europe corridor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. China, Kazakhstan, Uzbekistan, Turkmenistan, Islamic Republic of Iran, Turkey</td>
<td>5</td>
<td>Alashankou (China) - Dostyk (Kazakhstan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sary-Agach (Kazakhstan) - Keles (Uzbekistan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khodzhadavlet (Uzbekistan) - Turkmenabad (Turkmenistan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sarakhs (Turkmenistan) - Sarakhs (Islamic Republic of Iran)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Razi (Islamic Republic of Iran) - Kapikoy (Turkey)</td>
</tr>
<tr>
<td>b. China, Kazakhstan, Uzbekistan, Turkmenistan / Azerbaijan, Georgia</td>
<td>4</td>
<td>Alashankou (China) - Dostyk (Kazakhstan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sary-Agach (Kazakhstan) - Keles (Uzbekistan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khodzhadavlet (Uzbekistan) - Turkmenabad (Turkmenistan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ Turkmenbashi (Port) (Turkmenistan) + Baku (Port) Azerbaijan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beyouk Kesik (Azerbaijan) - Gardabani (Georgia)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ Poti or Batumi (Port) (Georgia) + Europe Bleak Sea (Port)</td>
</tr>
<tr>
<td>3. Singapore – Kunming China Rail Link (SKRL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Singapore, Malaysia, Thailand</td>
<td>2</td>
<td>Woodlands (Singapore) – Johor Bahru (Malaysia)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Padang Besar (Malaysia) – Padang Besar (Thailand)</td>
</tr>
<tr>
<td>4. China – Viet Nam</td>
<td>1</td>
<td>Hekou (China) - Lao Cai (Viet Nam) or Pingxiang (China) - Dong Dang (Viet Nam)</td>
</tr>
<tr>
<td>5. India – Nepal</td>
<td>1</td>
<td>Raxaul (India) – Birgunj (Nepal)</td>
</tr>
</tbody>
</table>

Several options are possible for connecting Asia and Europe. The Tran-Siberian corridor from the Far-East seaports through the Russian Federation offers links with longer distances but without any land railway border crossings in the ESCAP region. The Trans-Siberian corridor connections through China have at least one border crossing; through Mongolia and Kazakhstan at least two border crossings.

The Trans-Asia-Europe corridor links through Central Asia offer different options for connecting Asia and Europe with up to five land border crossings. Other international rail corridors in the ESCAP region have one, or sometimes two railway border crossings.

The corridors with multiple railway border crossings could offer competitive international railway transport options only if aggregated operational delays at each
border crossing are minimized. The significant challenges for streamlined border crossing movement appear at the border crossings that deal with heavy traffic and large volumes of goods. Overview of the rail freight volume in 2014 and 2015 at major railway border crossings in ESCAP region is presented in Table 4 below.

Table 4: Major railway border crossings in ESCAP region

<table>
<thead>
<tr>
<th>Border Crossing</th>
<th>Freight handed over (tons in thousands)</th>
<th>Total (tons in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zabaykalsk (Russian Federation)</td>
<td>Manzhouli (China)</td>
<td>13,466</td>
</tr>
<tr>
<td>Tobol (Aksu) (Kazakhstan)</td>
<td>Kartaly (Russian Federation)</td>
<td>22,422</td>
</tr>
<tr>
<td>Sary-Agach (Kazakhstan)</td>
<td>Keles (Uzbekistan)</td>
<td>15,870</td>
</tr>
<tr>
<td>Erenhot (China)</td>
<td>Zuny Uud (Mongolia)</td>
<td>1,280</td>
</tr>
<tr>
<td>Grodsko (Russia)</td>
<td>Suiifenhe (China)</td>
<td>7,156</td>
</tr>
<tr>
<td>Alashankou (China)</td>
<td>Dostyk (Kazakhstan)</td>
<td>4,770</td>
</tr>
<tr>
<td>Ganyushkino (Din Nurpiceisowo) (Kazakhstan)</td>
<td>Aksaraikaya (Kigrash) (Russian Federation)</td>
<td>10,121</td>
</tr>
<tr>
<td>Zernowaya* (Kazakhstan)</td>
<td>Zauralje* (Russian Federation)</td>
<td>14,028</td>
</tr>
<tr>
<td>Kurkamys* (Kazakhstan)</td>
<td>Kulmanda* (Russian Federation)</td>
<td>7,391</td>
</tr>
<tr>
<td>Beyou Kesik (Azerbaijan)</td>
<td>Gardabani (Georgia)</td>
<td>7,036</td>
</tr>
<tr>
<td>Petropavlosk (Kazakhstan)</td>
<td>Petukhovo (Petropavlosk) (Russian Federation)</td>
<td>4,486</td>
</tr>
<tr>
<td>Jalama (Azerbaijan)</td>
<td>Samur (Russian Federation)</td>
<td>700</td>
</tr>
<tr>
<td>Nikeltau (Kirgilda) (Kazakhstan)</td>
<td>Orsk (Russian Federation)</td>
<td>1,673</td>
</tr>
<tr>
<td>Aul (Lokot) (Kazakhstan)</td>
<td>Lokot (Russian Federation)</td>
<td>851</td>
</tr>
</tbody>
</table>

Legend: * Border Crossing in Eurasian Economic Union (no/limited customs/border controls)  
* Border Crossing outside Trans Asian Railway Network  

As per OSJD statistics the railways from the ten ESCAP countries who are members of OSJD transported 662 million tons of freight in international railway transport in

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36 Azerbaijan, Viet Nam, Georgia, Kazakhstan, China, Kyrgyzstan, Mongolia, Russian Federation, Tajikistan and Uzbekistan
2016. Out of this 198 million tons or 30 per cent was moved across railway border crossing between those countries. The rest 646 million tons of freight was handled at other railway border crossings outside ESCAP region and from/to seaports.

The top ten pairs of railway border crossing in 2016 handled 151 million tons or 76 per cent of overall freight moved across railway border crossings of the OSJD/ESCAP members.

In 2016, five pairs of border crossings in the ESCAP region dealt with an annual volume of cargo exceeding 15 million tons; and nine pairs of border crossings dealt with annual volume of cargo between 5 and 15 million tons.\(^{37}\)

**Figure 3: Major border crossings and volume of freight (2014/2015/2016)**

![Diagram showing major border crossings and volume of freight]


This Study attempts to reflect the variety of railway border crossings in ESCAP region and provides a review of eight pairs of railway border crossings by documenting the existing procedures and practices at: Zabaykalsk (Russian Federation) - Manzhouli (China); Erenhot (China) - Zamyn Uud (Mongolia); Sukhbaatar (Mongolia) - Naushki (Russian Federation); Alashankou (China) - Dostyk (Kazakhstan); Pingxiang (China) - Dostyk (Kazakhstan); Padang Besar (Malaysia) - Padang Besar (Thailand); Sarakhs (Islamic Republic of Iran) - Saraks (Turkmenistan) and Raxaul (India) – Birgunj (Nepal). A case study of one non-ESCAP railway border crossing at Rezekne (Latvia) is presented in Annex 4 of this Study.

The review of the existing situation at the railway border crossings addresses differences that may exist between the border crossings with respect to application of the international railway transport agreements such as OSJD/SMGS Agreement or

\(^{37}\) Calculation based on OSJD 2017, Bulletin of statistical data on railway transport for 2016
COTIF/CIM and bilateral railway transport agreements. It also pays a special attention to the existing border controls, identifying all border authorities and major stakeholders present at the border crossings, national regulation for border controls and organization of the processes. The analysis of the border crossings attempts to identify key issues and challenges experiences and good practices that could be shared among railway authorities of the countries in the region.

The Questionnaire provided in Annex 6 of this Study was developed, as guidance for the research and review of the railway border crossings.

A Major Railway Border Crossings in ESCAP region

1. Zabaykalsk (Russian Federation) - Manzhouli (China)

The Zabaykalsk/Manzhouli border crossing is located on important route that directly connects Trans-Siberian corridor with China, and includes branches to several seaports in northeast China. This border crossing is major and busiest border crossing between China and Russian Federation with daily capacity to process 40 pairs of freight trains.38

The Zabaykalsk/Manzhouli is also a road transport border crossing. More than 65 per cent of land transport between China and Russian Federation pass through this border crossing.39

Border crossing and rail transport arrangements between Russian Federation and China are based on the OJSD agreements (e.g. SMGS Agreement), and other bilateral agreements regarding border crossings, transit transport, railway and customs cooperation.40

Break of gauge

The Zabaykalsk/Manzhouli border crossing is break of the gauge point between 1520 mm gauge rail tracks in Russian Federation and 1435 mm gauge rail tracks in China. In accordance with the OSJD rules implemented at this border crossing, the receiving side is responsible to organize the handover of the train. For movements from the Russian Federation to China, handover is organized in Manzhouli, and for movements in opposite direction from China to Russian Federation, in Zabaykalsk.

39 Xinhua; 2016-03-23; China’s largest land port to expand capacity; Available at: http://www.chinadaily.com.cn/m/innermongolia/2016-03/23/content_24050244.htm
40 Bilateral agreements between Russian Federation and China as well as tripartite agreements between China, Mongolia and Russian Federation are listed in Annex 6 of this Study.
Box 1: Rail Freight Transport Volume in Russian Federation across ESCAP region

International railway freight transport along Trans-Siberian Railways from the Pacific Far East ports takes a large share from overall rail freight volumes transported across borders in ESCAP region (for example 78 million tons in 2015). The routes from Far East sea ports are going only through Russian Federation and do not cross any land rail border crossings in ESCAP region.

Figure 4: Selected International Railway Freight Traffic Volumes in Russian Federation (ESCAP land borders) (in mill. tons)

Significant amount of rail freight traffic runs between the borders of Kazakhstan and Russian Federation (79 million tons or 59 per cent in 2016). However, it should be noted that both countries are part of Eurasian Customs Union, and at their internal border there are only limited border controls (e.g. immigration control) because other regulatory controls (e.g. customs control) are moved at the external borders of the Customs Union. In addition, the railways run at the same gauge so railway operations at the border crossings are not burdened with transshipment operations.

The volumes of goods moved across borders with China represent significant share from overall rail freight volumes transported across borders in ESCAP region (for example 45 million tons or 34 per cent in 2016). Movement across railway border crossings with Azerbaijan, Mongolia and other border crossings in the ESCAP region represent lower share (e.g. 6.4 million tons or 5 per cent at the borders with Azerbaijan, 1.7 million tons or 1 per cent at the borders with Mongolia and 1.2 million tons or 1 per cent at other ESCAP land borders in 2016).

Source: Calculation based on 2015/2016 data from OSJD 2016/2017 Statistical Bulletin

Volumes of transport and type of goods

The volume of rail transport and transit across Zabaykalsk/Manzhouli border crossing has been variable in last several years. High volumes of over 20 million tons freight handled per year are documented from 2008 to 2010 and after decrease of the volumes to 10 million tons in 2012; steady increase is recorded to the volumes of approximately 27 million tons in 2015 and 2016. The border crossing presently has a maximum capacity of 30 million tons per year and potential remains for growth of freight traffic at this border crossing. The traffic was generally unbalanced, with majority of goods
transported in direction from Russian Federation to China, which has been changed in last few years when more balanced railway traffic is recorded.

**Figure 5: Volume of freight through Zabaykalsk – Manzhouli** (in million tons)

![Graphic of volume of freight through Zabaykalsk – Manzhouli](image)

Source: OSJD Bulletins of statistical data on railway transport for 2008 – 2016

Major categories of goods transported in direction from Zabaykalsk to Manzhouli are bulk goods such as: coal, crude oil, chemical products, iron ore, mineral fertilizers paper and timber. Main categories of goods transported in direction from Manzhouli to Zabaykalsk are: light industrial products, mechanical and electrical products, mineral products, petroleum coke, foods and building materials. In last several years the volumes of containerized freight traffic have increased. The block container trains mainly run in direction from China to Russian Federation.

**Characteristics of the Zabaykalsk (Russian Federation) border crossing**

The Zabaykalsk border crossing provides full range of railway operations for the freight trains crossing the border. The border station has a complex railway layout with nine rail yards for processing of receiving and departure of trains and six transshipment locations.

Some of the bottlenecks identified at the Zabaykalsk checkpoint include insufficient development of transshipment facilities and extensive use of manual labor. Reconstruction of the Zabaykalsk railway checkpoint that began in 2014 is expected to

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41 Jianhua Xiao; August 2013; Logistics Development of Inner Mongolia Autonomous Region (p.121) (Chapter 7 of Contemporary Logistics in China). Available at: [link.springer.com/chapter/10.1007 percent2F978-3-642-34525-8_7]

42 Парламентская газета; 6 февраля 2014 года; Баир Жамсуев: Реконструкция железнодорожного пограничного пункта пропуска «Забайкальск» будет завершена до конца года; (EN: Parliamentary Gazette; February 6, 2014; Bair Zhamsuev: Reconstruction of railway border crossing point “Zabaykalsk” will be completed before the end of the year). Available at: [https://www.pnp.ru/news/detail/49007]

accelerate movement of goods across the border and improve working conditions of state control authorities.⁴⁴

Control authorities present at the Zabaykalsk border check post are:

- Border Service of the Federal Security Service of the Russian Federation - Border Administration of the Zabaykalsk region; Zabaykalsk railway check post Border Guards authorities, and
- Directorate for Migration Affairs of the Ministry of Internal Affairs of Russia;
- Federal Customs Service (FCS) of the Russian Federation - Siberian Customs Administration; Chita Customs; Zabaykalsk railway check post Customs authorities.

The Border Guards and Customs are in general responsible for border controls at the Zabaykalsk border check post, however when it is necessary for specialized controls other state control authorities could be involved such as:

- Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor) under the Ministry of Agriculture of the Russian Federation, Administration of the Federal Service for Veterinary and Phytosanitary Surveillance for Zabaykalsk region and Amur area:
  - Department of the State veterinary surveillance on the state border of the Russian Federation and transport and
  - Department of the surveillance in the field of plant quarantine on the state border of the Russian Federation and transport;
- Russian Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing (Rospotrebnadzor) (Administration of the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing for Zabaykalsk region; Department of the transport surveillance and sanitary protection of the territory).

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⁴⁴ Альта-Софт; Новости; Читинская таможня; 26.01.2016; ЖДПП Забайкальск – крупнейший транзитный железнодорожный пункт пропуска на российско-китайской границе; (EN: Alta-Soft; News; Chita Customs; 01/26/2016; ZHDPP Zabaykalsk - the largest transit railway checkpoint on the Russian-Chinese border). Available at: http://www.alta.ru/sfo_news/41749/
customs control, and when relevant includes implementation of sanitary and phytosanitary, veterinary, quarantine and transport controls.

**Border Service of the Federal Security Service of the Russian Federation**

The Border Guard authorities of the Border Service of the Federal Security Service of the Russian Federation cooperate with the other authorities in the field of defense and protection of the state border. To fight against cross-border crime they participate in joint border operations and interdepartmental mobile teams that may include other authorities of the Federal Security Service, Ministry of Internal Affairs, Federal Drug Control Service, Federal Customs Service of Russia, as well as the territorial executive bodies located in the border areas.

**Federal Customs Service (FCS) of the Russian Federation**

The Customs authorities of the FCS implement the customs legislation of Eurasian Customs Union as presented in Chapter 1 Part C.1 in this Study and the Customs legislation of Russian Federation.

Border crossing controls are organized under “single window” principle where the Customs authorities are responsible for customs, as well as for: transport; sanitary-quarantine, veterinary and phytosanitary control, in the part of examination of documents. Data exchange between Customs authorities and other state control authorities includes information exchange through electronic data processing systems. When necessary Customs authorities coordinate further controls with other specialized state control authorities and inform the railways about decision of such controls.

**Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor)**

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46 Responsibilities and powers of the authorities in the field of defense and protection of the state border are defined with the Federal Law on State border of Russian Federation (1 April 1993) (Закон РФ от 1 апреля 1993 года № 4730-1 «О Государственной границе Российской Федерации» (as amended). Available at: http://ps.fsb.ru/law/generaldoc/more.htm percent21id percent3D10321073 percent40fsbNpa.html

47 More information on Federal Customs Service of the Russian Federation is available at: http://eng.customs.ru

48 For example: Federal Law on Customs Regulation (27.10.2010 as amended) (Федеральный закон от 27.11.2010 № 311-ФЗ «О таможенном регулировании в Российской Федерации»; Available at: http://www.alta.ru/tamdoc/10fz0311/


50 Федеральная Служба по Ветеринарному и Фитосанитарному Надзору (Россельхознадзор); More information on Rosselkhoznadzor is available at: http://www.fsvps.ru/fsvps/main.html?_language=en
The Rosselkhoznadzor’s Department of the State veterinary surveillance on the state border of the Russian Federation and transport and Department of the surveillance in the field of plant quarantine on the state border of the Russian Federation and transport execute their responsibilities for veterinary and phytosanitary supervision on the state border through cooperation with customs authorities and their offices at the border checkpoints could be directly involved in control activities when necessary.

**Russian Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing (Rospotrebnadzor)**

The Rospotrebnadzor’s Department of the transport surveillance and sanitary protection of the territory carry out sanitary and quarantine controls at the border checkpoints in cooperation with Customs authorities at similar way as well.

The Russian Railways (RZD) is managing the railway border station at the border crossing. The RZD was established as a Joint Stock Company in 2003 with the Russian Federation Government as a sole shareholder. The RZD is organizes the railway transportation process, including freight traffic and a range of freight handling services and it is responsible for the railway infrastructure. The RZD also provides services as a single customs broker.

The RZD operates through large number of subsidiaries, affiliates and branches, including the major freight operators. For example, at the Zabaykalsk border crossing Zabaykalsk Railways operates as a branch of the RZD. To increase the efficiency of complex railway processes the RZD has introduced several electronic information technologies systems (e.g. electronic consignment note, ETRAN system and foreign trade transport Cargo Express system).

Another important stakeholder at Zabaykalsk border crossing is the JSC TransContainer that was established as a RZD subsidiary. The JSC TransContainer operates the customs logistics terminal in vicinity of the border station.

Before arrival of a train at the Zabaykalsk border crossing several steps are taking place. The railway station administration informs the state controls authorities such as customs and border guard authorities about train schedule. In accordance with Eurasian Customs legislation the railways has to provide information about arrival of a train two

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51 Федеральная служба по надзору в сфере защиты прав потребителей и благополучия человека (Роспотребнадзор). More information on Rospotrebnadzor is available at: http://www.rospotrebnadzor.ru/en/

52 More information on RZD is available at: http://eng.rzd.ru/statice/public/en?STRUCTURE_ID=4

53 More information on TransContainer container terminals is available at: https://www.trcont.ru/en/the-company/activities/container-terminals/
hours in advance. Such information includes data on number, type of wagons in the train, and description of the cargo.

Figure 6: Exchange of information and main control processes at Zabaykalsk border station

Source: Author based on information from multiple sources

If the goods are subject to veterinary, phytosanitary, sanitary-quarantine supervision, the traders, or their representatives, apply for corresponding certificate to the relevant state control authority, before arrival of goods.

Upon arrival at the station, the train will be under customs supervision and the railways will start processing rail transport documentation. If necessary and in coordination with other state control authorities, the customs authorities may decide to open certain wagons for entry customs inspection. The customs should inform the border guard authorities about such decision.

The customs inspection is organized jointly with a commission that includes customs, border guards and railway station staff. If the requirements for entry are not fulfilled, the customs inspection commission informs the railway station administration about

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54 Decision on Introduction of mandatory advance information on goods imported in single customs territory of the Customs Union by railway transport (Decision No 196 of 17 September 2013)

55 East Siberia State University of Technology and Management, Ulan-Ude, 2015, Peculiarities of Customs Control of Goods Conveyed Across the Customs Border of the Customs Union by Railroad Transport (Gavrilova A.E., Supervisor: Entaev M.A., PhD). Available at: https://essru.ru/library/free/Kon/TD_2015/14__percentD0_percent93_percentD0_percentB0_percentD0_percentB2_percentD1_percent80_percentD0_percentB8_percentD0_percentBB_percentD0_percentBE_percentD0_percentB2_percentD0_percentB0_percentD0_percent90_percentD0_percent95.pdf; Eurasian legislation; RZD presentations
the wagons for which admission in the territory is not allowed. Such wagons have to be uncoupled and returned back.

For the wagons admitted for further processing the railways will continue with transshipment at corresponding locations depending on kind of the goods. The formalities for clearance of goods may start earlier with submission of customs declaration (e.g. for transit or for import) by the forwarders that act as a customs broker. The customs authorities will check the documents and continue with necessary customs control. If necessary physical controls of the border guard authorities or specialized control of other state control authorities may take place (e.g. veterinary, phytosanitary, sanitary-quarantine).

Upon the end of customs control the customs authorities and the border guard authorities will inform the railway station administration that the goods are cleared and the train can exit from the zone of customs supervision at the rail border station.

**Characteristics of the Manzhouli (China) border crossing**

The Manzhouli port is largest and busiest land port in China. The Manzhouli Port offers nine well equipped yards, reloading facilities for efficient transshipment of goods received from the Russian Federation as well as storage facilities. The receiving-departure yards have sidetracks on both 1520 mm and 1435 mm gauge.

**Figure 7: Container Yard at Manzhouli border station**

Source: Photo Xinhua (http://news.xinhuanet.com/english/photo/2016-06/23/c_135460790.htm)

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56 Jianhua Xiao; August 2013; Logistics Development of Inner Mongolia Autonomous Region (p.121) (Chapter 7 of Contemporary Logistics in China). Available at: http://link.springer.com/chapter/10.1007/978-3-642-34525-8_7
The construction of new international freight yard in Manzhouli in a phased manner started in 2008. The development of the new international freight yard, which covers an area of 15 square kilometers, should increase the annual reloading capacity of the port from 30 million tons to 70 million tons. The yard has railway logistics center, dangerous chemical station, and a container station. It is well equipped for efficient reloading of bulk cargo and containerized goods with gantry cranes and other reloading equipment.\textsuperscript{57}

Control authorities present at the Manzhouli station are:

- Exit/entry border inspection authorities of the Border Control department of the Ministry of Public Security of the People’s Republic of China;
- General Administration of Customs of the People’s Republic of China (GACC); and
- Authorities of China Entry/Exit Inspection and Quarantine Association (CIQ) affiliated to General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China (AQSIQ).

Responsibilities of the border control authorities, in accordance with Chinese national legislation are, in general, standardized for the major Chinese border crossings as described below in the Box 3.

The Manzhouli border station is under jurisdiction of the Harbin Railway Administration, which is one of the 18 railway administrations of China Railway. The China Railway is national railway transport operator officially set up in March 2013. The China Railway is a solely state-owned enterprise under the management of the Ministry of Transport and the National Railways Administration that use to be part of Ministry of Railways of the People’s Republic of China.\textsuperscript{58}

The China Railways Container Transport Corporation Limited, which is a subordinate enterprise of China Railway, runs the railway operations at the container trans-loading station located at the Manzhouli station.


\textsuperscript{58} More information on China Railway are available at: http://www.china-railway.com.cn/en/
Box 3: Border Control in China

Exit/entry border inspection authorities of the Border Control department of the Ministry of Public Security of the People’s Republic of China

The exit and entry administration of people and border inspection of transport vehicles, including trains, is regulated by national legislation, which designates the Ministry of Public Security as a responsible authority for administration of exit/entry border inspections at border ports. When necessary, and in coordination with Customs authorities, the exit/entry border inspection authorities may conduct border inspection on the goods that exit or enter China, carried in railway transport.

General Administration of Customs of the People’s Republic of China (GACC)

Under the national customs law the border railway station has as status of "customs surveillance zone", where there is a customs establishment and the customs control is exercised. The border area, for actual point of entry/exit into/from the territory, is defined jointly by the General Administration of Customs and the Border Control department of the Ministry of Public Security, in conjunction with the relevant provincial people’s government.

The customs legislation also regulates the formalities with inward and outward trains including: arrival, departure and movement from one place to another at the station; submission of declaration; customs control, examination and clearance.

The railways is required to notify the Customs and provide information when an inward or outward train will arrive; where it will stay; what places it will move to during its stay; and when the loading or unloading of the goods will take place.

The administration of manifests for inbound and outbound trains are detailed in a GACC Decree that includes provisions on submission of electronic manifest data and requirements for the railways to submit the main data of the original manifest at least two hours before arrival at the first station of call within the Customs territory.

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59 More information on the Ministry of Public Security of the People’s Republic of China is available at: http://www.mps.gov.cn/

60 More information on the General Administration of Customs of the People’s Republic of China is available at: http://english.customs.gov.cn/


The GACC defines the rules for customs control premises at railway cargo terminals with details on equipment regarding: requirements for Customs control (e.g. electronic monitoring devices); use of computerized management systems connected with the Customs systems and exchange of electronic data in accordance with the requirements specified by Customs; use of video monitoring system etc.\(^63\)

**Authorities of China Entry/Exit Inspection and Quarantine Association (CIQ) affiliated to General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China (AQSIQ).**\(^64\)

The entry/exit inspection and quarantine (CIQ) authorities are managing the inspection and quarantine clearance for the entry-exit goods related to environment, health, animal and plant health, and human safety, and for transportation means and personnel. The inspection and quarantine clearance management model applied to entry-exit goods is "Inspection application first, and customs declaration second".\(^65\)

To improve the efficiency for inspection and quarantine clearance the AQSIQ started development of “Quick Customs Clearance” system in 2001. The system was based on electronic declaration of imported goods, electronic supervision and management and electronic discharge. The system provided: simplified inspection of applications; streamlined inspection and quarantine actions; and quick issuing of certificates that accelerates customs clearance as well.\(^66\)

Further support of electronic quarantine clearance was enabled with development of the China Inspection and Quarantine Electronic Certificate System (China E-cert) in 2009. The China E-cert is a web-based electronic certification system. The information provided form the E-cert system might be downloaded into automated clearance systems or viewed on the Internet. The system supports government-to-government exchange on information related with quarantine certification.\(^67\)

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\(^{64}\) CIQ is one of the 10 trade association and federations independently affiliated to AQSIQ. More information on CIQ is available at: [http://en.ciqcid.com/](http://en.ciqcid.com/) and on AQSIQ at: [http://english.aqsiq.gov.cn/](http://english.aqsiq.gov.cn/)


\(^{67}\) AQSIQ Import and Export Food Safety Bureau Presentation on Introduction of Control on Certificates of Import and Export of Food in China; Available at: [http://fsclf-pitin.apec.org/docs/events/export-certificate-workshop/day-2/07-Wang-Ning.pdf](http://fsclf-pitin.apec.org/docs/events/export-certificate-workshop/day-2/07-Wang-Ning.pdf)
The border crossing controls, at the Manzhouli port, are organized in sequential manner. For the outbound border crossing movements:

- first, if necessary the CIQ inspections take place and the required certificates required are issued;
- second, the customs documentary control and clearance formalities are finalized (in general the goods in transit exiting at the border port are not physically inspected unless a fraud is suspected);
- third, the exit/entry border authorities control is done; and
- finally, the train could be dispatched from the station.

For the inbound border crossing movement, the controls are organized in reverse order starting with the control procedures of the exit/entry border authorities; then followed by the CIQ inspections and the customs clearance of goods. A simplified outline of the outbound processes at the Manzhouli border station is presented at the Figure 8 below:

**Figure 8: General outline of the outbound processes at the Manzhouli station**

- Receiving a train at the station
- CIQ Inspection and Certification
- Customs control and Customs clearance
- Railway transport operations and technical inspections
- Exit/entry border inspection
- Dispatching a train from the station
Box 4: Rail Freight Transport Volume in China across Selected Land Borders

Vast majority of international railway freight transport across land ports in China happens on the borders with Russian Federation, Kazakhstan and Mongolia, where it links with Trans-Siberian or Trans Asia Europe corridors. The volumes of goods handed over at other borders represent very small share (less than 1 percent on border with Viet Nam and border with People’s Republic of Korea in 2016).

Figure 9: Selected International Railway Freight Traffic Volume in China (in million tons)  

Significant volumes of rail freight traffic run across the border crossing ports between China and Russian Federation (e.g. 45 million tons or 60 per cent in 2016). Even though railway corridors across the border crossings with Russian Federation may have longer distances, they offer good connections with northeast ports in China and efficient moving across only one border crossing.

Important volumes of rail freight traffic move across the border crossing ports between China and Mongolia (e.g. 16.7 million tons or 22 per cent in 2016) as well between China and Kazakhstan (e.g. 13 million tons or 18 percent at in 2016).

Source: Calculation based on 2016 data from OSJD 2017 Statistical Bulletin

Railway border crossing issues at Zabaykalsk/Manzhouli

Dealing with break of gauge is one of the main challenges at Zabaykalsk/Manzhouli border crossing that may lead to extended border crossing time. The investments and development of transshipment facilities at the border crossing have provided efficient handling of large volumes of cargo moving across Zabaykalsk/Manzhouli.

The time standards set for completing railways, border and customs operations at Zabaykalsk border crossing checkpoint are given in the Table 5 below.

The monitoring results suggest that actual time of inspections and operations usually do not exceed the time standards introduced.\(^{68}\)

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\(^{68}\) Rosgranitsa web site information; 10/09/2013; Администрацией ЖДПП Забайкальск проведен мониторинг Технологической схемы; http://www.rosgranitsa.ru/ru/agency/to/sibtu/news/8432
Table 5: Time standards to complete operations at Zabaykalsk check point

<table>
<thead>
<tr>
<th>Type of operation</th>
<th>Standard Time (in minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even import cargo train</td>
<td></td>
</tr>
<tr>
<td>Railways operations</td>
<td>60</td>
</tr>
<tr>
<td>Border operations</td>
<td>60</td>
</tr>
<tr>
<td>Customs operations</td>
<td>60</td>
</tr>
<tr>
<td>Even transit and export cargo train</td>
<td></td>
</tr>
<tr>
<td>Railways operations</td>
<td>40</td>
</tr>
<tr>
<td>Border operations</td>
<td>35 (ore); 47 (coal, timber; other)</td>
</tr>
<tr>
<td>Customs operations</td>
<td>35 (ore); 47 (coal, timber; other)</td>
</tr>
<tr>
<td>Odd empty train (1520 mm)</td>
<td></td>
</tr>
<tr>
<td>Railways operations</td>
<td>35</td>
</tr>
<tr>
<td>Border operations</td>
<td>35</td>
</tr>
<tr>
<td>Customs operations</td>
<td>35</td>
</tr>
<tr>
<td>Odd empty train (1435 mm)</td>
<td></td>
</tr>
<tr>
<td>Railways operations</td>
<td>20</td>
</tr>
<tr>
<td>Border operations</td>
<td>40</td>
</tr>
<tr>
<td>Customs operations</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: OSJD Comprehensive Plan for improvement of transport and development of OSJD Corridor No 1 to 2020. 69

Average overall time for processing of container trains at Zabaykalsk border crossing checkpoint from the arrival at the territory of the Russian Federation until departure from the station in 2015 was 12.5 hours. 70

Several simplifications and good practices could be identified at the Zabaykalsk/Manzhouli border crossing such as:

- use of advanced railway electronic information systems, as well as railways to railways and railways to customs electronic exchange of data;
- interagency cooperation and transfer of responsibilities at Zabaykalsk check point under “single window” principle, under which customs authorities are performing the documentary control for sanitary-quarantine, veterinary and phytosanitary requirements;
- simplification for block container trains and introduction of green corridor; and
- active cross border cooperation between railways and border control authorities of both countries.

69 OSЖД, 2013, Комплексный план совершенствования перевозок и развития транспортного коридора ОСЖД № 1 до 2020 года; http://osjd.org/dbmm/download?vp=51&load=y&col_id=2066&id=1873
2. Erenhot (China) - Zamyn Uud (Mongolia)

The Erenhot/Zamyn Uud border crossing is located on the 1,110 km long rail transit route across Mongolia that runs between: Zamyn Uud (Mongolia) at the border with China (Erenhot) and Sukhbaatar (Mongolia) at the border with the Russian Federation (Naushki). Presently this is the only international Trans-Mongolian rail route. The rail corridor across Mongolia offers potentially good, and one of the shortest routes for the transportation of goods between Asia (e.g. Chinese port of Tianjin) and Europe. The Erenhot/Zamyn Uud is also a road transport border crossing.

Figure 10: Trans-Mongolia Rail Transit Route

The movements across the Erenhot/Zamyn Uud border crossing is based on the legal requirements of the SMGS Agreement, and other bilateral arrangements regarding rail transport and customs cooperation between China and Mongolia.

Break of gauge

The break of gauge operations between 1435 mm rail gauge in China and 1520 mm rail gauge in Mongolia take place at Erenhot/Zamyn Uud border crossing. To overcome the gauge difference transshipment, or change of the bogie system, is needed. Rail tracks of both gauges (1435 mm and 1520 mm) cross the border between the Erenhot and Zamyn Uud stations.

In accordance with the SMGS Agreement rules, which are operationalized with arrangements between the railways of the neighboring countries, the break of the gauge activities and the operations for transfer of railway documents/goods occurs in the receiving border station. For example, for the movements in direction from Mongolia to China, the exchange of the railway documents, transfer and reloading of goods will happen in Erenhot (China) border station, while for the movement in opposite direction from China to Mongolia such operations will be organized in Zamyn Uud (Mongolia) border station.

71 Mongolian rail system presently runs on single-track line and railroads are not electrified. The Mongolian State policy on railway transportation (2010) foresees significant investment in new railway projects and improvements of existing system (e.g. upgrading of the permanent infrastructure and renewal of the rolling stock as well as assessment for viability of double tracking).

72 Bilateral agreements between China and Mongolia as well as tripartite agreements between China, Mongolia and Russian Federation are listed in Annex 4 of this Study.
In addition to rail-to-rail transfers of the freight from one wagon to another, road-to-rail trans-shipments are second major activity at the Erenhot/Zamyn Uud border crossing. It is estimated that on Chinese side, approximately half of the cross-border freight is carried in combination of road and rail transport, especially when the places of origin or destination are near the border, or when there is a shortage of rail wagons.

**Box 5: Overall Rail Freight Transport Volume in Mongolia**

Domestic transport takes a large share from overall rail freight volumes transported in Mongolia (42.7 per cent out of overall 20 million tons of rail freight volume transported in 2016). Dominant part of the rail freight volumes in international transport is Mongolian export, while import and transit across Mongolia represent smaller share. Figure 11 presents the distribution of the internationally transported rail freight (export, import and transit) in total amount of 11.5 million tons in 2016.

Majority of the goods are handed over at southern border crossing between Mongolia and China. The data for 2016 show that 90 per cent of the overall international rail freight was handed over at Zamyn Uud/Erenhot border crossings, where Mongolian exports are major part of the freight traffic.

The volume of goods handed over at the northern border crossing Naushki/Sukhbaatar between Russian Federation and Mongolia represents lower share of overall rail border crossing movements (e.g. 10 per cent in 2016). At this border crossing, largest part of the freight traffic is inbound transit from Russian Federation to China and Mongolian imports.

The rail freight transport in Mongolia has a vital role in export of Mongolian products such as coal and minerals; however, it is also important for imports and it has good potential for transit transport across the country.

**Volumes of transport and type of goods**

The volume of rail transport and transit across Erenhot/Zamyn Uud border crossing is

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progressively growing in last several years. Exponential growth is recorded in last few years with maximum volume of 16.7 million tons freight documented in 2016. The volumes have been unbalanced with majority of goods transported in direction from Mongolia to China until 2014. In last few years (2015/2016) significant increase of the volumes in direction from China to Mongolia are recorded, which makes the movements in this direction to be more dominant.

Figure 12: Volume of freight through Erenhot – Zamyn Uud (in million tons)

![Graph showing volume of freight through Erenhot – Zamyn Uud]

Source: OSJD Bulletins of statistical data on railway transport for 2008 – 2016

Major categories of goods transported in direction from Zamyn Uud to Erenhot are Mongolian exports such as coal, iron ore, and other minerals. The goods in transit, mainly Russian Federation exports to China (e.g. timber), are also represented. The containerized goods are important part of the movements in opposite direction from Erenhot to Zamyn Uud.

**Characteristics of the Erenhot (China) border station**

The Erenhot is a thriving border hub for trade and trans-shipment to and from Mongolia and beyond. The Erenhot border station and surrounding area provides around 10 square kilometers of well-laid out rail yards, rail-to-rail trans-shipment facilities, lorry loading and associated storage, logistics and other facilities for value added functions. Public sector, state-owned-enterprises and the private sector are all involved in active cooperation.74

Control authorities and other stakeholders

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Control authorities present at the Erenhot station are:

- Exit/entry border inspection authorities of the Border Control department of the Ministry of Public Security of the People’s Republic of China;
- General Administration of Customs of the People’s Republic of China (GACC);
- Authorities of China Entry/Exit Inspection and Quarantine Association (CIQ) affiliated to General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China (AQSIQ).

Responsibilities of the border control authorities and control processes for the first-class Chinese border crossings are in general standardized in accordance with Chinese national legislation as described earlier in the Box 3 and the explanation provided at the part 1 of this Chapter (for Manzhouli border station).

The Erenhot border station is under jurisdiction of the Hohhot Railway Administration, which is one of the 18 railway administrations of China Railway. The China Railways Container Transport Corporation Limited, which is a subordinate enterprise of China Railway, runs the railway operations at the container trans-loading centers located at the Erenhot station.

**Characteristics of the Zamyn Uud (Mongolia) border crossing**

The Zamyn Uud border station is the largest border crossing in Mongolia, and a major rail and road transportation hub between China and Mongolia. The border crossing operates 24 hours, providing transshipment and limited storage capacities as well as export, import and transit clearance formalities.

The transshipment process at the Zamyn Uud is presently organized at three terminals. The Terminal 1 handles the rail to rail and road to rail reloading of various types of cargo (e.g. unitized, palletized, loose, bulk cargo and heavy equipment). It is equipped with a gantry crane, different types of loaders and forklifts.

The Terminal 2 is specialized for transshipment of containers from flat wagons of one gauge to other by reach-stackers. However, this terminal also handles loading and unloading of road-to-rail and rail-to-road reloading.

The Terminal 3 is mainly utilized for reloading road to rail operations of cement and other goods in wagons, as well as roll on / roll off of heavy equipment on flat wagons. Combined capacity of all three terminals is 420 wagons per day.\(^75\)

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\(^{75}\) Ganbaatar Batchimeg, 2013, Research Project: Critical issues on foreign trade policy, strategy and regulation; Graduate School of Media and Governance Keio University (Research Advisor Prof. Yorizumi Watanabe). Available at: https://www.kri.sfc.keio.ac.jp/report/mori/2013/c-004.pdf
Control authorities and other stakeholders

At the Zamyn Uud border station there are four authorities present:

- General Authority for Border Protection;
- General Department for Citizenship and Migration of Mongolia referred as Immigration of Mongolia;
- General Customs Administration of Mongolia, and
- General Agency for Specialized Inspection (GASI).

Responsibilities and control processes of the border control authorities, in accordance with Mongolian national legislation are in general standardized at the Mongolian border crossings as described in the Box 6 below.

**Box 6: Border Control in Mongolia**

**General Authority for Border Protection**

The Border protection officers are responsible for protection and security at the border crossing. They also check the passports (in addition to Immigration authorities) and freight documents (in addition to Customs authorities). On arrival at the border, the railways apply for border crossing to a Border protection officer. The Border protection officers may check the cargo and approve continuation of the procedure (e.g. in the case of the entry at the Zamyn Uud Border Station the train to proceed to the arrival terminal).

**General Department for Citizenship and Migration of Mongolia (Immigration of Mongolia)**

The Immigration of Mongolia officers are mainly responsible for control of exit and entry of passengers and vehicles at the Mongolian borders that includes control of travel documents and checking of visa requirements for operators and crew of transport means.

**General Customs Administration of Mongolia**

Mongolian customs legislation was revised and upgraded in 2008 in order to incorporate many trade-facilitation measures in line with international standards (e.g. the Revised Kyoto Convention), such as use of customs declaration documents in electronic format, pre-arrival declaration and risk management.

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76 More information on General Authority for Border Protection is available at: http://bpo.gov.mn/en/
77 More information on Immigration of Mongolia is available at: http://immigration.gov.mn/new/?lang=en
78 The name of the department was changed in April 2014 with introduction of the Law on the Border Checkpoints when some of the functions of the General Authority of the Border Protection have been transferred and merged with the Mongolia Immigration Agency as previously known. n News: Mongolia Immigration Agency restructured with new name; 4th June 2014; http://www.news.mn/r/174836
Box 6: Border Control in Mongolia (continued)

With the customs modernization, which followed implementation of new Mongolia’s Customs Law\(^{80}\) and introduction of new Customs Automated Information System (CAIS), the customs procedures have been simplified and the time for clearance has been reduced. The CAIS was officially launched in 2010, and the data center hardware was since upgraded. The software was upgraded in 2013 to include functional features such as the expansion of the Customs external portal interfaces, and the implementation of the e-manifest.

Customs formalities

Customs formalities at Zamyn Uud start before the train’s arrival at the border, with an entry notification from the railways.\(^{81}\) Upon arrival at the border station the railways submit to the Customs the transport documents (e.g. pass-over documents; railway car documents; railway bill) and trade documents (e.g. commercial invoice, foreign certificates) sealed in envelop by neighboring customs office. The documents should identify: consignor and consignee of the goods; the railway station of departure, transit and destination; description and classification of goods, the number and size or volume, package types and marking; non-tariff restriction applicable to the goods.\(^{82}\)

In initial control, customs officer stamps the documents submitted, checks if there are any discrepancies and returns the documents to the forwarder.

Forwarder prepares and submits a cargo manifest to the customs based on the documents submitted at arrival through the CAIS.\(^{83}\) Customs officers check the electronically submitted manifests and issue the approval. The risk management module is used by the Customs to access the electronic manifests. The Customs officers can physically inspect the transport means for any un-manifested goods.

In accordance with the international transit procedure, foreign goods shall move in transit from the entry border port to the exit border port without payment of Customs duty and other taxes. The Customs may request guarantee however for the rail transit guarantee is not required. The goods in transit are not subject to non-tariff restrictions.

The only customs document required, and the main instrument for control, is the transit manifest prepared by the forwarder and submitted at the entry border port through the CAIS.\(^{84}\)

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\(^{80}\) Unofficial English translation of Mongolian Customs Law (2008) is available at:

\(^{81}\) In accordance with Article 34 (pre-arrival notification) of the Mongolian Customs Law

\(^{82}\) In accordance with Article 35 (submission of documents and information) and Article 38 (Documents and Information to be Submitted to the Customs concerning the International Railway Transport) of the Mongolian Customs Law

\(^{83}\) In accordance with Article 39 (cargo manifest) of the Mongolian Customs Law

\(^{84}\) In accordance with Article 74.3.1 (placement of Goods under a Customs procedure) of the Mongolian Customs Law
Box 6: Border Control in Mongolia (continued)

When the transit manifest is approved by Customs, the goods can be transported from the entry border port (e.g. Zamyn Uud) to the customs office of destination in Mongolia (e.g. Ulaanbaatar) (in a case of domestic transit) or to the exit border port (e.g. e.g. Sukhbaatar) (in a case of international transit).

Individual paper based transit manifest is still carried in a pouch.

Information on electronic transit manifest approved at entry border port is available at the destination customs office or at the exit border port so the manifest does not have to be submitted once again. Electronic processing of the transit manifest provides simplified and more secure termination of the transit procedure.

General Agency for Specialized Inspection (GASI)\(^5\)

The General Agency for Specialized Inspection (GASI) is responsible for issuing import and export certificates for various categories of goods. The GASI develops inspection plans based on risk assessment. Border inspections include checking of submitted documents (e.g. foreign certificates, commercial invoice, railway bill, etc.); control on imports of animal and animal products, plants and seeds, processed food, drugs and medical equipment, toxic and hazardous chemicals, oil products; as well as control on exports of toxic and hazardous substances, minerals and mining products. Tasting laboratory facilities are available at the border crossing. Radiation monitoring at the border is provided with radiation control scanner for trains.

The Ulaanbaatar Railways (UBTZ) is a dominant railway and presently only transport operator on Trans Mongolian railway route.\(^6\) The UBTZ was established as a joint venture between Mongolia and the Russian Federation.\(^7\) Another important stakeholder is Mongolian Railway (MTZ).\(^8\)

The Ulaanbaatar Railways (UBTZ) operates terminals 1 and 3, while the Mongolian railway (MTZ) operates the container terminal 2 at the Zamyn Uud border port.\(^9\) Several freight forwarders are also present at the rail border crossings.

The Ulaanbaatar Railways (UBTZ) is exchanging information required with Mongolian Customs however UBTZ information system presently is not connected to the CAIS.

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\(^5\) More information on GASI is available at: http://inspection.gov.mn/info/eng/

\(^6\) More information on UBTZ (Mongolian only) is available at: http://www.ubtz.mn/

\(^7\) UBTZ was established in 1949 as a 50 percent-50 percent joint stock company with a Bilateral Agreement in 1949. The Agreement was amended several times with Protocols signed in: 1953, 1957, 1966 and 1999 mainly with regard to increase in share capital. The overview is provided in Annex 4 of this Study.

\(^8\) MTZ was established in 2008 as a State Owned Shareholding Company mainly responsible for new railway construction and projects. More information on Mongolian Railway is available at: http://www.mtz.mn/en/

\(^9\) Terminal 2 at Zamyn Uud has been managed by UBTZ from opening in 1996. The MTZ started managing Terminal 2 from May 2015.
The forwarders are responsible for electronic submission of the cargo manifest, transit manifest or import/export declarations.

**Railway border crossing issues at Erenhot/Zamyn Uud**

Long time taken for freight trains to cross the railway border crossing at the Erenhot/Zamyn adversely affects the performance of railway corridor. Presently it is expected that the movement across the both stations at the border crossing takes approximately two days. The ADB CAREC Programme Corridor Performance Measurement and Monitoring Report for 2015 shows that the average dwell time for outbound traffic at the Erenhot station is 26.8 hours and for inbound traffic at the Zamyn Uud station is 24.6 hours. The total average time of 51.4 hours for movement across the border in direction from China to Mongolia recorded in 2015 is slightly improved from 54.4 hours documented in 2014.

**Table 6: Erenhot/Zamyn Uud border crossing times (in hours)**

<table>
<thead>
<tr>
<th></th>
<th>Erenhot (China) Outbound</th>
<th>Zamyn Uud (Mongolia) Inbound</th>
<th>Zamyn Uud (Mongolia) Outbound</th>
<th>Erenhot (China) Inbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix Cargo Shift</td>
<td>/</td>
<td>/</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Transload at Gauge Change Point</td>
<td>/</td>
<td>/</td>
<td>1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Train Classification</td>
<td>/</td>
<td>/</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Reissue Transit Documents</td>
<td>/</td>
<td>/</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Customs Inspection</td>
<td>11.8</td>
<td>12.6</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Commercial Inspection</td>
<td>/</td>
<td>/</td>
<td>2.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Busy Reloading Facilities</td>
<td>25.9</td>
<td>26.7</td>
<td>15.4</td>
<td>16.3</td>
</tr>
<tr>
<td>No wagons available</td>
<td>/</td>
<td>/</td>
<td>23.1</td>
<td>20.5</td>
</tr>
<tr>
<td>Restriction on Entry</td>
<td>36.2</td>
<td>30.4</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Marshalling</td>
<td>/</td>
<td>/</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total Mean</strong></td>
<td>30.7</td>
<td>26.8</td>
<td>23.7</td>
<td>24.6</td>
</tr>
<tr>
<td><strong>Total Median</strong></td>
<td>24.0</td>
<td>12.3</td>
<td>20.2</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Source: CPMM Reports for 2014 and 2015

For the movement in opposite direction from Mongolia to China the average dwell time for outbound traffic at the Zamyn Uud station is only 4.3 hours and for inbound traffic at the Erenhot is 34.6 hours. Total average time of 38.9 hours for movement across the border in direction from Mongolia to China recorded in 2015 is an improvement from 47.5 hours documented in 2014.

The main constrains at the border crossing are lengthy transshipment operations, limited reloading capacities and lack of available wagons. The outbound delays are experienced at the Erenhot station mainly due to restriction on entry (30 hours in 2015), which is influenced by busy road-to-rail reloading facilities (27 hours in 2015) and long

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customs inspection (12.5 hours in 2015). Limited receiving capacity at the Zamyn Uud station may also have a role in restriction on entry time.

The inbound time at Erenhot station is still long (despite recent significant improvement from 44 hours in 2014 to 35 hours in 2015) due to time-consuming operations at change of the gauge transshipment yards. Erenhot station has a good receiving capacity, which does not create any restriction on entry and enables prompt outbound movement from Zamyn Uud station.

Inbound movement delays experienced at Zamyn Uud station are mainly result of: lack of available wagons (20.5 hours in 2015) and insufficient capacity of reloading facilities (16.3 hours in 2015). Respectable time for break of the gauge activities at transshipment terminals is reported (1.3 hours in 2015). Excellent times for outbound movement are achieved at Zamyn Uud (3.1 hours in 2014 and 4.3 hours in 2015).

Development of sufficient and efficient capacities for transshipment (e.g. with upgrade of border crossing facilities) remains a key factor for streamlined movements at this border crossing. Development of modern logistics infrastructure and systems is also considered as one of the priorities to further increase logistics capacity, increase freight turnover and decrease congestion at the border crossing.

Good practices and simplifications noted at Erenhot/Zamyn Uud border crossing include:

- fast processing of container trains;
- good receiving capacities at Erenhot border station;
- active cross border cooperation, such as join customs control meetings of the customs administrations of both countries.

3. Sukhbaatar (Mongolia) - Naushki (Russian Federation)

The Sukhbaatar/Naushki border crossing is a link that connects the Trans-Mongolian rail route with Trans-Siberian corridor. This border crossing is servicing rail transport only. The railways at Mongolia and the Russian Federation run over same 1520 mm rail gauge, therefore time-consuming transshipment operations are not necessary. The rail transport at this border crossing is governed by the SMGS Agreement and several bilateral agreements applicable between Mongolia and Russian Federation.91

In accordance with the railways arrangements, the handover of the even railway freight trains moving from Russian Federation to Mongolia is done in Sukhbaatar station and the handover of the odd railway freight wagons is organized in Naushki station.

91 Bilateral agreements between Mongolia and Russian Federation as well as tripartite agreements between China, Mongolia and Russian Federation are listed in Annex 4 of this Study
Handover for the trains moving in opposite way is organized in similar way.

**Volumes of transport and type of goods**

The volume of goods moving across Sukhbaatar/Naushki border crossing is relatively steady in last several years reaching around 3.5 million tons per year.

![Figure 13: Volume of freight through Sukhbaatar – Naushki (in million tons)](chart)

Source: OSJD Bulletins of statistical data on railway transport for 2008 – 2016

The cargo flow at this border crossing is hugely unbalanced with most of the traffic running in direction from Russian Federation to Mongolia. An average of 150 wagons per day have been received in Mongolia from Russian Federation in 2015. Approximately half of the wagons are Mongolian imports and half of them are transits to China. Major categories of goods recorded for import in Mongolia in 2015 by number of wagons were: petroleum (62 per cent), containerized goods (10 per cent) and food (6 per cent). Regarding the transit entries with destination to China, major categories of goods in 2015 were: timber (58 per cent), cellulose (28 per cent), oil (4 per cent) and containerized goods (3 per cent).92

![Figure 14: Mongolian Imports and Transit entries at Sukhbaatar station](chart)

Source: Information based on UBTZ Presentation; 2016; Introduction of Sukhbaatar station

The volume of traffic running in direction from Mongolia to Russian Federation is much smaller. An average of only 32 wagons per day have been received in Russian Federation from Mongolia in 2015. Exit of wagons in transit coming from China

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92 Information based on UBTZ Presentation; 2016; Introduction of Sukhbaatar station
represented 60 percent of all outbound wagons.

Major categories of goods recorded for export from Mongolia in 2015 by number of wagons are: crystal mining products (47 percent), empty containers (22 percent) and coal (20 percent). With regard to the transit exits of wagons arriving from China, major categories of goods in 2015 were: electrodes (35 percent), containerized goods (24 percent), tar (16 percent) and chemicals (12 percent).

Figure 15: Mongolian Exports and Transit exits at Sukhbaatar station

Characteristics of the Sukhbaatar (Mongolia) border station

The Sukhbaatar border station is a railway station that provides services for receiving and dispatching of trains at the Mongolian side of the border between Mongolia and Russian Federation. The border crossing operates 24 hours providing some loading and unloading services. The Sukhbaatar station has 12 tracks for receiving and sending wagons, with platforms for technical and customs control, as well as few branches where loading and unloading operations could be also done.

Loading and unloading equipment is available and mainly operated by railways authorities, however the trading companies and forwarders organize some of the loading and unloading operations. Very limited storage facilities are available, however there is no major logistics capacities at border station. The goods transported through this border station could be cleared for import, export and transit.

Figure 16: Layout of the Rail Station Sukhbaatar
At the Sukhbaatar border station there are four authorities present:

- General Authority for Border Protection;
- General Department for Citizenship and Migration of Mongolia referred as Immigration of Mongolia;
- General Customs Administration of Mongolia, and
- General Agency for Specialized Inspection (GASI).

Responsibilities and control processes of the border control authorities, in accordance with Mongolian national legislation are in general standardized at the Mongolian border crossings as described earlier in the Box 6 at the part 2 of this Chapter (for Zamyn Uud border station).

The Ulaanbaatar Railways (UBTZ) and several freight forwarders are also present at the rail border crossings.

**Characteristics of the Naushki (Russian Federation) border station**

The Naushki railway border station was opened in 1939. The station is the railway checkpoint on the Russian side of the border between Russian Federation and Mongolia. The Naushki checkpoint is in need for reconstruction to improve and modernize unloading platform for customs inspections, warehouse and temporary storage facilities.\(^{93}\)

Control authorities present at the Naushki railway border check post include:

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\(^{93}\) Байкал Финанс; 31.01.2016; ЖДПП "Наушки": нагрузка растет, реконструкция отложена; (EN: Baikal Finance; 01/31/2016; ZHDPP "Naushki": the freight grows, reconstruction delayed); http://baikalfinans.com/ekonomika/zhdpp-naushki-nagruzka-rastet-rekonstruktsiya-otlozhena-31012016-14926900.html
▪ Border Service of the Federal Security Service of the Russian Federation - Border Administration of the Republic of Buryatia; Naushki railway check post Border Guards authorities, and

▪ Directorate for Migration Affairs of the Ministry of Internal Affairs of Russia;

▪ Federal Customs Service (FCS) of the Russian Federation - Siberian Customs Administration; Buryat Customs; Naushki railway check post Customs authorities.

The Border Guards and Customs are in general responsible for border controls at the Naushki border check post, however when necessary for specialized controls other state control authorities could be involved such as:

▪ Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor) under the Ministry of Agriculture of the Russian Federation, Administration of the Federal Service for Veterinary and Phytosanitary Surveillance for the Republic of Buryatia:
  o Department of the State veterinary surveillance on the state border of the Russian Federation and transport and
  o Department of the surveillance in the field of plant quarantine on the state border of the Russian Federation and transport;

▪ Russian Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing (Rospotrebnadzor) (Administration of the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing for the Republic of Buryatia; Department of the transport surveillance and sanitary protection of the territory).

Responsibilities of the border control authorities in Russian Federation and control processes for the international border crossings checkpoints at external borders of the Eurasian Customs Union are in general standardized in accordance with Eurasian legislation and the legislation of Russian Federation as described earlier in the Box 2 and the explanation provided at the part 1 of this Chapter (for Zabaykalsk border crossing check point).

**Railway border crossing issues at Sukhbaatar/Naushki**

The Sukhbaatar/Naushki border crossing: a) is not a break of the gauge point (transshipment operations are not required) b) no major railway transport operations at the border crossing (e.g. classification of trains and remarshalng) and c) border stations presently handle the volumes below their capacities. Therefore, the trains in general can move through this border crossing in the same day.

The ADB CAREC Programme Corridor Performance Measurement and Monitoring (CPMM) Report for 2015 shows that the average dwell time for outbound traffic at the Naushki station is 12 hours and for inbound traffic at the Sukhbaatar station is 14
hours.\textsuperscript{94} The main constrains at the border crossing are lengthy operations at busy road-to-rail / rail-to-road reloading facilities (e.g. 12.1 hours for outbound traffic at Naushki and 10.9 hours for inbound traffic at Sukhbaatar recorded in 2015).

Mongolian Customs reported that customs control activities at Sukhbaatar station in average take only 15 minutes, however the train stops at the rail border crossing in average for 3 hours.\textsuperscript{95} The rest of the waiting time is necessary for preparation of documents (for railway, customs and other regulatory purposes); submission of documents and waiting for controls to start; technical controls and railway related operations.

This is generally in line with the CPMM findings (e.g. 0.7 hours for customs inspection formalities; 1.7 hours for reissue of transit documents in 2015) if reloading operations are excluded.

Table 7: Naushki/Sukhbaatar border crossing times

<table>
<thead>
<tr>
<th></th>
<th>Naushki (Russian Fed.)</th>
<th>Sukhbaatar (Mongolia)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rail (Outbound Traffic)</td>
<td>Rail (Inbound Traffic)</td>
</tr>
<tr>
<td>2014 (hrs)</td>
<td>2015 (hrs)</td>
<td>2014 (hrs)</td>
</tr>
<tr>
<td>Pick up and deliver wagons</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Reissue Transit Documents</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Customs Inspection</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Busy Reloading Facilities</td>
<td>11.5</td>
<td>12.1</td>
</tr>
<tr>
<td><strong>Total Mean</strong></td>
<td><strong>11.5</strong></td>
<td><strong>12.1</strong></td>
</tr>
<tr>
<td><strong>Total Median</strong></td>
<td><strong>12.0</strong></td>
<td><strong>12.0</strong></td>
</tr>
</tbody>
</table>

Source: CPMM Reports for 2014 and 2015

The border customs controls on the goods in transit at the border between Mongolia and Russian Federation are in general mutually accepted, however there is still substantial amount of cases where additional control of the documents is necessary due to lack of document harmonization. Even though manifest data are not formally harmonized, corresponding rubrics could be identified and recognized, and if it is necessary further data can be manually added to the documents.

Introduction and integration of control and surveillance systems at Sukhbaatar/Naushki border crossing is considered (e.g. electronic tracking, camera surveillance systems at border crossing stations etc.; X-ray control in the border ports for the control the trains).

Good practices and simplifications at Sukhbaatar/Naushki border crossing station include:

- negotiation and preparation for electronic exchange of data between the railways companies, which is expected to start in 2017;


\textsuperscript{95}ESCAP team field visit at Sukhbaatar station in June 2016.
active cross border cooperation on border crossing with regular meetings between railways and customs authorities.

4. Alashankou (China) - Dostyk (Kazakhstan)

The Alashankou (China) - Dostyk (Kazakhstan) border crossing point is a major rail traffic link between China and Kazakhstan. The border crossing is open since July 1991 and the movement of international rail freight transport started in 1992. This border crossing also serves as a road transport link.

The railway infrastructure of Kazakhstan and the routes through Alashankou/Dostyk border crossing, support many options for connecting China, Central Asia, Russian Federation and Europe. Several Kazakhstan’s transport corrodors are passing through this border crossing including: northern corridors that connect with Trans-Siberian corridor, central and southern corridors of Trans-Asia-Europe links. The international railway transport corridors through the territory of Kazakhstan offer some of the shortest links between Northeast Asia with Europe.

The legal requirements on rail transport between China and Kazakhstan, across Alashankou/Dostyk border crossing, are laid down in the SMGS Agreement, as well as in several bilateral agreements between the governments, the ministries for transport and the railways of both countries.96

Break of gauge

The Alashankou/Dostyk border crossing is break of gauge point between 1,435mm gauge width in China and 1,520mm gauge width in Kazakhstan. Dual rail tracks with both gauge width are available between the Alashankou and the Dostyk border stations. The distance between the border stations is 12 km.

Figure 17: Rail links at the Alashankou/Dostyk border crossing

The use of different gauge width is a major issue that has to be addressed at this border crossing where it is necessary to organize operations such transshipment of cargo or bogie change. In accordance with OSJD rules, as a general principle, reloading and

96 Bilateral agreements between China and Kazakhstan are listed in Annex 4 of this Study
handover of wagons is done at the station of receiving railways. For movements from Kazakhstan to China, handover takes place in the Alashankou station; and for movements from China to Kazakhstan, in the Dostyk station. Facilities for bogie exchange are available at the Dostyk station.

Dealing with break of gauge issue is one of the main impediments for smooth movement across the border, which causes lengthy border crossing delays to be experienced at the Alashankou/Dostyk border crossing point.

For non-containerized cargo, a time-consuming reloading is required such as bulk-trans-loading of bogie exchange. For containerized cargo, the transshipment process is faster and includes moving of containers with a gantry crane, from flat wagons positioned on rails with one gauge to flat wagons positioned on rails with another gauge.

**Volumes of transport and type of goods**

The volumes of transport and transit across Alashankou/ Dostyk border crossing have shown strong growing trend in last 25 years. From modest volumes in the early years, to the peak volumes of around 17 million tons of cargo transported as recorded in 2013. The volumes transported from Kazakhstan to China are in general much higher than those from China to Kazakhstan, with some variation within respective portions.

In the recent years certain stagnation of the volumes is documented (e.g. in 2014 12.63 million tons are transported), which is mainly attributed to the shift of transport to other routes due to more favorable transport tariffs offered and global economic slowdown. Several additional factors may also be considered such as: concerns over border crossing impediments and long dwell times at multiple border stations along the corridors concerned.

**Box 7: Overall Rail Freight Transport Volume in Kazakhstan**

A large share from overall rail freight volumes transported in Kazakhstan is domestic transport (59 percent out of overall 244.2 million tons of rail freight volume transported in 2016). Dominant part of the rail freight volumes in international transport is Kazakhstan export, while import and transit across Kazakhstan represent smaller share. The Figure 18 presents the distribution of the internationally transported rail freight (export, import and transit) in total amount of 100 million tons in 2016.
Majority of the goods are transported along northern routes between Kazakhstan and Russian Federation. The data for 2016 are showing that 67 per cent of overall land rail freight was handed over at northern border crossings.

The volume of goods handed over at Dostyk and Alashankou border stations represents rather lower share of overall land rail border crossing movements (e.g. 9.5 per cent in 2016). However majority of rail freight transport between Kazakhstan and China was moved across Alashankou/Dostyk border crossing.  

Figure 18: Distribution of international rail freight transport in Kazakhstan (2016) (in million on tons)


Figure 19: Volume of freight through Alashankou - Dostyk (in million tons)

Source: OSJD Bulletins of statistical data on railway transport for 2006 – 2016 and ADB, CAREC Programme, Case Studies on Railway Border Crossing Points-I. Kazakhstan / People’s Republic of China (PRC)

Major categories of goods exported from Kazakhstan to China at Alashankou/Dostyk border crossing include: iron ore, ferrochrome, wheat, steel and crude oil, while in direction from China to Kazakhstan electronics are mostly exported goods.  

The cargoes in containers make more than 50 percent of the total transport from China to Kazakhstan. Most of the container trains are moving in direction from China to


Europe. The number of container block trains has substantially increased in the last five years: from 14 in 2011, 77 in 2013, 428 in 2015, to 479 container trains just in first six months of 2016.99

**Box 8: Altynkol/Khorgos – the second rail link between Kazakhstan and China**

A new rail freight border crossing connection between Kazakhstan and China was established at Altynkol (Kazakhstan) and Khorgos (China) in September 2012. In 2016 a volume of 0.85 million tons of cargo moved through this border crossing, which represents 6.5 per cent of freight transport between Kazakhstan and China. The transport is largely unbalanced with majority of cargo in containers moving from China to Kazakhstan.

The Altynkol/Khorgos border crossing facilities are equipped to offer: efficient operations for transfer of containers between wagons of different gauge at container yards. The new dry-port facilities at Altynkol station are expected to further improve cargo handling operations by offering storage services at rail connected warehouses; temperature-controlled chamber; reefer plug stations and other dry-port services.100

The growth of transcontinental container services contributes to increased volume of transit despite the decline of the absolute tonnage transported at Alashankou-Dostyk border crossing. The potential for higher transport volumes on corridors that move along Alashankou/Dostyk border crossing remains, due to expected growth of intercontinental trade. Therefore, it is very important to implement effective facilitation measures at this border crossing.

**Characteristics of the Dostyk (Kazakhstan) border station**

Full range of operations is performed at the Dostyk border station regarding reception and dispatch of trains that are crossing the state border. The station is official border crossing and a marshaling yard of national importance, where the trains can be break-up and configured for transport on the routes of several rail corridors that are passing through this border crossing.

The Dostyk border crossing covers area of 126,000 square-meters and it has several types of yards and transshipment points.101 To overcome the shortage of reloading capacity and to improve efficiency of the operations for screening, shunting, sorting, preparation and maintenance of rail wagons, several measures have been considered such as: widening of platforms and modernization of equipment at transshipment points. Despite the attempts to increase the capacity for processing of trains,

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99 National railway company Kazakhstan Temir Zholy (KTZ) web site; 21.07.2016; Transportation across the border station Dostyk: The account goes on millions: http://www.railways.kz/ru/node/10451
100 ESCAP, 2016 (unpublished), Development of seamless rail-based intermodal transport services in Northeast and Central Asia: Report on Transport Facilitation procedures and documentation in Kazakhstan (Author: P.J. Hodgkinson)
101 Kedentransservice; Market of Cargo Transshipment at Border Stations: Dostyk Station. Available at: http://www.kedentransservice.kz/node/81
possibilities for extensions of yards and rails tracks are limited due to topography of the area.

Figure 20: Development of rail tracks at Dostyk railway station

Presently at the Dostyk station there are few locations for rearrangement of the wagons from the bogies of one gauge to another. In addition to the open locations, there is a newer hangar type facility, where customs and quarantine operations take place. Several receiving - departure yards, with either 1520 mm or 1435 mm gauge, have function to increase the capacity of the border station and to support sorting operations. Separate yard for shunting operations on 1520 mm gauge is also available.

The transshipment points at the station are designed and equipped to handle certain types of cargo such as: unitized and packaged cargo; pipes; perishable goods; heavy loads and oversized cargo; bulk cargo and containers. Some of the transshipment points are located on open yards, and some on covered hangar type locations. The transshipment points are accordingly equipped with various loading equipment such as: gantry cranes, reloading cranes, mobile cranes, reach stalkers and forklifts.102

Total daily capacity of the Dostyk station currently is 344 container wagons, 130 covered wagons, 144 open wagons, 270 bogie exchange wagons and 100 wagons for petroleum products. Existent capacity of the Dostyk station allows movement of 20 million tons of cargo per year.103

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103 Қазақстан Темір Жолы — Железнодорожник Казахстана - KTZ News website: 01.08.2016; Dostyk – Years Friendship! (rus: Достык – 25 Лет Дружбы!). Available at: https://railnews.kz/newsrus/2016/08/01/достык-25-лет-дружбы.html
Control authorities present at the Dostyk station are:

- Border Service of the National Security Committee of the Republic of Kazakhstan for border security and immigration control;
- Customs control authorities of the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan;
- Control authorities for veterinary and phytosanitary safety of the Ministry of Agriculture; and
- Authorities in the field of sanitary and epidemiological welfare of population related with the Committee on Consumer Protection for organization and conduction of sanitary-quarantine control.

The Dostyk station is located at the external borders of the Eurasian Customs Union; therefore, responsibilities and control processes of the border control authorities are determined by Eurasian legislation and by national Kazakh legislation (box 9 below).

The railways company provides advance information in electronic form to the Customs authorities at least two hours before arrival of a train at the Dostyk border station. Upon arrival of a train the railways will start processing the paper based railway and other commercial documents.

**Box 9: Border Control in Kazakhstan**

In accordance with national legislation, at the border-crossing points of Kazakhstan operate control authorities competent for organization of: border, customs, transport, sanitary-quarantine, veterinary and phytosanitary control; as well as passport control of persons. The Border Service of the National Security Committee of the Republic of Kazakhstan has overall competence over organization of border crossing points and it is responsible for letting the persons, transport means and goods pass the border, upon clearance for entry or exit by State Revenue authorities or other control authorities. Sealed wagons and containers can be examined at request of the Border Service of the National Security Committee of the Republic of Kazakhstan, jointly with the State Revenue authorities of the Republic of Kazakhstan, if the integrity of the seals is compromised or upon indications that unauthorized persons have accessed the cargo.

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104 Article 66 of the Law on Customs of the Republic of Kazakhstan; and Decision No196 of 17 September 2013 on Introduction of mandatory advance information on goods imported in single customs territory of the Customs Union by railway transport

105 Art. 19 paragraphs (4) and (5) of the Law on Republic of Kazakhstan State Border (rus: Закон Республики Казахстан о Государственной границе Республики Казахстан (с изменениями и дополнениями по состоянию на 25.04.2016 г.). Available at: http://online.zakon.kz/Document/?doc_id=31320511#pos=1-307

106 More information on the Border Service of the National Security Committee of the Republic of Kazakhstan (rus: Пограничная служба Комитета национальной безопасности Республики Казахстан (ПС КНБ РК)) is available at: http://www.shekaraknb.kz

107 Art. 19 paragraph (6) to (9) and Art. 34 of the Law on Republic of Kazakhstan State Border
**State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan** is responsible for organization of customs control. For the goods arriving at the customs territory by rail, the Customs legislation requires providing documentation on transport means and transport of goods containing information on: the name and address of the consignor; the name and address of the consignee; the name of the departure station and destination station of the goods; the number of packages, their marking and types of packaging products; description as well as the codes of the goods at four digits level of the Harmonized System; gross weight of goods (in kilograms); and the identification numbers of the containers. The SMGS or CIM/SMGS railway consignment is recognized as a customs transit declaration.

**The Ministry of Agriculture** is responsible for organization of veterinary and phytosanitary control while the **Authorities in the field of sanitary and epidemiological welfare of population** related with the Committee on Consumer Protection are responsible for organization and conduction of sanitary-quarantine control.

At the entrance of the station from the border side, there is a Customs yard where all trains stop for state control, which includes: border security check, immigration control and initial customs control. The X-ray scanner facility is located after the Customs yard. Usually entire train is scanned to support customs control process.

After translation of transport and other commercial documents, such as invoice and packing list, corresponding customs declaration is prepared and submitted to the Customs authorities in electronic and paper based form. The customs declaration is registered and examined by the Customs authorities. Such control includes cross-check of X-ray scans and customs declaration, which enables non-intrusive count of packages and check of the contents against the goods declared.

The wagons and containers remain sealed with seals applied by the shippers or by foreign customs authorities unless the wagons are reloaded or the wagons/containers opened for physical control by the control authorities. The decision on detailed physical control is based on the system for risk management. Similar formalities are applied on transit and import procedure. If the goods are subject to veterinary, phytosanitary or sanitary-quarantine control the formalities will include corresponding control authorities.

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Note that until August 2014 the Customs control authorities use to be governed by the Customs Control Committee of the Ministry of Finance of the Republic of Kazakhstan (рус: Комитет таможенного контроля Министерства финансов Республики Казахстан (КТК МФ РК)), which was subsequently reorganized and merged with the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan.

109 Art. 21 of the Law on Customs of the Republic of Kazakhstan


The customs and controls by other authorities are take place at customs yard and at other designated places within the station. Customs and other regulatory clearance at the Dostyk station are conducted simultaneously with the break of gauge operations, which are major activity at the border crossing. Full range of import, export and transit customs procedures could be conducted at the station in accordance with national Kazakhstan customs legislation\textsuperscript{112} and customs legislation of the Eurasian Customs Union.

The Dostyk station is supervised by Kazakhstan’s National Railway Company Kazakhstan Temir Zholy (NC KTZ). The NC KTZ is a joint-stock company with a national welfare fund as a sole shareholder and holding structure. The Ministry of Transport and Communications of the Republic of Kazakhstan has control over the company.\textsuperscript{113}

The NC KTZ performs the function of the operator of the main railway network. Under the process of the NC KTZ transformation the function of cargo transportation was transferred from the NC KTZ to the affiliated company KTZ Cargo Transport on 1\textsuperscript{st} July 2016. The NC KTZ also acts as a customs declarant for export, import and customs transit procedures for goods transported by rail.\textsuperscript{114}

Main yard operator of the Dostyk station is Kedentransservice, which is joint venture of the leading container operator of the Russian railways TransContainer and the NC KTZ.\textsuperscript{115} Other stakeholders concerned at the Dostyk station are customs brokers and forwarding agents.

The railway operations are supported by a train operation center regarding control of the movements of locomotives and wagons, as well as by a shunting control center for the shunting operation. The train and wagon information is managed by railway information systems. A fiber optic cable connection is provided for communication between the railways at Dostyk and Alashankou stations.

A general and simplified outline of the processes at the Dostyk border station is presented at the Figure 21 below:

\textbf{Figure 21: General outline of the processes at the Dostyk station}

\textsuperscript{112} Law on Customs of the Republic of Kazakhstan (Rus: Кодекс Республики Казахстан О таможенном деле в Республике Казахстан (с изменениями и дополнениями по состоянию на 09.04.2016 г.)) http://online.zakon.kz/Document/?doc_id=30776062#pos=1.;-307

\textsuperscript{113} More information on NC KTZ is available at: http://www.railways.kz/en/node/1036

\textsuperscript{114} NC KTZ web site information to forwarding agents published on 23.06 2016 and 09.06.2016: http://railways.kz/ru/node/89

\textsuperscript{115} More information on Kedentransservice is available at: http://kedentransservice.kz/node/92
Characteristics of the Alashankou (China) border station

The Alashankou border port is one of the China’s national first-class ports of entry, able to handle high volumes of cargo and to provide wide range of rail transport operations. The extensive investments in infrastructure and equipment at the station have supported increased capacity and improved efficiency of movement across the Alashankou/Dostyk border crossing.

The border includes a 4,800 square-meter railway station, as well as several transshipment yards, goods yards and train maintenance sections. Most of the transshipment yards are covered. At the border station there are yards with sideline tracks and transshipping tracks for both 1435 mm and 1520 mm gauge.\(^{116}\)

The Alashankou port provides high efficiency of trans-loading operations at four centers adequately equipped with cranes and other loading equipment. The annual

capacity of 200,000 TEU is scheduled to be expanded with construction of new trans-loading center. The Alashankou station is presently one of the largest trans-loading capacities in ESCAP region.\footnote{ADB, 2014, CAREC Programme, Corridor Performance Measurement and Monitoring Annual Report for 2013. Available at: http://cfcfa.net/images/downloads/CPMM_AR2013_ENG.pdf}

The Alashankou port (also known as Alataw Pass Port) is one of the busiest land ports of entry in China. The first comprehensive bonded zone located in proximity of the Alashankou border port, is covering area of 5.6 square kilometers and started with official operations in June 2014.\footnote{Shanghai International Shipping Institute (SISI); 2014-07-02; First comprehensive bonded zone at Alataw Pass starts operation http://en.sisi-smu.org/index.php?c=article&id=12547} The comprehensive bonded zone at the Alashankou supports increased economic activities in the field of logistics, storage and international trade.

\textbf{Figure 22: Trans-loading process in Alashankou station}

![Trans-loading process in Alashankou station](Source: ADB 2014, CAREC CPMM Annual Report for 2013)

Control authorities present at the Alashankou station are:

- Exit/entry border inspection authorities of the Border Control department of the Ministry of Public Security of the People’s Republic of China;
- General Administration of Customs of the People’s Republic of China (GACC);
- Authorities of China Entry/Exit Inspection and Quarantine Association (CIQ) affiliated to General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China (AQSIQ).

Responsibilities of the border control authorities and control processes for the first class Chinese border crossings are in general standardized in accordance with Chinese national legislation as described earlier in the Box 3 and explanation provided at the part 1 of this Chapter (for Manzhouli border station).

The Alashankou border station is under jurisdiction of the Urumqi Railway Administration, which is one of the 18 railway administrations of China Railway. The
China Railways Container Transport Corporation Limited, which is a subordinate enterprise of China Railway, runs the rail operations at the container trans-loading centers located at the Alashankou station.

**Railway border crossing issues at Alashankou/Dostyk**

Despite some recent improvements, the time needed for crossing the border at Alashankou/Dostyk railway border crossing is very long. Presently it is expected that if everything goes smoothly, the movement across the border crossing takes approximately one day at Alashankou station and two days at Dostyk station. That is quite long compared to other major rail crossings in the region. The ADB CAREC Programme Corridor Performance Measurement and Monitoring Report for 2015 shows that the average dwell time for outbound traffic at the Alashankou station is 26.9 hours and for inbound traffic at the Dostyk station is 42.3 hours.\(^\text{119}\)

The capacity constraints and heavily congested facilities at Dostyk station are the main challenge for providing efficient handling of high traffic volumes. Lengthy border crossing delays are experienced at the Dostyk station, mainly due to break of the gauge activities, in particular with regard to: lack of available wagons (19 hours in 2015), insufficient capacity of reloading facilities (8 hours in 2015), and time consuming transloading at gauge change point (4.8 hours in 2015). Other issues such as emergency repairs (4 hours in 2014) and waiting due to faulty handling equipment (2 hours in 2014) have been also reported.

Even though the delays with regard to break of the gauge activities are high, it should be noted that significant reduction of the waiting at busy reloading of facilities is achieved at the Dostyk station (from 42.3 hours in 2014 to 8 hours in 2015).

The transshipment process for containers is faster than for reloading of non-containerized cargo and according to the NC KTZ it takes only about 5-6 minutes to lift and transfer a container from one wagon to another at different gauge. However, the dwell-time spent at the station even for the wagons with containers usually takes at least one day.\(^\text{120}\)

**Table 8: Alashankou/Dostyk border crossing times**

<table>
<thead>
<tr>
<th>Transload at Gauge Change Point</th>
<th>Alashankou (China) Rail (Outbound Traffic)</th>
<th>Dostyk (Kazakhstan) Rail (Inbound Traffic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 (hrs)</td>
<td>2015 (hrs)</td>
<td>2014 (hrs)</td>
</tr>
<tr>
<td>Transload at Gauge Change Point</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>


\(^\text{120}\)ESCAP, 2016 (unpublished), Development of seamless rail-based intermodal transport services in Northeast and Central Asia: Report on Transport Facilitation procedures and documentation in Kazakhstan (Author: P.J. Hodgkinson)
Train Classification

<table>
<thead>
<tr>
<th>Document Errors</th>
<th>Reissue Transit Documents</th>
<th>Customs Inspection</th>
<th>Busy Reloading Facilities</th>
<th>No wagons available</th>
<th>Restriction on Entry</th>
<th>Marshaling</th>
<th>Other reasons for Waiting</th>
<th>Total Mean</th>
<th>Total Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>/</td>
<td>/</td>
<td>4.4</td>
<td>4.0</td>
<td>42.3</td>
<td>24.0</td>
<td>8.6</td>
<td>36.0</td>
<td>42.4</td>
<td>23.0</td>
</tr>
<tr>
<td>/</td>
<td>/</td>
<td>3.2</td>
<td>0.5</td>
<td>3.0</td>
<td>0.9</td>
<td>0.5</td>
<td>4.0</td>
<td>26.9</td>
<td>24.0</td>
</tr>
<tr>
<td>/</td>
<td>/</td>
<td>0.5</td>
<td>4.3</td>
<td>3.0</td>
<td>0.9</td>
<td>0.5</td>
<td>4.0</td>
<td>59.7</td>
<td>46.6</td>
</tr>
<tr>
<td>/</td>
<td>/</td>
<td>0.5</td>
<td>4.3</td>
<td>3.0</td>
<td>0.9</td>
<td>0.5</td>
<td>4.0</td>
<td>42.3</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Source: CPMM Reports for 2014 and 2015

Even though there is an increased number of block container trains passing the border crossing, majority of the cargo is arriving at the Dostyk station in trains loaded with goods in individual wagons. Such trains need to be break-up and reconfigured for continuation of the movement along corresponding routes. Therefore, the railway operations such as: train classification (3 hours in 2015) and marshaling (7.3 hours), are also significantly contributing to the border delays at Dostyk station.

The border security, customs and other regulatory border controls take less time if compared with railway processes. A part of the regulatory controls could be done simultaneously with railway processes. The data from 2015 performance measurement show that average customs inspection takes 4 hours in Alashankou station and 2.9 hours in Dostyk station.

According to performance measurement data it seems that customs and other controls do not represent important constraint, however it should be noted that delays caused by control authorities may have direct impact on overall dwell time. Some of those controls are located at the entry/exit bottleneck points at the station and may represent requirement for continuation of other railway processes. Any extension of the time necessary for customs or other controls at such bottleneck points could increase the overall dwell time of the affected trains. Additionally, such delays could cause accumulation of dwell time for other trains waiting for entry/exit of the station.

The errors at railway transport and customs documents, as well as the reissue of transport and transit documents at the border stations, contribute for less than an hour indicating that they have relatively minor impact on the time spent at the borders. However, the cumulative effect on the delays caused by documentary requirements may also represent a factor for extension of the time for waiting at the border crossing.

In the Alashankou station the major reason for delays is the restriction from entering in the customs control zone. Such delays took in average 24 hours in 2015, which was improvement from 42.4 hours in 2014. The restrictions from entering in the customs zone are happening due to congested facilities at the Dostyk station that are not able to accept the volumes of traffic coming from the Alashankou station.
The implementation of new legislation requirements represents a common challenge at road and rail border crossings around the world, for the border agencies as well as for the trade and transport communities. Transport, customs and other regulatory requirements at the Alashankou/Dostyk border crossing, which are based on international conventions are providing solid basis for organization of efficient processes and procedures.

The Eurasian Customs Union provides integration of transport services and it enables modern customs procedures with positive impact on trade and transport facilitation, even though it introduces some additional requirements at external borders. For example, the introduction of the Customs Union between the Kazakhstan, Russia and Belarus resulted with longer border crossing times at external borders with non-Customs Union economies.\(^{121}\)

To benefit from favorable business environment, the private sector requires stability of transport, customs and other regulatory requirements including transport tariffs and other costs for crossing the borders. Therefore, any changes of the legislation and rules of operations, which introduce new requirements, should be less frequent, transparent and supported with well-prepared activities for change management such as: training of staff, outreach activities, test period etc.

In Mach 2016 problems have been experienced at Dostyk station regarding the implementation of advance information requirements introduced in accordance with the Customs Union and national legislation.\(^{122}\) In the beginning of implementation period the software that had to support submission of advance information from the railways to the Customs was not functioning properly. At the same time, the Customs was implementing the regulation that requires high-risk situation treatment and detailed control of goods in a case of failure to submit advance information. As result large volumes of cargo have been stopped at the border for customs control causing serious delays.\(^{123}\)

The issues with implementation of the advance information at Dostyk station have been relatively quickly resolved, however this example shows the necessity of good preparation for introduction on novelties, including testing period and corrective actions if necessary as well as addressing any issues from potential reluctance of national or cross border affected partners.

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\(^{122}\) Based on Decision No196 of 17 September 2013 on Introduction of mandatory advance information on goods imported in single customs territory of the Customs Union by railway transport

\(^{123}\) ESCAP, 2016 (unpublished), Development of seamless rail-based intermodal transport services in Northeast and Central Asia: Report on Transport Facilitation procedures and documentation in Kazakhstan (Author: P.J. Hodgkinson)
Even though dealing with transport, customs and other regulatory documents is not a major cause for delays at the Alashankou/Dostyk border crossing as specified earlier in this chapter, the measures for dealing with errors and reissue of documents are worthy for consideration.

There are number of consignments arriving at the Alashankou/Dostyk border crossing with national rail transport documents, in particular if they are coming from railway stations from China which usually do not serve international traffic. Such local rail waybills have to be translated to SMGS, or CIM/SMGS consignment notes at the border, which not only takes some time, but it can also cause errors that may produce additional delays.

The private sector often considers that documentary requirements are excessive especially in the case of transit. The problems encountered with documentation required for special types of good (e.g. certificates for dangerous goods) have been also indicated. Customs regularly requires hard copies of: consignment note, commercial invoice and packing list to be submitted for clearance of the goods including for transit procedure even if the customs declaration is submitted in electronic form. Further simplifications are considered based on submission of advance information between the railway and customs; and electronic submission of supplementary documents.¹²⁴

The rail transport operations are sometimes organized on fragmented way by using services directly from the railways or local freight forwarders instead of consolidated services provided from international freight forwarders. Such organization results in requirements for reissue of transport documents at the border crossings. In addition, that makes more difficult for the traders to trace their consignments when crossing the borders.

The customs legislation usually requires authorized customs brokers to submit customs documents at the border crossings. With the endeavor to reduce the number of middlemen in the border crossing process, the local forwarders, international forwarders and railways companies could be authorized to act as a customs broker. On the other hand such practice raises concerns over monopolistic behavior and increased fees as a result of lack of competition.

The issues of reducing fragmentations and improving supply chain on Eurasian connections across Central Asia including the links through China and Kazakhstan is discussed in more details in recent World Bank publication.¹²⁵

¹²⁴ ESCAP, 2016 (unpublished), Development of seamless rail-based intermodal transport services in Northeast and Central Asia: Report on Transport Facilitation procedures and documentation in Kazakhstan (Author: P.J. Hodgkinson)

¹²⁵ Rastogi, Cordula, and Jean-François Arvis; 2014; The Eurasian Connection: Supply-Chain Efficiency along the Modern Silk Route through Central Asia; Washington, DC: World Bank
Good practices and simplifications identified at Alashankou/Dostyk border crossing include:

- use of common CIM/SMGS railway consignment note;
- initiative for electronic exchange of information between railways;
- advance information on transport means and goods;
- fast border operations for container block trains;
- high efficiency of trans-loading operations at Alashankou port; and
- active cross border cooperation with regular meetings of the subcommittee on border crossings and customs cooperation.
5. Pingxiang (China) – Dong Dang (Viet Nam)

International railway links between China and Viet Nam include two lines: one is from Kunming (China) across Hekou (China) - Lao Cai (Viet Nam) border crossing to Ha Noi (Viet Nam), and the other is from Nanning (China) across Pingxiang (China) - Dong Dang (Viet Nam) border crossing to Ha Noi or other destinations in Viet Nam. Presently those two border crossings are the only international railway traffic links of Viet Nam.

The legal requirements on railway transport between China and Viet Nam are based on the SMGS Agreement. The bilateral agreements on cross border and transit railway transport provide the framework for organization of international railway transport between the two countries.  

All practical issues that have emerged from the implementation of the international railway transport between China and Viet Nam in previous year are addressed at the regular annual meetings and the conclusions are published as the Border Railway Conference Protocols that provide further implementation guidance.

**Break of gauge**

The Pingxiang/Dong Dang border crossing is break of gauge point between 1,435mm gauge width in China and 1,000mm gauge width in Viet Nam. However dual rail tracks with both gauge width is available from the Dong Dang border station to the Viet Nam capital city Ha Noi (Yen Vien station).

**Figure 23: Rail lines between the Pingxiang/Dong Dang border crossing station and Ha Noi (Yen Vien station)**

The existence of the dual gauge lines enables movement of Chinese wagons and rolling stock beyond the Pingxiang / Dong Dang border crossing. Because the transshipment of cargo or bogie change is not necessary, delays at the border crossings are minimized. In accordance with the cross-border railway agreement between China and Viet Nam, change of the locomotive and crew, as well as handover of goods at the Pingxiang/Dong Dang border crossing takes place in Vietnamese side at Dong Dang border station.

**Volumes of transport and type of goods**

Bilateral agreements between China and Viet Nam are listed in Annex 4 of this Study.
The volumes of international railway traffic and transport of goods at Pingxiang/Dong Dang border crossing are much lower if compared with other major railway border crossing in the ESCAP region.\(^\text{127}\)

In recent years there is a declining trend of the freight volumes transported across Pingxiang/Dong Dang border crossing. The volumes of goods transport are hugely unbalanced with majority of goods moving in direction from China to Viet Nam and only minor part of goods moving in opposite direction.

It seems that stagnation of the international railway traffic is mainly attributed to lower competitiveness of railway transport compared to other means of transport (e.g. high railway transport tariffs; fragmented and undeveloped logistics operations, low average train speed due to infrastructure constrains etc.) rather than to border crossing issues.

**Figure 24: Volume of freight through Pingxiang – Dong Dang** (in thousand tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Pingxiang to Dong Dang</th>
<th>Dong Dang to Pingxiang</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>423</td>
<td>30.7</td>
<td>453.7</td>
</tr>
<tr>
<td>2014</td>
<td>368.6</td>
<td>9.8</td>
<td>378.4</td>
</tr>
<tr>
<td>2015</td>
<td>346.3</td>
<td>1.2</td>
<td>347.5</td>
</tr>
</tbody>
</table>

Sources: Vietnam Railways; October 2016, Information provided to the ESCAP study team

Major categories of goods exported from China to Viet Nam include: steel plates, coils, chemicals, home appliances and other equipment, while in direction from Viet Nam to China, ore and tea are main exported goods. The goods in transit from and to third countries represent small part of the volume of goods handed over at the border crossing.

Presently there is no containerized cargo transport across Pingxiang/Dong Dang border crossing, however the railways authorities of China and Viet Nam are making efforts to introduce container services as well as refrigerated container services (e.g. in order to enable Viet Nam exports of seafood products and fruits to China, appropriate warehousing facilities are planned to be built at Pingxiang border station).

**Characteristics of the Dong Dang (Viet Nam) border station**

\(^{127}\) Table 4 - Selected Border crossings and volume of freight (2014) of this Study
The Dong Dang station is level one station that covers area of 129,014 square-meters that includes: main building, warehouse, freight yard, platform and premises for handover office. At the station there are 14 tracks, four of which are receiving-departure tracks, four are wagon assembly tracks, four are designated for cargo loading and unloading and one track is dedicated for repairing wagons.

Maximum capacity of Dong Dang station is 12 pairs of trains per day (12 incoming and 12 outgoing trains). Overall loading and unloading capacity allows handling of 65 wagons per day. Present Agreement between China and Viet Nam on border railway transport regulates that 8 pairs of trains with maximum tonnage of 1000 tones can be organized in both directions. The actual number of trains is much lower and usually it is within the range between two and six trains per day. The average number of cargo trains in 2015 was less than 4 per day in both directions.

Full range of operations is performed at the Dong Dang border station regarding receiving and sending of trains across the border. In most of the cases import customs clearance is done in inland customs offices in Viet Nam, with minimum customs formalities at the Dong Dang border station. Import and export clearance can be organized at the border crossing as well.

**Box 10: Hekou/Lao Cai rail link between China and Viet Nam**

The freight border crossing at Hekou (China) - Lao Cai (Viet Nam) has handled variable volumes of traffic in recent years that had amounted to similar level as Pingxiang/Dong Dang border crossing in 2015.

**Figure 25: Volume of freight through Hekou – Lao Cai (in thousand tons)**

In accordance with the cross-border railway agreement between China and Viet Nam, change of the locomotive and crew, as well as handover of goods at this border crossing takes place in Chinese side at Hekou. There are two lines that connect Hekou and Kunming (China): old 1,000 mm gauge rail track line from Hekou North station and new Hekou – Mengzi – Kunming line from Shan Yao border station that runs over standard 1,435 mm gauge opened in 2014. Lao Cai (Viet Nam) and Shan Yao (China) border station are connected with 1,000 mm rail gauge line.
Control authorities present at the Dong Dang (Viet Nam) station are:

- Vietnam Immigration Department authorities under the Ministry of Public Security for border security and immigration control;
- General Department of Vietnam Customs authorities;
- Quarantine and Health authorities.

Railway Border processing and control process at Dong Dang station

In accordance with the Agreement between Chinese and Viet Nam railways administrations the railway staff of departure border station informs the counterpart at receiving border station every day at 1800 hrs. about the plan of the cargo to be exported in next day (including number of wagons, destination, cargo description, information on consigner and consignee). This information is exchanged by telephone.

The arriving and departing trains briefly stop at the border line, where the officers of the Vietnam Immigration Department authorities get on or off the train. The immigration officers escort the trains from the border line to the border station on arrival and from the border station to the border line on departure.

**Figure 26: Dong Dang railway border station**

Source: ESCAP Study team, October 2016

The Vietnam Immigration Department authorities oversee checking of passports and visa requirements as well as security controls at the border crossing. The railway staff can cross the border, and perform the duties within the border area and at the border
crossing stations, only with their personal railway staff cards, without visa to be issued. For other staff, multiple entry visas could be issued. The Immigration Department authorities do not check transport and commercial documents. If some security control is required physical inspection could be arranged in cooperation with customs authorities.

At arrival of a cargo train, the staff of the railways handover office receives a list for commercial cargo inspection and checks the serial number of wagons, serial number of seals, and compares other information from invoices, other relevant documents and the handover list. In case of any inconsistencies, both sides do joint checks again, prepare a record on actual situation and the delivery side has the responsibility to provide a remedy.

After the handover is finalized all transport documents are presented to the Customs office to process the transport documents in initial customs check upon entry of goods in the customs territory. The waybills (railway consignment notes) filed in Chinese (or Russian form SMGS consignment notes for goods in transit across China) are translated in Vietnamese by the railway staff at the Dong Dang station. After checking the documents, as well as the cargo if necessary, the customs authorities stamp the waybill. The staff of the railways handover office receives back all documents and delivers them to transport companies/forwarding agents.

A large portion of the cargo (approximately 60 per cent) is not unloaded/loaded at the border crossing and moves to/from inland customs offices in national customs transit procedure. For the customs transit procedure, transport company/forwarding agent should submit to the customs office transport document in electronic form, based on already available waybill and other paper-based documents. Transit guarantee is not required. Generally, the goods that move in customs transit procedure from/to Dong Dang border station to/from inland customs office are not subject of documentary and physical control at the border station. For such goods, the customs controls are completed in inland customs offices, where the cargo is unloaded/loaded and cleared for import/export.

If the goods are subject to quarantine, veterinary or phytosanitary control the formalities must be completed by the corresponding control authorities at the border station. The Quarantine and Health authorities physically inspect approximately 50 to 60 percent of the goods subject to their control.

In accordance with the preference of the importers/exporters, the goods may be cleared for import/export and unloaded/loaded at the Dong Dang border crossing. Such goods represent approximately 40 per cent of overall cargo and they can continue to be transported by road or by rail using domestic rail tariffs.
Electronic customs declarations are applied in Dong Dang station from January 2011 and electronic customs data processing systems of customs offices at Yen Vien station and Dong Dang station are connected from January 2016.

The decision on detailed physical control is based on risk management. If the goods are selected on green channel, the customs authorities do not control the documents and goods. When the goods are selected on yellow channel only the documents are being controlled and such formalities take approximately 15 minutes. About 10 to 20 per cent of the goods are selected in red channel, where in addition to documentary control the goods are physically inspected. Such control may take from 30 minutes up to four hours depending on goods that should be inspected and unloading/loading activities that may be required. The customs authorities have the right to do post clearance control of the goods in the period of 60 days after import clearance or control the customs related documentation in period of 5 years.

A general and simplified outline of the processes at the Dong Dang border station is presented at the Figure 27 below:

**Figure 27: General outline of the processes at the Dong Dang station**

![Diagram of processes at Dong Dang station](image)

Many of the processes of the railway administration and the procedures of customs and other control authorities at the Dong Dang railway border crossing station are performed simultaneously. The standard times for handling export/import/transit freight train are 60 minutes for railway operations and 60 minutes for immigration and customs control or overall time of 60 minutes. When it is required to reassemble the train the standard times could be extended up to 120 minutes.
Railway border crossing issues at Pingxiang/Dong Dang

The border crossings issues and time delays presently do not represent any significant challenge for the freight transport at Pingxiang/Dong Dang, due to currently low levels of railway freight traffic.

Presently there is no electronic support for exchange of information (railways to railways and railways to customs). Viet Nam railways administration still does not have an advanced electronic information system and railway stations are not electronically interconnected. Information is mainly exchanged by telephone and with paper based documents. However, the railways and the border control authorities manage to efficiently processes data on departure and receiving trains without automation due to low levels of traffic and small number of wagons to be processed.

The railways and customs control equipment is limited (e.g. only weight scales and some loading/unloading equipment is available). Presently there is no X-ray scanner facility or other automated control systems at the border station. The current equipment’s at the border station are considered sufficient having in mind that large part of the cargo continues in transit to the inland customs offices and it is not a subject to physical customs controls at the border crossing station.

In the future, if the volumes of freight traffic increase (which mainly depends on other factors such as railway infrastructure improvements, favorable rail freight tariffs, improved logistics services, introduction of container and refrigerated container services etc.), then the efficiency of border crossing procedures and controls may become an issue and introduction of automation, electronic exchange of information, automated and non-intrusive control systems should be considered.

Box 11: Passenger Transport at Pingxiang/Dong Dang border crossing

When the passenger train arrives at the border stations Pingxiang (China) and Dong Dang (Vietnam), the passengers have to get off the train with all of the luggage and proceed with the administrative border procedure: customs inspection, immigration and quarantine control organized in same time.

Present administrative border inspection procedures are burdensome for the passengers and total time to finalize the procedures can take up to 3 hours for each station.

The railways administrations and control authorities are considering solutions to address this challenge and streamline border-crossing procedures for passengers, which will increase competitiveness of international railway passenger transport services.

The dual gauge from Dong Dang station to Hanoi is very efficient solution for dealing with break of gauge at the border crossing. The configuration of three rails enables movement of 1435 mm and 1000 mm gauge wagons on the same rail line. Transloading of the cargo at the railway border station with dual gauge tracks is not required, which
streamlines the process of crossing the border by rail. As result the delays at the railway border crossing are minimized and operational costs are lower.

**Figure 28: Dual Gauge at Dong Dang railway border station**

Several other good practices are implemented at the Dong Dang border crossing regarding the goods that move under customs transit from the border station to the inland customs office for import clearance:

- new domestic consignment note does not have to be produced at the border railway station if in the international consignment note (e.g. SMGS consignment note) an inland international railway station is stated as a destination (e.g. Yen Vien station near Ha Noi);
- only electronic transport document to be submitted by the transport company to the customs authorities for customs transit and movement from the border crossing to the inland customs office. The customs authorities recognize the paper based consignment note;
- customs information systems of the customs offices at the border station Dong Dang and inland station Yen Vien are connected, which enables prompt exchange of information and tracing of the customs transit status;
- customs transit guarantee for movement of goods by rail is not required;
- for the customs transit the customs authorities do not require any other documents (e.g. paper based customs transit declaration; invoices, packing lists) to be submitted at the border crossing railway station; and
- generally, customs authorities at the border station do not control documents and do not physically inspect the goods that move in customs transit to the inland customs office.

6. Padang Besar (Malaysia) - Padang Besar (Thailand)
The rail border crossing Padang Besar (Malaysia) – Padang Besar (Thailand) is presently the only operational railway rail link between Malaysia and Thailand for both cargo and passengers. The Padang Besar railway border crossing is designated for cross-border traffic in the Joint Traffic Working Agreement between Malaysia - Thailand Railway (1954) as amended in 1989.

The Agreement signed between railway organizations of Malaysia and Thailand enables cooperation on various aspects of railway operations including: handling of traffic and use of the joint boundary station; exchange of rolling stock; payment for hire of rolling stock; through traffic of passengers, livestock and goods; proportional division of fares, freights and other receipts from and through traffic between two countries; liability claims in respect of through traffic; and other matters necessary to ensure efficient and economical railway operations. Regarding facilitation of through traffic, the Agreement provides for provision of terminal facilities, use of common language, and passes to railway employees.

At the Padang Besar border crossing there is no break of gauge since the both railways run on same 1,000 mm gauge width. A change of crew and locomotive is required and organized at Padang Besar (Malaysia) joint boundary station.

**Figure 29: Padang Besar (Malaysia) railway border station**

Source: ESCAP Study team, January 2017

Based on Joint Traffic Working Agreement, the cross-border rail freight service between Malaysia and Thailand, started in June 1999 in partnership between KTMB
and State Railway of Thailand (SRT). This service, known as land bridge service, offers movement of cargo in block container trains between ports and inland container depots (ICD) in Malaysia and Thailand. Presently six train land bridge services are offered weekly. The KTMB is providing the flat container wagons and several private operators who own/operate the containers are offer the land bridge service to the customers.

The land bridge transport service for block container trains, between one point in one country (port or ICD) to another in other country (port or ICD), enables simplified processing of trains at the Padang Besar border crossing. In this case reconfiguration of the train is not needed, there is no rail to rail and/or road to rail transshipment, documentary requirements are simplified and there are minimal controls at the border.

**Figure 30: Landbridge Business Model – Flow of Practices**

Source: KTMB Presentation Cross-Border Freight Service Malaysia Thailand, January 2017

The land bridge train service runs in both directions, southbound form Thailand to Malaysia and northbound Malaysia to Thailand, however trade flows are not balanced and in general more goods are carried out southbound. The quantities of the containers transported by the land bridge train service have been variable over the years. From initial quantities of around 12 thousand twenty-foot equivalent units (TEU) carried in 1999, the number of containers transported by the land bridge train service has grown rapidly to above 52 thousand TEUs in 2004 and then fell to lowest level of less than 4 thousand TEU in 2014. Presently there is a rising trend of the quantities of containers transported, reaching around 16 thousand TEUs in 2016.

**Figure 31: Quantities of containers transported by landbridge train service (TEU)**
Despite the benefits that land bridge block train service is offering, such as lower operational costs and streamlined border crossing procedures, the volumes of cargo transported by land bridge block train service are far below their potential. The reasons for the decline are attributed to several factors including shortage of locomotives and single-track infrastructural constrains in Thailand as well as increased competition with intermodal (road/rail) services.

The six weekly land bridge train services represent only a small part of operations at Padang Besar railway border crossing. Majority of the southbound cargo arrives to the Padang Besar Terminal located next to Padang Besar (Malaysia) railway station on containers loaded on Thai trucks. The Padang Besar Terminal has a single entrance and foreign trucks are not permitted to enter in Malaysia. Therefore, the containers loaded on Thai trucks are transshipped on KTMB trains. The KTMB provides South Thai Cargo (STC) container train service that connects Padang Besar inland terminal and Penang port (Malaysia) from where the goods are shipped for export.

Daily five trains, transporting laden containers with cargo from South of Thailand moves under national customs transit procedure, in domestic railway transport from Padang Besar to Penang port. In opposite direction five trains bring empty containers from Penang port to Padang Besar to be exported and loaded on Thai trucks at the Padang Besar Terminal.

Around 90 per cent of all containerized cargo handled at Padang Besar railway border crossing are rubber products (rubber wood, rubber bales, rubber latex, rubber based items such as gloves, tires etc.), while remaining 10 per cent are other commodities such as automotive spare parts, steel based products, furniture and food products.
The cross-border land bridge train service share was only three percent of overall containerized commodities transported by KTMB in 2016. Majority of freight or 67 percent was carried with STC train service. Other domestic KTMB container services include land feeder train service that connects the ports and dry ports on the west coast of Peninsular Malaysia, and inter terminal transfer (ITT) train service for transshipment of containers between two domestic ports.

Control authorities and other stakeholders

Control authorities present at the Padang Besar (Malaysia) railway station are:

- Malaysia Immigration Department (Security and Passport Division) for security and immigration control;
- Royal Malaysian Customs Department authorities;
- Quarantine and other authorities if necessary for specific types of goods.

The Auxiliary Police is present on the gate check in the adjacent Padang Besar Terminal.

Multimodal Freight (MMF) is a wholly owned subsidiary of KTMB that operates the Padang Besar rail terminal.

KTMB and MMF operate 24 hours, however cross border operations and control formalities are available from 0600 hrs. to 2100 hrs. daily.

Railway Border processing and control process at Padang Besar (Malaysia) station

Railway operations and processes at the Padang Besar (Malaysia) railway station are in general organized by KTMB. Since the Padang Besar (Malaysia) is the joint station under the Joint Traffic Agreement the operations for cross border trains are executed in cooperation between KTMB and SRT. At the station, there is an office of SRT as well. The SRT office at Padang Besar (Malaysia) communicates with SRT office at Padang Besar (Thailand) by telephone and railway documents are exchanged manually upon arrival of the train. KTMB and SRT offices closely cooperate at the Padang Besar (Malaysia) railway station. The communication between KTMB and SRT is mainly by telephone and regular direct contacts. The railway paper based documents are manually
exchanged. Technical inspections on cross border trains are organized jointly between KTMB and SRT.

Upon arrival of land bridge southbound cargo train at Padang Besar (Malaysia) a wagon list and SRT consignment note (container carload invoice) is presented. The SRT container carload invoice serves as an entry cargo manifest for KTMB. Relevant data from the SRT consignment note are keyed in the KTMB information system and KTMB consignment note (Borang Kiriman) is created. Presently KTMB electronic information system is not connected with the customs information system.

The Customs check the documents of the land bridge southbound cargo, such as paper based consignment note and accompanied documents (e.g. invoice, packing list). Customs do not retain the documents checked. Subsequently forwarding agents prepare and electronically submit customs declarations for import (K1 form) or for transit (K8 form). In the case of land bridge northbound cargo, including for empty containers, customs declaration for export (K2 form) is required to be submitted.

Customs transit clearance formalities at Padang Besar border crossing are minimal and include only documentary control without physical inspection of cargo. Malaysian Customs reseal all southbound containers arriving at the border station by road or by rail with customs seals.

It should be noted that the construction of the KTMB container wagon platforms (extended and elevated part of the wagon platform) enables a safety feature that restricts opening of the container doors while the container is loaded on a wagon.

**Figure 33: Landbridge train at Padang Besar (Malaysia) station**

Source: ESCAP Study team, January 2017
The railway operations and customs formalities at the Padang Besar border crossing take about three hours. Regular customs clearance formalities, including risk analysis and physical examination of selected containers and goods are performed at the ports and ICDs of loading and discharge.

**Box 12: Passenger Transport at Padang Besar (Malaysia) border crossing**

The border controls for passengers crossing the border between Thailand and Malaysia by rail are carried out in shared facilities, at the Padang Besar (Malaysia) station. Border agencies of Thailand have their respective offices at the station, though officials are only present when a train is arriving.

Both Thailand and Malaysian Customs, immigration and quarantine authorities conduct a single stop border control inspection for passengers at the common facility.

Upon arrival, passengers exit the train to the platform with their luggage and move to clear the exit immigration procedures of the country of departure. After this, they move to the opposite side of the controls building, where they go through the passport control and luggage check of the destination country. Customs is responsible of ensuring that each part of the train is checked. The process takes about one hour and the flow of controls is indicated clearly.

**Railway border crossing issues at Padang Besar**

The Padang Besar railway border crossing offers an example of joint cross border operations especially for passenger transport and railway technical inspections. Cross border rail freight operations (land bridge operations) are simple and streamlined, primarily due to organization of railway transport only with block container trains. This allows minimal operations and controls to be implemented at the border crossing which reduces the time spent at the border. Good cooperation between the railways of both countries is evident. Various operational issues are regularly being addressed at weekly border crossing working group meetings.

Presently there are no significant challenges for the freight transport at Padang Besar mainly due to relatively low levels of cross border rail transport, simplified transit formalities and uniform type of commodities transported. Electronic support for exchange of information (railways to railways and railways to customs), use of common railway consignment note and easing of customs sealing requirements (e.g. recognition of railways and/or foreign customs seals) could be considered for further facilitation and simplification of cross border formalities.
7. Sarakhs (Islamic Republic of Iran) - Saraks (Turkmenistan).

The Sarakhs/Sarak and the Incheboroun/Gudriolum are the two international railway border crossings between Islamic Republic of Iran and Turkmenistan. The Sarakhs/Sarak border crossing, that became operational in 1996, is the main railway link between CIS countries (e.g. Turkmenistan and Kazakhstan) and Islamic Republic of Iran, which also provides access to the Iranian ports at the Persian Gulf. Presently around 85 per cent of the rail transit across Islamic Republic of Iran is handled over Sarakhs border station.\textsuperscript{128}

The legal requirements on international rail transport between Islamic Republic of Iran and Turkmenistan are based on the SMGS, PGW and other OSJD agreements. The protocol signed between the two countries further details the framework for organization of cross border railway transport. The protocol is addressing several operational issues such as organization of: bogie change, exchange of trains, transit and mutual cooperation.

**Break of gauge**

The Sarakhs/Sarak border crossing is break of the gauge point between 1,435mm gauge width in Islamic Republic of Iran and 1520 mm gauge width in Turkmenistan. The rail tracks between border crossing stations run on both 1520 mm and 1435 mm gauge, around 5km in the territory of the Islamic Republic of Iran and around 200 meters in the territory of the Turkmenistan.

**Figure 34: Organization of bogie change at Sarakhs/Sarak border crossing**

![Organization of bogie change at Sarakhs/Sarak border crossing](image)

Source: Mr. Mohammad Hadi ZiaeiMehr Director General of Khorasan Railways (Iranian Railways); May 2017; Presentation to the ESCAP study team

\textsuperscript{128} Mr. Mohammad Hadi ZiaeiMehr Director General of Khorasan Railways (Iranian Railways); May 2017; Presentation to the ESCAP study team
The existence of rail tracks with both gauges between the two border crossing stations allows the locomotives of both railways to move between them. In accordance with the protocol on organization of cross border railway transport the exchange of trains from Turkmenistan to Islamic Republic of Iran is on receiving Iranian side with Turkmenistan locomotive and operational staff. The exchange of trains from Islamic Republic of Iran to Turkmenistan is organized on Turkmenistan side were the trains are received with Iranian locomotive and operational staff.

A change of bogie systems organized in both countries is the principal way of dealing with break of gauge. In accordance with the protocol for organization of cross border railway transport, both counties have to change the bogie systems in equivalent shares (50% in Sarakhs Islamic Republic of Iran and 50% in Saraks Turkmenistan).

In principle the dispatching side could decide which trains will be subject to bogie change of the wagons in their own country and which trains will be sent to the receiving country for change of bogies.

As a general rule the bogies are changed for outgoing trains in both countries. For the trains moving from Turkmenistan to Islamic Republic of Iran the bogies are changed in Turkmenistan and the wagons arrive at the Iranian side on Iranian standard gauge width (1,435mm). In opposite direction for the trains moving from Islamic Republic of Iran to Turkmenistan the bogies are usually changed in Iranian side and the wagons arrive at the Saraks on Turkmen side on Turkmen broad gauge width (1.520mm).

The capacity for change of bogies in both countries is not balanced. On Iranian side there are two bogie change stations located around 5 km from the border line. The new bogie change station has 24 sets of jacks and the original bogie change station has 25 sets of jacks.

Figure 35: Bogie change section at Sarakhs (Islamic Republic of Iran)
Four lines of the bogie change stations in Iranian side can work simultaneously achieving time of one hour for bogie change on 12 sets of jacks for the broad gauge or 45 minutes for standard gauge. The bogie change stations have a capacity to deal with 200 wagons per 24 hours each. Present capacity for change of bogie systems to total of 400 wagons per day represents significant improvement from the original capacity for dealing with about 100 wagons per day when the Sarakhs station opened in 1996.

For the outgoing trains the bogie change stations can be prepared in advance based on information on the wagons obtained from the place where the goods are originally loaded. Early preparation of the bogie change station for incoming trains is not possible (and usually not required since the wagons are coming with changed bogies on the gauge of receiving country) due to lack of sufficient cross border exchange of information.

The Turkmenistan bogie change station located next to the border line (at approximate distance of 200 meters) has lower capacity for dealing with about 150 wagons per 24 hours.

Volumes of transport and type of goods

The Sarakhs railway station has a capacity to deal with 7.5 million tons of freight on yearly basis. The actual volumes of international railway transport of goods at Sarakhs/Sarks border crossing have been variable over the years.

**Figure 36: Quantities of cargo transported at Sarakhs Border Station (1000 tons)**

![Graph showing quantities of cargo transported at Sarakhs Border Station](image)

Source: Mr. Mohammad Hadi Ziaei Mehr Director General of Khorasan Railways (Iranian Railways); May 2017; Presentation to the ESCAP study team
The highest quantities of 3.4 million tons transported goods have been recorded in 2010, which declined to the 1.6 million tons in 2014 (mainly attributed to the reduction of goods in transit). Upon 53 per cent increase of the freight moved across the border in 2015, the total quantities of transported cargo slightly decreased in 2016 to reach the level of 2.3 million tons.

In recent few years the quantities of transported goods in transit across the Islamic Republic of Iran have been increased, and in 2016 they represent more than 50 per cent of total transported goods. Presently the import/export volumes are relatively balanced with slightly higher quantities of exports from the Islamic Republic of Iran to Turkmenistan.

While volumes of oil products are showing declining trend the volumes of transport of non-oil products (e.g. agricultural products, grains, steel and steel products and other commodities) has been increased. Presently there is no significant containerized cargo transport across Sarakhs/Saraks border crossing mainly due to the types of goods transported.

*Characteristics of Sarakhs (Islamic Republic of Iran) border station*

The Sarakhs border crossing area covers about 310 hectare that includes 65 lines (49 lines on standard gauge and 15 lines on broad gauge), main station building, warehouse, platform and other supporting facilities. The station is organized in three sections for: exchange of trains; bogie change; and formation of trains.

The border crossing presently is open from 8 am to 8 pm, while the regular working hours of Customs and Quarantine services is from 8 am to 2 pm. If necessary and upon request the Customs authorities can extend the regular working hours, which is subject to payment of charges.

At the Sarakhs station full range of railways operations is performed with regard to receiving and dispatching of trains across the border. When necessary some wagons could be attached or detached from the train composition, however the station is not serving as a marshaling yard for significant reconfiguring of trains. At the station there are no major warehousing and storage facilities and there is no road to rail or rail to road transshipment activities.

The import customs clearance could be done at the Sarakhs border crossing station or the goods could continue to some of the inland customs offices in the Islamic Republic of Iran for import clearance, warehousing or transshipment. First major inland railway station that could serve as a dry port, is Motahari Railways station.
Box 13: Motahari railways station with dry port capability

The Motahari railways station is located around 160 km from Sarakhs border station inland to the south in the territory of the Islamic Republic of Iran. The station is strategically positioned nearby regional center Mashhad (40 km), and on the railway corridors to the Iranian ports in at the Persian Gulf (e.g. Bandar Abbas) and eastern corridors toward the capitol city Teheran and further on the railway border links with Turkey and Azerbaijan. The Motahary railways station is located 70 km to Afghanistan border on the west, which also represents future potential railways link.

The Motahary dry port capability is being improved with construction of new station building where railways, customs and other stakeholders involved will work together. The facilities around Motahari station include customs warehouses equipped for loading and unloading of different types consignments including bulk cargo and containers. At the Motahari station there are capacities for storage of 90 million liters of fuel.

Figure 37: Railway loading and unloading capacities for oil products

Source: Zalpars Company

Import/export and transshipment operations could be organized at the customs warehouses and at the premises of several private companies that operate in the proximity of the station. The cooperation for customs clearance between customs authorities and some of the private companies includes electronic exchange of data from electronic scales for measurement of weight of tanker trucks; control cameras on the faucets for different oil products; access to the from the electronic devices installed for measurement of the volume of the oil products at the storage facilities.

Presently all customs controls and sealing are done by the customs, however introduction of facilitation schemes based on granted status of authorized economic operator to the reliable operators could be considered.
Control authorities present at the Sarakhs station (Islamic Republic of Iran) are:

- Border Security Guards;
- Police;
- Customs authorities;
- Quarantine authorities.

Khorasan Railways is the branch of the Iranian Railways that runs the railways operations at the Sarakhs border crossing. The Iranian Railways provides the railway infrastructure; has a role in regulation of railways transport; and serves as a carrier (with locomotives owned and operated by the railways). In the process of privatization all wagons of the Iranian Railways are transferred to the private transport operators. In a case of transit, the CIS countries are providing the wagons for transit operation across the Islamic Republic of Iran, subject to demurrage charges.

At the border line the border security guards operate 24 hours controlling the entry and exit, into and from the Iranian territory. The trains briefly stop for immigration control, and the police officers accompany the trains from the border line to the Iranian exchange section located around 5 km inland.

The communication between the Iranian and Turkmenistan exchange offices is by phone. The trains are announced 30 minutes before the arrival of the train at the exchange section. Presently there is no electronic exchange of data between neighboring railways undertakings. Upon arrival of the train at the exchange section the paper-based documents are physically exchanged (e.g. wagon lists and SMGS consignment notes). Afterwards the data from the railways documents are keyed in the electronic system of the Iranian Railways (Khorasan Railways).

The procedure for exchange of trains is usually organized for both incoming and outgoing trains and the overall time for the formalities in both directions, which includes technical inspection as well, is approximately 3 - 4 hours. The standard expected time is set for 1 minute per wagon axle.

The trains have to wait for the procedure of exchange of trains to be finalized in order to proceed with change of bogies when necessary. It should be noted that the change of bogies on incoming trains occurs rarely since the wagons are usually coming with already changed bogies on a gouge width of the receiving country.

The railways personal can easily move between the border stations of both countries using personal temporary cross border documents issued by railways authorities with validity of 6 months. Daily list of authorized personnel that will cross the border is exchanged as well.

The documents for the railways customers, forwarding agents and customs are then processed by the railway import section, which also deals with payment of railway
related charges. The communication between the railways and customs presently is done only with paper based documents, however recently a project for connection between railways and customs electronic systems was initiated. Customs usually requires paper based documents such as: SMGS consignment note, invoice, certificate of origin and code of payment of duties and charges to be submitted. In a case when the goods are subject to quarantine and other specialized controls, the customs authorities coordinate all necessary formalities with the relevant authorities.

The customs authorities perform the inspections of goods based on risk assessment and selectivity. The goods placed on red channel (e.g. sensitive and high risk goods) are subject of 100% physical control that could last up to 3 days. For the goods placed on yellow channel, the documents can be examined up to 14 hour. The clearance for the goods on green channel is expected to be finalized within 3 hours.

A general and simplified outline of the processes at the Sarakhs border station is presented at the Figure 38 below:

**Figure 38: General outline of the processes at the Sarakhs station**

Upon clearance of the goods for import or transit the customs authorities issue a paper based receipt that the cleared goods can move into the country and the formalities for formation of train and dispatch from the border station can proceed. Most of the cargo moves across the border in Sarakhs in the same day.

At the railway control room all train movements at the border station and on the relevant corridors could be followed. The communication between Iranian railway stations is provided with optic fiber link.
The organization of transit involves several steps including request to the railways for transit through a representative in the country of transit (e.g. Iranian representative or authorized freight forwarder request the transit from the Iranian railways in the name of Turkmenistan Company). Upon acceptance for transit the transit railways undertaking notifies the partner railways undertaking of the neighboring country (e.g. Iranian Railways notifies the Turkmenistan Railways that the transit is accepted. Each railways undertaking organizes transit operations in its territory.

In addition, permission from customs authorities is required for customs transit and for transshipment. The application for customs transit and transshipment is submitted in paper form to the local customs office. Then the application is electronically communicated to the Customs Headquarters (in Teheran) authorized to make the decision upon application. The permission is subsequently communicated to the customs offices concerned such as entry customs office (e.g. Sarakhs) and exit customs office (e.g. Bander Abbas port). Border crossing offices are electronically connected to follow the movement of transit. In a case of transshipment the permission is communicated from the Customs Headquarters to the office responsible for supervision (e.g. Motahari).

For the goods in transit an insurance type of guarantee is required for all goods and a financial type of guarantee is compulsory for sensitive goods such as agricultural products and oil products. For the temporary admission of the wagons in transit a guarantee is not required.

**Railway border crossing issues at Sarakhs/Saraks**

The border crossings issues and time delays presently do not represent major challenge for the freight transport at Sarakhs/Saraks mainly due to the levels of railway freight traffic that are currently lower than the capacities of the border crossing.

Disparity of the bogie change capacities at the two border crossing stations is the issue that may require some attention. An increase of the bogie change capacity and/or more optimized use of present overall capacities for change of bogies in both countries could be considered to tackle possible issues for dealing with break of gauge in a case of higher volumes of freight railway traffic at the border crossing. A modality for flexible use of the rule for equivalent shares of bogie changes should be explored in order to avoid extended delays due to limited bogie change capacities.

In a case when the change of bogies is done in receiving country the railways undertakings of both countries should be encouraged to exchange in advance relevant information that will enable early preparation of the bogie change stations.

Presently there is no electronic support for exchange of information between main stakeholders (railways to railways and railways to customs). In order to further facilitate the railways and customs formalities, the neighboring Iranian and Turkmenistan
railways could consider introduction of railways to railways electronic exchange. Recently started endeavors to link the Iranian railways and customs electronic systems are expecting to result in improved communication with replacement of paper based documents with corresponding electronic messages. These improvements should encourage simplification of railway border crossing formalities.

Risk management system could be strengthen with processing of pre-arrival information and improved risk analysis that will enable targeting of the risk cargo with lower levels of consignments selected on red channel for 100 per cent physical inspection.

The organization and authorization for customs transit and transshipment is complex and requires decision making on central level that involves several formalities and communication steps. Even though the application for the customs transit is paper based, electronic support for interaction is provided that partially facilitates the process for organization and authorization of transit.

The railways and customs control equipment is limited. Presently there is no X-ray scanner facility or other automated control systems at the border station. If the volumes of freight traffic are increased the efficiency of border crossing controls may become an issue and introduction of automation, electronic exchange of information, automated and non-intrusive control systems should be considered.

Several good practices implemented at the Sarakhs border crossing include:

- use of common SMGS consignment note;
- well organized bogie change stations with sufficient capacity;
- electronic submission of customs declarations;
- interconnection of the Sarakhs customs office and other customs offices at border stations, which enables prompt exchange of information and tracing the customs transit status;

good cross border cooperation with regular meetings on high level (every six months) and on operational level between heads of border stations (weekly or when necessary).
The border crossing Raxaul (India) – Birgunj (Nepal) is located on major road and railway transport corridors between Nepal and India that support bilateral trade and provide transit route to/form landlocked Nepal from/to nearest seaports in India (Kolkata and Haldia) for third country trade. The rail linked Inland Container Depot (ICD) at Birgunj (Nepal) is located approximately 6 km from the border station Raxaul (India). The ICD Birgunj (also known as Sirsiya Dry Port) is connected with 1676 mm gauge railway tracks to the Indian railways network. At the ICD Birgunj rail-to-road and road to rail transloading operations are organized for movement of freight with Nepalese trucks to/from final destination/origin points in Nepal.

In 2015, over seven hundred freight trains have been received at the ICD Birgunj from Indian seaports and other places in India. Almost half of them were carrying containerized third-country import goods. The Container Corporation of India Limited (CONCOR) operates container trains, which mainly run in direction to Nepal-bound transit imports. For example in 2015 over 20,000 TEUs were imported and less than 1,000 TEUs of containerized cargo were exported from Nepal through India.

Table 9: Nepal-bound containerized railway transit through India

<table>
<thead>
<tr>
<th>Year</th>
<th>Nepal’s Transit Exports (TEU)</th>
<th>Nepal’s Transit Imports (TEU)</th>
<th>Total (TEU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>26</td>
<td>18387</td>
<td>18413</td>
</tr>
<tr>
<td>2011-12</td>
<td>588</td>
<td>17941</td>
<td>18529</td>
</tr>
<tr>
<td>2012-13</td>
<td>674</td>
<td>20200</td>
<td>20874</td>
</tr>
<tr>
<td>2013-14</td>
<td>684</td>
<td>17346</td>
<td>18030</td>
</tr>
<tr>
<td>2014-15</td>
<td>934</td>
<td>21764</td>
<td>22698</td>
</tr>
</tbody>
</table>


The rest of the cargo is transported by the Indian Railways, including break-bulk cargo (e.g. sugar, cement and fertilizers), iron and steel products (moved in open carriage).

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The Indian Railways are responsible to manage movement of trains, arrange for availability of locomotives, wagons, rakes and rolling stock. In 2016, an average of 150-160 freight trains in a month were running on Raxaul - Birgunj border crossing.130

The ICD Birgunj in Nepal is constructed on 38 hectares of land, it has six full-rake railway lines, covered shed, container freight station, container yard with ground slots for 1568 TEUs and parking for 250 tracks and 50 trailers. The facilities are equipped for handling containers, bulk, and break-bulk cargo, which includes reach stackers, forklifts, trailers and cranes.131

The main legal instruments that govern transport and transit arrangements between Nepal and India are:

- the Rail Services Agreement between Ministry of Industry, Commerce and Supplies, Government of Nepal and Ministry of Railways, Government of India (21 May 2004) and

These arrangements clearly designate the railway border crossing Raxaul (India) – Birgunj (Nepal) as entry/exit points for bilateral and transit railway transport.

The Rail Services Agreement provides details for operating and managing rail services for railway transit transport (between Kolkata/Haldia ports in India and Raxaul - Birgunj railway border crossing) as well as bilateral railway transport (between stations on Indian Railways and Raxaul – Birgunj railway border crossing). The agreement regulates details on: interchange of trains, maintenance of railway tracks and wagons, running of trains and shunting activities, maintenance of interchange records, movement of dangerous and offensive articles, charging of freight and liabilities.

The Raxaul border crossing station is the interchange station for the trains running between Raxaul and Birgunj in both directions from India to Nepal and from Nepal to India. Trains that run between India and Nepal use Indian Railways locomotives and wagons owned by Indian Railways or Container Corporation of India. Joint technical (mechanical) inspection or rolling stock is organized at Raxaul border-crossing station by the representatives of the respective agencies designated from both sides. Joint technical (mechanical) inspection of each wagon/flat in interchange between India and Nepal ensure that wagons/flats are sent from India fit in all respects and received back from Nepal in the same condition.

Railway Receipt or its equivalent document is used as a transport document for carriage

131 Sanjib Pohit, 2009, Overview of India-Nepal Trade: Trends, Trade Logistics and Impediments. Available at: https://mpra.ub.uni-muenchen.de/45874/1/MPRA_paper_45874.pdf
of goods by rail in transit transport from Kolkata/Haldia to Birgunj and for carriage of goods from Birgunj to Kolkata/Haldia as well as for bilateral transport from originating station in India to Birgunj and from Birgunj to destination station in India.

The representatives of the respective agencies designated from both sides organize joint commercial inspection at Raxaul border crossing station. After joint examination of each incoming/outgoing train, details of each wagon are recorded and the condition of locks and seals (including One Time Lock on containers) are checked. At this point the custody of the train changes from India to Nepal and vice versa.

Procedures for customs examination and clearance in the Rail Services Agreement are detailed in four annexes:

- **Annexure – A:** Procedure for customs examination and clearance of containerized transit cargo / break-bulk transit cargo loaded in covered wagons (Import procedure),

- **Annexure – B:** procedure for customs examination and clearance of containerized transit cargo / break-bulk transit cargo loaded in covered wagons (Export procedure).

- **Annexure – D:** Procedure for examination and clearance of the India-Nepal bilateral traffic on the Raxaul-Birgunj rail section (Import procedure from Nepal to India),

- **Annexure – E:** Procedure for examination and clearance of the India-Nepal bilateral traffic on the Raxaul-Birgunj rail section (Export procedure from India to Nepal).

Document requirements and procedure to be followed for Nepal-bound transit imports and transit exports through India include:

- **Import Containerized Cargo Declaration (ICCD)** that has to be submitted at the Indian port of entry, in case of transit import. The ICCD is made in quadruplicate paper form and it has to be presented along with the copy of bill of lading (non-negotiable copy), copy of invoice, copy of packing list and copy of the import license issued by Government of Nepal, wherever issued, and a copy of the letter of credit, authenticated by a designated authority of Government of Nepal. When the import is not a subject to import licence and letter of credit the ICCD has to be certified by the Consul General of Nepal at Kolkata;

- **Export Containerized Cargo Declaration (ECDD)** that has to be submitted to the Indian customs authorities at Raxaul land customs station in case of transit export. The ECCD is made in quadruplicate paper form and it has to be presented along with copy of bill of lading, copy of invoice, copy of packing list and copy of the Letter of Credit, authenticated by the concerned Nepalese bank. When the export is not a subject to letter of credit the ECCD has to be
certified by the Nepalese customs office in ICD Birgunj;

- Transshipment Permit (TP) in prescribed forms (5 copies), along with copies of relevant parts of Import General Manifests (IGMs) for transshipment of transit imports, or along with a copy of ECCD for transshipment of transit exports.

Traffic in transit is exempted from customs duties, however in accordance with the Rail Service Agreement, the Nepalese import/export goods in transit shall be covered by a bond and/or a bank guarantee, as may be acceptable to Indian Customs, furnished by the carrier to the satisfaction of the Indian Customs for an amount equal to the Indian Customs duties on such goods. Another bond is required to be filed by the shipping agents binding themselves to re-export containers within six months of their import into India.

The Memorandum to the Protocol to the Treaty of Transit regulates that for moving of sensitive goods by rail a security is required to insure customs duties currently in force in India. Such security can be provided in form of insurance policy or bank guarantee assigned to the Commissioner of Customs in Kolkata. For non-sensitive goods only legally binding letter of undertaking is required, for covering an amount equal to the difference between market value and cost, insurance, freight (CIF) value.

The goods in transit import and transit exports in general are moving by rail under customs seal. For the containerized transit imports, on arrival at the entry port the, the Indian customs authorities merely check the ‘one-time-lock’ of the container. If the one-time-lock is found intact, the customs officer shall allow transportation of the containerized cargo, without examination, unless there are valid reasons to do otherwise.

In a case of transit import arrival of Nepalese break-bulk cargo at the entry port, the Indian customs authorities make a selective percentage examination of goods to check whether the goods are in accordance with the declaration on the ICCD and conform to the Import license and/or the Letter of Credit. Afterwards Indian Customs officer puts a ‘one-time-lock’ or ‘seal’ to the subject wagon. The serial number of ‘one-time-lock’ or ‘seal’ is recorded on the ICCD. The number along with date of the ICCD and the serial number of the ‘one-time-lock’ or ‘seal’ are also recorded on the TP.

On arrival of the transit import cargo by rail at Raxaul land customs station (LCS) the Indian Customs authorities merely check the ‘one-time-lock’ or ‘seal’ of the container or wagon endorsed on the TP and, if found intact, shall approve for onward transmission of the cargo to the ICD Birgunj, without examination of the container/wagon unless there are valid reasons to do otherwise.

The original copy of the TP is presented, compared with the duplicate copy received in
sealed cover, processed and endorsed by the Indian customs authorities at the Raxaul LCS. After the goods in transit are cleared, the onward movement by rail into Nepal is allowed by the Indian customs, which make a certification at the TP. The original copy of the TPs is handed over to the carrier and a duplicate is sent to the Indian Customs House at the port of entry. After the original TP is duly endorsed by the Nepalese customs authority at ICD Burgunj, it will be also forwarded the same to the customs authority at the port of entry (e.g. Kolkata) for closure of the manifest.

Similarly to the procedure for transit imports in a case of containerized transit exports on arrival of sealed export container at Raxaul, the Indian Customs authorities merely check the ‘one-time-lock’ of the container and if found intact, the customs officer shall allow transportation of the container, without examination. For the transit export of break-bulk cargo an arrival of sealed export wagon at Raxaul, the Indian customs authorities, also merely check the ‘one-time-lock’ or ‘seal’ and if found intact, the customs officer allows transportation of the wagon, without examination,

After the Indian Customs at Raxaul LCS are satisfied as regards the transit export checks it endorses loading/dispatch particulars of goods and seals on all the copies of TPs. On arrival of the cargo by rail at the gateway port in Kolkata the Indian Customs authorities shall check the ‘one-time-lock’ or ‘seal’ on container or wagon and, if found intact, shall approve for onward shipment of sealed export container/wagon, without examination of the cargo unless there are valid reasons to do otherwise.

The original copy of the TP is presented, compared with the duplicate copy received in sealed cover, processed and endorsed by the Indian customs authorities at the gateway port in Kolkata. The onward shipment by vessel of the goods in transit is allowed only after clearance by the Indian Customs authorities at the gateway port. A copy of the TPs endorsed by Kolkata Customs at the gateway port is sent to LCS in Raxaul for closure of bonds in respect of containers/wagons transshipped from ICD Birgunj.

Document requirements and procedure to be followed for bilateral trade between India and Nepal through rail transport include:

- **Import Cargo Declaration (ICD)** for import to India, which is certified by the Nepalese customs office in ICD Burgunj to verify that the goods specified in the declaration and the quantity and value specified within are permitted to be exported to India.

- **Invoice / Export Cargo Declaration (ECD)** for export from India in accordance with the regulation for export procedure as detailed in the Nepal Invoice Procedure (DRP), which is certified by the jurisdictional officer of Central Excise/Customs to verify that the goods specified in the invoice / declaration and the quantity and value specified within are permitted to be exported from India.

In case of import to India, on or before arrival of goods at Raxaul Railway Station the
ICD, made in quadruplicate, has to be presented to the Customs officer. In accordance with Indian customs regulation, importer or his authorized agent shall attach the Bill of Entry along with the necessary documents (signed invoice, packing list, railway receipts, importer’s / CHA’s declaration, license, letter of credit, certificate of origin etc.). The Bills of Entry are subjected to assessment and the goods are examined by the customs for import clearance in accordance with the Treaty of Trade between India and Nepal and Indian customs legislation.

In case of export from India, on or before arrival of goods at Raxaul Railway station the Bills of Export / ECD (made in quadruplicate) has to filed at the Raxaul LCS along with prescribed documents in accordance with Indian customs regulation. Once the Bills of Export / ECD are assessed, the goods are examined and the verification is found correct the Customs officers shall give the “Let Export Order”. The Indian Customs shall put the 'one-time-lock' or 'seal' of the container / wagon and record the same in Bill of Export and/or ECD.

After export clearance of the goods the Indian Customs Officer shall make endorsement on duplicate, triplicate and quadruplicate copies of Bills of Export and/or ECD. The duplicate copy of ECD is forwarded to Manifest Closing Section for reconciliation. The triplicate copy of the ECD is given to carrier or his agent and the quadruplicate copy of ECD is sent to the Customs Office at ICD Birgunj for their verification and return to Raxaul LCS. On return of quadruplicate copy, the same will be reconciled with the original and duplicate copy of Bills of Export and/or ECD in the Manifest Closing Section of LCS, Raxaul.

On arrival of the cargo by rail at ICD Birgunj the Nepalese customs authorities shall merely check the 'one-time-lock' or 'seal' of the container/wagon put on by the Indian Customs/Central Excise officers. If the seal is found intact, the Nepalese Customs authorities shall deal with the Original & Triplicate copies of the Invoice and/or ECD or such other documents and, return the Duplicate copy after endorsing his certificate of receipt of goods in Nepal directly to the Indian Customs at Raxaul through the Carrier. Thereafter, the Nepalese Customs authorities may allow import clearance in accordance with the Treaty of Trade between India and Nepal and Nepalese customs legislation.

The Raxaul – Birgunj is an example of railway border crossing where one of the border crossing stations (Birgunj) is a multi modal node (rail to road or road to rail) since there is no continuation of the railway transport afterwards.

Present transit procedure is paper based and heavily burdened with document requirements. Introduction of electronic information processing and electronic data exchange between customs stations in India as well as between the customs authorities of India and Nepal could be considered.
Overview of railway border crossing issues in freight transport by rail

The review of the selected border crossings in the region presented earlier in this Chapter shows that each border crossing has unique characteristics and several specific issues and challenges needs to be addressed. For example, some of the border crossings have issues related to break of gauge, while at some of them freight trains are often recomposed at the border station while at others the trains with same composition usually continue to the next inland marshaling yard or destination. Some Customs authorities have compulsory requirements for submission of advance information, while other receive all documents and information upon arrival of trains at the station.

Figure 40: Example of typical sequence of formalities at railway border crossing

- Arrival of train at the border line / escort by border guards / immigration
- Translation of transport/commercial documents
- Initial Customs check (stamping of transport/commercial documents)
- Registration of customs document and Risk analysis
- New transport document
  - Customs declaration
  - Transit to inland office
  - Import at BCP
- X-ray scanning and Customs control
- Forwarder / Transport Company
  - Veterinary / Phytosanitary / Sanitary / Quarantine control

This study attempts to analyze railway border crossing issues in cross border and transit freight transport in systematic way focusing of several matters such as:

- rail freight traffic border crossing operations that includes:
  - dealing with break of gauge
  - requirements for change of locomotive and crew
  - transfer of wagons between neighboring railways
  - technical inspections and compliance with railway transport standards
  - commercial transfer of goods between neighboring railways

- documentary requirements by:
  - railways
- customs
- other border crossing authorities

- use of electronic information systems including electronic data interchange (EDI) by:
  - railways (including EDI railways to railway and railways to customs)
  - customs (including EDI government to government on national and cross-border level and/or single window facilities)

- customs and other government agencies formalities such as:
  - requirement to stop at border line for escort to the border station
  - obligation to submit pre-arrival information
  - mutual recognition of seals attached by railways and/or foreign customs authorities for control of goods
  - use of risk assessment and selective controls for entry/exit of goods in the customs territory and for customs procedures transit/import/export
  - use of modern and non-intrusive control technologies
  - simplifications (e.g. for block container trains, use of railway consignment note as customs transit declaration, others for customs transit procedures and for temporary admission of wagons/containers)
  - coordinated, integrated and joint controls on national and/or cross border level including: streamlined control processes; transfer of responsibilities; single stop control at one border station (Mode 2 BCP); full transfer of controls from border stations to departure/destination (Mode 1 BCP).

- other relevant issues such as:
  - existence and organization of intermodal terminal, logistics and dry port capacities at the border station
  - existence and organization of maintenance hub at the railway border crossing station

An overview of the border crossing issues for the reviewed railway border crossings in this chapter is presented in Annex 7 of this Study.

**Rail freight traffic border crossing operations**

The rail freight traffic border operations depend on rail transport regime. The railway border crossings where the rail transport is governed by international agreements (e.g. OSJD in China, Kazakhstan, Mongolia, Russian Federation or COTIF in Pakistan, Iran and Turkey) have higher level of harmonization related to requirements for transfer of wagons and goods.

When the rail transport regime relies solely on bilateral agreement (e.g. as it is a case between Malaysia and Thailand), extension of international rail transport to other
countries may be more challenging. Differences in bilateral arrangements at other border crossings could require additional harmonization efforts or developing new multi country agreement.

For example, it could be very challenging to develop future rail transport regime between Malaysia, Thailand, Cambodia and Viet Nam based only on bilateral agreements. Therefore, the options for developing a new multilateral agreement and/or joining OSJD agreements or COTIF could be considered.

Regarding technical interoperability, at many reviewed border crossings the wagons can cross the border and continue the route (Level B), even though there are cases where technical incompatibility restricts such movement of the wagons (e.g. only Chinese wagons can cross the border at Pingxiang (China) / Dong Dang (Viet Nam border crossing).

The existence of break of gauge is a major factor that determines rail freight traffic border crossing operations. The border crossings, which do not have to deal with break of gauge, are in position to provide relatively smooth transfer of wagons and goods between railways undertakings of neighboring countries (e.g. Sukhbaatar (Mongolia) / Naushki (Russian Federation); Padang Besar (Malaysia) / Padang Besar (Thailand)).

When dealing with break of gauge, it is essential to efficiently organize the transfer of wagons/goods (e.g. the processes for change of bogies; or reloading of containers from one flat container wagon to other).

At the border crossings with huge volumes of goods that cross the border (e.g. Zabaykalsk (Russian Federation) / Manzhouli (China) and Alashankou (China) / Dostyk (Kazakhstan)) such challenges could be substantial.

**Documentary requirements**

Documentary and data requirements of railways, customs and other government authorities differ from country to country and they are on various levels of harmonization. Some railway documents (e.g. wagon list and consignment note) of the OSJD or COTIF members are fully harmonized. The OSJD/SMGS agreement and COTIF/CIM provide for use of common consignment note, which is not necessarily the case with bilateral agreements.

Customs authorities usually require information for initial entry control (e.g. advance information, notification of arrival, customs cargo manifest) as well as customs declaration for transit, import and export procedures. Supplementary documents such as invoices, packing lists and various certificates are often required.

Even though railways and customs documentary requirements have many similar data they are not formally standardized and harmonized both on national and cross border level, unless the consignment note is legally acceptable as a customs document.

**Electronic information systems and EDI for information exchange**
Advanced railway electronic information systems are tested and deployed at several border crossings (e.g. Zabaykalsk (Russian Federation) / Manzhouli (China), Alashankou (China) / Dostyk (Kazakhstan)) that allows railways to railways electronic data interchange (EDI). Many countries in the region are planning and developing electronic information systems that can support EDI in future. Even though the benefits of automation are well recognized, majority of present railways to railways communication is done by phone and manual exchange of paper-based documents.

The railways of many countries in the region are making efforts to introduce electronic information exchange with customs authorities as well (e.g. in Russian Federation and Kazakhstan). Harmonization and standardization of data and documentary requirements between railways and customs could support such endeavors. Many of the railway electronic information systems are still not interfaced with customs systems (e.g. that is presently the case in the reviewed border crossings in Malaysia, Mongolia and Viet Nam).

The government agencies cooperate and exchange information among them, however such exchange is mostly done by e-mails, phone or paper based documents rather than electronically with interface of their electronic information systems or single window facilities. Even if there is a single windows facility in the country, it usually covers only import and export formalities, and railways operations are not included (e.g. in Malaysia).

**Customs and Other Government Agencies formalities**

The government authorities usually do not require a train to stop at the borderline between the countries to provide an escort from/to the border station, however there are few exceptions (e.g. in Dong Dang Viet Nam).

Most of the Customs authorities require pre-arrival information to be submitted before arrival of the train at the border station. There is a room for more effective use of pre-arrival information for efficient risk analysis and consequently improved targeting and selective controls that contribute to streamlined customs formalities upon arrival of a train (e.g. scanning of selected wagons/containers instead of whole train).

Use of modern and non-intrusive control technologies improves control capacities of the authorities and reduces the time consuming physical inspections (e.g. use of video monitoring system in Manzhouli (China) and use of x-ray scanner in Dostyk (Kazakhstan), Zabaykalsk (Russian Federation)).

The Customs authorities in many cases recognize customs seals of their foreign counterparts and resealing is not required, though there are some exceptions (e.g. Malaysian Customs authorities are resealing all containers with Malaysian Customs Seals). Some countries (e.g. China, Mongolia Russian Federation) are negotiating recognition of controls and exchange of x-ray scans for certain goods.

In most of the border crossing stations the Customs authorities and railways are trying
to simplify processing of block container trains and reduce the time spent at the border with simplified documentation, efficient transshipment of containers where necessary and improved cross border cooperation (e.g. introduction of green corridor at Zabaykalsk/Manzhouli border crossing).

The customs transit procedures are simplified in majority of border crossings. The railways usually do not have to submit transit guarantee. The railway consignment note is sometimes formally recognized as customs transit document or it serves as supplementary document in transit procedure. The Customs authorities usually require only electronic transit declaration (or electronic transit manifest / transport document) to be submitted. Transit controls at the border crossing are in general simple and sometimes may include physical control at the border station (e.g. in Dong Dang Viet Nam, and Padang Besar (Malaysia)). Separate customs declarations for temporary admission of laden wagons and containers are not required.

Box 14: Possible ways to organize Railway Border Crossings

Types of border crossings:

▪ **MODE 1** - Without train stopping at the border stations. Common procedures for border crossing are organized in major inland stations, in parallel with the operational procedures for traffic management. This mode would mean that more than one railway undertaking is operating on the national infrastructure. Hence at least operational and safety provisions must be established.

▪ **MODE 2** - Single stop for the trains at the designated common border station. All procedures of the authorities of both countries take place in parallel at one common station.

▪ **MODE 3**: Two stops, first at the exit border station and then in the entry border station. The two neighboring border stations of the exit railway and the entry railway develop procedures separately, sequentially.

Technical interoperability levels:

▪ **LEVEL A** - Wagons of the train cannot cross the border. The train will be recomposed with new wagons after the transshipment of the freight. The new train will continue the trip on the entry railway in a new composition.

▪ **LEVEL B** - Wagons of the train can cross the border and continue the route. Compatibility between the two neighboring countries for a number of elements of the railway infrastructure and for the wagons is required.

▪ **LEVEL C** - Wagons and locomotive of the train can cross the border and continue the route. Highest level of technical interoperability, which requires additional compatibilities between the two railways in terms of infrastructure, locomotives, safety responsibilities and operational rules.

Source: ESCAP 2017 unpublished, Critical parameters for facilitation of international railway transport

The level of coordination between Customs and other government authorities differs from border crossing to border crossing. On national level government authorities
usually cooperate when necessary. Joint inspection commissions are established at some border crossings (e.g. at Zabaykalsk and Naushki (Russian Federation)). In Russian Federation the responsibilities for examination of documents for sanitary, quarantine, veterinary and phytosanitary control are transferred to Customs authorities (single window principle).

At cross-border level, the cooperation between Customs and other government agencies is often manifested with regular meetings (on yearly bases or more often if necessary), where questions and joint initiatives are discussed. In general, there is no cross-border coordination between government authorities at operational level unless specified in the bilateral agreement (specific simplification cross border projects may be considered as an exception).

The border crossings in the ESCAP region are mainly organized as Mode 3 border crossing points with two stops, first at the exit border station and then in the entry border station. The border crossing at Padang Besar (Malaysia) is an exception and operates as Mode 2 joint single stop border crossing station for passenger transport only.

Generally, it could be concluded that long border crossing delays are main challenge for cross-border and transit railway transport. Different border crossings have their own specific characteristics, which could reflect the reason behind border crossing delays.

To facilitate and streamline processing of railway freight through the border crossings in the ESCAP region and in the same time to provide efficient regulatory and security control, the railway border-crossing issues should be continually analyzed and necessary challenges addressed.

Such challenges include:

- Lack of capacities for efficient break of the gauge activities such as:
  - bogie exchange facilities and equipment
  - reloading facilities and equipment
- Shortage of available wagons/locomotives
- Bottlenecks due to underdeveloped infrastructure to support increased traffic flows:
  - Insufficient rail tracks between adjusting border stations
  - Low capacity of receiving and departure railway yards
  - Inadequate and/or insufficient side tracks at the border stations
- Different transport regimes, or not using common transport documents (e.g. a need to produce new railway consignment note at the border crossing)
- Lack of efficient cooperation between railways
- Manual, paper based, burdensome and inefficient railway processes
- Excessive document requirements by control authorities (number of documents and/or supplementary documents) (especially in case of transit)
- Requirements for translation of documents by control authorities (especially in case of transit)
- Paper based operations by control authorities or requirements to produce paper based documents in addition to electronic data
- Extensive controls such as complete inspections (especially in case of transit);
- Lack of targeted controls based on efficient risk management (and/or treating the risk in transit procedures same as the import risk)
- Lack of modern equipment for automated transport/regulatory related controls, recognition of transport means, surveillance and tracking of movements
- Not using options for simplification of documentary and control requirements
- Lack of efficient information exchange between railways and control authorities
- Numerous control authorities at the border crossing
- Lack of coordination between control authorities in the field of:
  - exchange of information (including single window system)
  - standardization of data / documentary requirements
  - joint risk analysis
  - joint controls
- Extensive requirements for veterinary, phytosanitary, quarantine sanitary or other specialized controls (especially in case of transit)
- Lack of cross border cooperation between control authorities
- Incompatible inspection certificates
- Duplication of inspections and controls
- Monopoly position of railways / yard operators and related inefficiencies
- Lack of capacities for efficient transshipment for intermodal transport
  - Rail-road terminals
  - Reloading facilities and equipment
- Frequent changes of legislation and requirements for crossing the border
- Lack of transparent requirements for crossing the border
- Lack of training for control authorities to implement formalities

Figure 41: Main reasons for extended delays at the railway border crossings (percent of occurrence and days)
The next chapter of this Study lays down several good practices regarding the railway border crossing issues and challenges, which have been identified during the review of the major border crossings in the ESCAP region as well as good practices from other regions over the globe.

Source: OSJD, 2014, Best practices to improve efficiency of international carriage by rail in Eurasia
3 RECOMMENDATIONS

A Break of gauge

Efficient solutions for dealing with break of gauge are implemented. That includes well-developed and sufficient capacities for container reloading and/or bogie changing system that is most prevalent in the region.

If the railway border crossing has break of gauge it is imperative that it is addressed efficiently to reduce the delays at the railway border crossing and lower the operational costs. Across the Trans-Asian Railway Network, the significant break of gauge change happens over 1435 mm to 1520 mm and vice versa. The most common technique used to address this is the bogie changing.

Efficient reloading of containers is another solution for dealing with break of gauge in a case of containerized goods. In this case the goods will remain in the same container, and the container itself will be transshipped from one wagon to other. The reloading process usually takes only few minutes per container and consists of lifting a container from one flat wagon and transferring it to other flat wagon (e.g. as presented in previous chapter for Alashankou (China) border crossing station).

The reloading of containers could be efficient solution if appropriate and sufficient reloading facilities (side tracks, hangars) and equipment (e.g. gantry cranes, reach stackers) are available. In addition, the supply of wagons should be well organized to avoid any excessive delays.

For non-containerized cargo, change of bogies is a solution for efficient dealing with break of gauge, where the goods could remain in same wagons while crossing the border. Again, this solution requires appropriate and sufficient facilities, equipment and bogies systems.

The existence of rail tracks with both gauges between the two border crossing stations allows the locomotives of both railways to move between them. The change of bogies is an operational issue that could be addressed with protocol between the railway undertakings of the countries concerned that details the rules for organization of bogie change. For example with the protocol on organization of cross border railway transport it is agreed that the exchange of trains between Turkmenistan and Islamic Republic of Iran will be on receiving side where locomotive and operational staff of dispatching side will arrive. As a general rule in this border crossing the bogies for outgoing trains are changed in dispatching country.

For efficient change of bogies the capacities of the bogie change systems have to be balanced and corresponding to the volumes of rail traffic. For example at Sarakhs border crossing on Iranian side there are two bogie change stations, one with 24 sets of jacks and other with 25 sets of jacks that can work simultaneously achieving time of one hour for bogie change on 12 sets of jacks for the broad gauge or 45 minutes for the standard gauge. In this case the bogie change stations have a total capacity to deal with...
400 wagons per day which is sufficient to service present level of railway traffic at this border crossing.

More efficient change of bogies can be achieved if the bogie change stations are prepared in advance based on information on the wagons obtained from the place where the goods are originally loaded. Early preparation of the bogie change station for depends on well-organized exchange of information.

The border crossings where there are huge volumes of freight traffic (e.g. as presented in previous chapter for Manzhouli/Zabaykalsk border crossing) are continually making efforts to increase efficiency in implementing the solutions for efficient dealing with break of gauge issues.

The dual gauge solution (e.g. as presented in previous chapter for Dong Dang (Viet Nam) border crossing station) enables movement of same wagons across the border and successfully eliminates the need for any transloading. However, this solution could be very costly and it should be considered when the feasibility is proven, for example in cases where major marshaling yard and/or destination stations are in relative proximity of the border crossing.

B Railways to railways and railways to Customs information sharing

1. Use electronic information systems for sharing information

Electronic information systems support:

- optimization of railway processes at border crossings
- electronic information exchange between railways
- electronic information exchange between railways and control authorities

The railway electronic information systems automate the organization of cargo traffic and provide a communication interface between railways undertakings and their clients, business partners, and control authorities at border crossing checkpoints. Information system applications could support electronic processing of documents such as electronic consignment note.

At the busy border crossings, it is very important for the railway station administration to optimize the railway processes and avoid unnecessary delays. The optimization may include following railway processes: train schedules; the routes and stops of the trains on entering and exiting a railway border station; shunting and sorting the wagons and marshaling the trains; using the railway staff and equipment for technical controls and railway related operations. The electronic information systems can support optimization of the railway processes.
Box 15: Use of electronic information systems in Russian Railways

The JSC Russian Railways (RZD) has developed and uses a large number of automated information systems integrated with the business processes, including those relevant for crossing the border by rail.

Upgraded transport and logistics systems based on information technology are expected to improve forecasting, processing of large data volumes, risk management and decision-making, as well as cooperation between the RZD other relevant stakeholders. Some of the automated systems employed are:

Automated Management System of Border Stations (ASU PS)\(^{132}\)

The ASU PS is multifunctional real-time system that provides complex automation of technological operations and processes at all railway border crossing stations in Russian Federation. The system is primarily focused on organization of operations for receiving and sending of goods and transport means across the border, including processing of documents.

The ASU PS is an integral part of the overall railway transport management process, and in addition to its own specific features it has all features of the automated systems for sorting stations and marshaling yards.\(^{133}\)

Automated System for Operative Transport Management (ASOUP)\(^{134}\)

The ASOUP, which is considered one of the main information systems of the Russian railways, has been upgraded several times.\(^{135}\) The ASOUP database contains operational and historical data about each: train, wagon car, container, dispatch, request, locomotive and locomotive crews.

Almost all the other RZD information systems are connected with the organization of the rail transport and they receive and transmit information in the ASOUP. The upgrades of the system have endeavored to optimize the flow of information and create a single information area of Russian railways.

\(^{132}\) In Russian: Автоматизированная Система Управления Пограничных Станций (АСУ ПС)

\(^{133}\) More information on ASU PS and other products and solutions for automation in railway transport of the Center for transport information technology (CIT Trans) (Rus: Центр информационных технологий на транспорте (ЦИТ-Транс)) are available at: http://cittrans.css-rzd.ru/dnn/ПРОДУКТЫИРЕШЕНИЯ.aspx

\(^{134}\) In Russian: Автоматизированная Система Оперативного Управления Перевозками (АСОУП)

\(^{135}\) The ASOUP is developed by the: Design Technology Bureau for Automated Railway Transport Management ПКТБ АСУЗТ (now - ПКТБ CKI JSC “RZD”), in cooperation with the specialists of: Research and Design Institute of Information Technology, Signaling and Telecommunications on Railway Transport (JSC NIIAS), Union Scientific Research Institute of Railway Transport (VNIIZT) the Main Computing Center (GVC JSC RZD).

More information on ПКТБ CKI JSC “RZD” is available at: http://www.pktbcki.ru/about/history.html
Box 15: Use of electronic information systems in Russian Railways (continued)

Currently there is a project for new generation of automated system for operative transport management (ASOUP-3). The modernization of the ASOUP should provide improved planning and standardization of the transportation process, increased efficiency of dispatching personnel, forecasting and optimization of operational work, improved reporting reliability, as well as increased productivity and reduced costs.\footnote{Roman Lykov; GVC JSC “Russian Railways”; 9/12/2016; Three “P”, or Simple Rule of Progress (Russian: Три «П», или Простое правило прогресса) Available at: http://www.pult.gudok.ru/archive/detail.php?ID=1311479 2/4}

The ETRAN platform

The ETRAN automated system for preparation and processing of railway transport documents was originally designed in 2001 and it became operational in September 2002.\footnote{The ETRAN was developed by the softer developer Intellex (http://www.intellex.ru/solutions-services/elektronnyij-dokumentooborot) in cooperation with the RZD affiliate Center for transport information technology (CIT Trans) (In Russian: Центр информационных технологий на транспорте (ЦИТ-Транс)). More information on CIT Trans products and solutions is available at: http://cittrans.css-rzd.ru/dnn/ПРОДУКТЫИРЕШЕНИЯ.aspx} The updated version of the ETRAN in 2008 provided option for use of digital signature to authenticate the accompanying documents, which greatly increased the efficiency of document processing. In 2011 the system supported exchange of electronic documents on empty wagons transport first between the Russian Federation and Finland and later with several other countries.

The ETRAN is a platform that includes a software application and more than 150 application servers and database servers. United ETRAN database provides information exchange between more than ten related automated systems such as: Automated System for Operative Transport Management (ASOUP), Automated Management System of Border Stations (ASU PS), Automated Management System of Stations (ASU ST), and other.

The ETRAN centralized system operates 24x7, and enables connection between the RZD and more than 29 thousand users throughout the territory of the Russian Federation. Presently around 1.3 million consignment notes per month are processed by the system.

In addition, on the support for transport documents the ETRAN provides interaction and electronic data interchange with the automated systems of shippers, rolling stock operators, freight forwarders in relevant processes. One of the most significant ETRAN updates in July 2015 has enabled introduction of new international consignment note SMGS.\footnote{Roman Lykov; GVC JSC “Russian Railways”; 9/12/2016; Three “P”, or Simple Rule of Progress (Russian: Три «П», или Простое правило прогресса) Available at: http://www.pult.gudok.ru/archive/detail.php?ID=1311479 2/4}
**Box 15: Use of electronic information systems in Russian Railways** (continued)

Cargo Express

The Cargo Express system is an information and analytical system with forecasting features on movement of wagons and cargo to their destinations based on the automated management system of the stations. The system also supports automated management of operational databases, prohibitions and restrictions on admission of goods for transport at the RZD network.

Other automated systems which work in integrated environment address several additional issues such as: automation of processes at container yards; processing of train information (e.g. approaching trains, wagons and cargo, processing inbound composition, technical train inspections, location of wagon cars at arrival and departure rail yards etc.); graphic references on the availability of trains, containers wagon cars and cargo at the control areas of railway station; control of repairs and equipment of wagons, issuing certificates and reports; etc.¹³⁹

The electronic railway information systems enable efficient cross border information exchange between the railways undertakings that act as carriers (e.g. contractual carrier, successive carriers, destination carrier). The data available in the information systems of the railways, including the data obtained from the partner railways can be further processed and reused for electronic information exchange between railways and control authorities at the border crossing. Such electronic information exchange could accelerate the preparation, submission and processing of railways, customs and other documents required.

The electronic railway information systems provide: safe web-based solutions; satisfactory authentication of electronic information exchange (e.g. electronic signatures); secure storage and protection of electronic data; interface solutions for connection with the information systems of control authorities and/or for connection in single window environment.

¹³⁹ CIT Trans products and solutions is available at: http://cittrans.css-rzd.ru/dnn/ПРОДУКТЫИРЕШЕНИЯ.aspx
2. **Railways to railways electronic data interchange (EDI)**

Electronic data interchange (EDI) allows efficient exchange of information among railways to complete border crossing formalities. Railways of the region are encouraged to implement such systems with appropriate arrangements such as bilateral/sub-regional or regional agreements. As far as possible the EDI systems and messages thereon should be harmonized across the railways in the region. Phased implementation of electronic systems is recommended with appropriate training for officials implementing it.

Implementation of electronic data interchange (EDI) between railways of neighboring countries requires good cooperation between the railways, formal arrangement (e.g. an agreement or a memorandum of understanding); and suitable capacity and provided interoperability between the information systems.

The cross-border railways EDI may include data on trains, wagons and cargo. The data should be automatically generated from other relevant railway information systems. The implementation of projects for introduction and interactions between EDI systems is usually gradual. Depending on circumstances, such projects may be implemented first in one direction (e.g. only for inward movements) or in both directions for inward and outward movements.

The EDI pilot projects between railways may start with exchange of data for empty wagons (e.g. as it was a case between RZD and Finish Railways) and subsequently to be extended for loaded cargo wagons and container wagons.

**Box 16: Electronic data interchange between RZD and other national railways**

Based on EDI agreements, the JSC RZD presently working on exchange of electronic data in international rail freight transport with the railways undertakings of:

- CIS countries: Belarusian Railways; Ukrainian Railways; Kazakhstan Railways; Azerbaijan Railways;
- Baltic countries: Latvian Railways; Lithuanian Railways; Estonian Railways;
- Other countries: Chinese Railways; Finish Railways; Polish Railways; Mongolian Railways

The scope of electronic data interchange differs from country to country. In some of the cases the implementation of the EDI agreement is at pilot project stage, and in other more advanced levels of electronic data interchange are already achieved.

The JSC RZD plans to extend electronic data interchange with other railways undertakings such as: Uzbekistan Railways and Democratic People’s Republic of Korea Railways.

*Source: RZD Presentation, Bangkok 2016, Vsevolod Titov; Application of information technologies in cross-border transportation of goods and vehicles in international rail traffic*
Box 17: E-train project (Coordinating Council on Trans-Siberian Transportation)

The Coordinating Council on Trans-Siberian Transportation (CCTT) initiated the Electronic Train project in 2010 with an objective to increase competitiveness of the Trans-Siberian route by optimization of document circulation in international railway transport of goods. The main pillar of the project is development and introduction of information technologies that can support electronic exchange of transportation and commercial documents.

The project has addressed the issues related with the legal status of the documents (e.g. in accordance with the legislation in European Union and Eurasian Union, European Union, OSJD Agreements), as well as technological and technical issues relevant for national railways and the freight forwards. The CCTT IT working group has supported the project with development of the conceptual scheme of information interaction and a uniform technical regulation of an electronic data exchange.

The project was implemented gradually with initial focus on container train traffic on pilot routes that connect China with Europe. The project has brought together the national railways undertakings, freight forwarders and other partners from China, Kazakhstan, Russian Federation and several European Countries to work together on development and implementation of solutions for electronic processing of railway related documents, including electronic digital signature and electronic data interchange.

Source: Coordinating Council on Trans-Siberian Transportation [http://icctt.com/elektronnyy-poezd]

Latest examples of railways electronic information exchange arrangements include:

An agreement signed between Russian Railways (RZD) and Kazakhstan Railways (KTZ) in June 2016 for cooperation on the electronic interchange of international freight consignment notes and communications with customs authorities. A similar agreement was signed with Belarusian Railways. Annex to the agreement covers the protection of confidential commercial and technical information.

A memorandum on cooperation for development of railway transport within the framework of Eurasian Economic Union signed in June 2017 between the railways Russian Federation, Kazakhstan and Belarus. One of the main objectives of the cooperation would be on joint use of freight wagon fleet, development of transport corridors and harnessing the transit potential of the Union.

Agreement between, the railways of Russian Federation and China reached in In April 2017 to work on introduction of electronic data exchange technologies.

A multilateral agreement to deepen the cooperation for organization of container trains between China and Europe signed between railways of Russian Federation, China, Kazakhstan, Mongolia, Belarus, Germany and Poland in April 2017. The focus of the

cooperation would be on electronic data exchange and preliminary electronic information on freight goods and vehicles moving across the borders, simplification of the control procedures at the check points and reduction in customs clearance times.

**Box 18: Electronic information exchange between Kazakh and Chinese Railways**

The Kazakh Railways JSC NC KTZ and the Chinese Railways Ministry have started preparation on electronic exchange of information at the meetings of the mixed commissions since 2010. The discussions on expert level have addressed various technical and technological aspects of the electronic data interchange as the basis for bilateral agreement.  

The agreement on electronic exchange of data on goods passing through the borders of the two States based on railway transport consignment notes has been agreed in 2012. The agreement for exchange of electronic data is expected to speed up the movement across border crossings by timely planning and optimization of railway operations at the border stations and reducing the time for preparation of documentation required.

The EDI provides automated exchange of structured electronic messages between the server applications of the railway undertakings involved. The issues to be resolved in addition to the agreed content on data to be exchanged include: method of electronic communication (e.g. through common network or web-based solution); applicable standards (e.g. United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) standards); structure of messages; data protection and security etc.

**Box 19: Common electronic CIM/SMGS consignment note**

Jointly developed CIT / OSJD Functional and legal specifications for the electronic CIM/SMGS consignment note is a document published to provide recommendations to undertakings intending to use an electronic version of the CIM/SMGS consignment note. This document envisages a multi-phased approach for the introduction of the electronic CIM/SMGS consignment note and details: transmission of EDI messages; liability and the legal effect of EDI messages; type of EDI messages and their content; recommendation for the contract for electronic interchange of CIM/SMGS consignment note data (EDI Contract Recommendation); and rights of access to data on the electronic CIM/SMGS consignment note.

**Box 20: Selected OSJD Leaflets on Codification and IT**

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143 KTZ web site; News published on 08.12.2011; Railwaymen of Kazakhstan and China discussed the issues of electronic data interchange.

144 Kazlogistics web site: Информация о сотрудничестве Республики Казахстан и Китайской Народной Республики в области железнодорожного транспорта (EN: Information on the cooperation of the Republic of Kazakhstan and China in the field of railway transport). Available at: http://portal.kazlogistics.kz/analytics/95/596/

145 Functional and Legal Specifications for the Electronic CIM/SMGS Consignment Note; applicable with effect from 8 July 2009 (as amended) are available at: http://www.cit-rail.org/en/freight-traffic/manuals/?id=639
Harmonization in the ICT field among OSJD members is supported by number of leaflets developed by the OSJD permanent Working Group on Codification and IT:

- Leaflet О 402-1, on unified electronic data exchange for transfer of freight wagons from 1520 mm gauge to 1435 mm gauge and the other way around;
- Leaflet О 407-1, on unified exchange of data on movement of trains, including analysis of the timetable for international traffic;
- Leaflet P 910-1, on recommendations for the form of the wagon sheet and completion instructions for the transfer of wagons between the railways operated by member countries of the OSJD;
- Leaflet P 910-4, on recommendations on the form of the complete (natural) sheet of the international freight train and completion instructions;
- Leaflet P 912, on principles of unified messages for the international freight train and completion instructions;
- Leaflet О 912-3, on the library of railway messages in the EDIFACT structure;
- Leaflet P 919, on the Model Agreement on electronic data interchange between the national information systems of the OSJD railways for freight traffic;
- Leaflet P 919-1, on recommendations for the completion and application of a hardcopy of an electronic consignment note in international freight traffic;
- Leaflet О 920-1, on unified numerical coding of railway undertakings, infrastructure managers, and other companies involved in railway transportation;
- Leaflet О 920-2, on unified numerical coding of railways official facilities;
- Leaflet О 920-10, on unified numerical coding of railway customers;
- Leaflet О+Р 941, on security of common information resources and information and telecommunications infrastructure;
- Leaflet P 941-1, on principles of organization of information security in the interaction of digital telecommunications networks;
- Leaflet P 941-2, on organizational and legal measures to ensure information security in railway transport;
- Leaflet P 941-3, on recommendations on the use of technology of the trusted third party to ensure the legal relevance of electronic documents in a cross-border communication;
- Leaflet P 941-4, on typical technical specifications of cross-border cooperation between public key infrastructures used by railways operated by member countries of the OSJD;
- Leaflet P 942, on technology of information support of freight traffic on SMGS for electronic data exchange in the UN / EDIFACT standard;
- Leaflet P 942-1, on general recommendations for the transition to work with electronic documents in international freight transport;
- Leaflet О+P 944, on list of classifiers and codes of data elements Library of code lists for cargo messages under SMGS conditions;
- Leaflet О+P 943, on the library of standard electronic messages for international freight traffic under SMGS conditions in the UN / EDIFACT standards.

For example the OSJD Leaflet P 941-4 on typical technical specifications of cross-border cooperation between public key infrastructures used by railways operated by member countries of the OSJD.

146 All OSJD Leaflets are available in Russian language at http://osjd.org/doco/public/ru?STRUCTURE_ID=5068
member countries of the OSJD\textsuperscript{147} provides: specifications and instructions for management of trusted third party (TTP) services, specifications for public key infrastructure interwork interfaces, requirements for mutual electronic signature acknowledgement software for implementing cross-border information interchange, recommendations for the TTP interaction management functionality of and other requirements for trust infrastructure nodes. The OSJD Leaflet P 941-4 also details the models for the cross-border exchange of electronically signed documents between Russian, Belarusian, Ukrainian and Kazakh Railways.

The electronic information exchange in railway transport is well advanced in Europe. The technical standards for interoperability are implemented for the rail transport within the European Union. The rail transport from one EU member state to another EU member state happens in the single customs territory of the EU where there are no border crossing checkpoints.

**Box 21: Telematics Applications for Freight - Technical Specification for Interoperability (TAF- TSI)**

The EU regulation on technical specification for interoperability relating to the telematics applications for freight subsystem of European rail system (referred to as the TAF TSI) ensures efficient interchange of information in rail transport by setting a framework for common interfaces to allow communication and data exchange between different systems. For this reason the TAF specifications are flexible and suitable for implementation in many different countries.\textsuperscript{148}

The TAF TSI covers the applications for freight services and the management of connections with other modes of transport. The TAF TSI has an impact on the conditions of use of rail transport by railway undertakings, infrastructure managers, other service providers (e.g. wagon companies, intermodal operators) and customers.

The EU regulations on TAF-TSI requires delivery of reliable services with use of common business processes and linked systems. The railway undertakings, infrastructure managers and other service providers and stakeholders such as customs can exchange information electronically. For example, the messages for reporting of the movement of a wagon (e.g. wagon departure notice, wagon arrival notice, wagon delivery notice) must be stored and electronically accessible. The electronic exchange of such messages to authorized parties has to be done on contractual bases.

The TAF TSI annexes define specific details required for implementation of electronic exchange such as: figures and sequence diagrams of TAF TSI messages, common interface requirements; TAF TSI data and message model etc. It should be noted that TAF TSI provides the standards for interoperability, however do not require the use of specific technologies or technical solutions.

\textsuperscript{147} http://osjd.org/docu/public/ru/STRUCTURE_ID=5068&layer_id=4581&refererLayerId=4621&id=977&print=0

Box 21: Telematics Applications for Freight - Technical Specification for Interoperability (TAF- TSI) (continued)

The EU TAF provisions are transposed in COTIF to Uniform Technical Prescription Telematics Applications for Freight (UTP TAF) that will enter into force on 1 December 2017. Differently from EU, application of OTIF UTP TAF is not limited to one single customs territory.

Railway ICT Solutions that support implementation of TAF TSI have been developed by: Rail Network Europe (RNE), RAILDATA, a special group under UIC set up in 1995 by several European railway undertakings and Common Components Group (CCG), a special group of the UIC, assigned to develop, maintain and operate the Reference Files system and the Common Interface.

Table 10: TAF – TSI ICT Solutions

<table>
<thead>
<tr>
<th>TAF TSI functionality</th>
<th>Company/ Organization</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path request at short notice</td>
<td>RNE</td>
<td>RNE PCS</td>
</tr>
<tr>
<td>Train Preparation</td>
<td>RNE</td>
<td>RNE PCS</td>
</tr>
<tr>
<td>Train Running Forecast</td>
<td>RNE</td>
<td>RNE TIS</td>
</tr>
<tr>
<td>Service disruption information</td>
<td>RNE</td>
<td>RNE TIS</td>
</tr>
<tr>
<td>Train location</td>
<td>RNE</td>
<td>RNE TIS</td>
</tr>
<tr>
<td>Data exchange for quality improvement</td>
<td>RNE</td>
<td>RNE TIS</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>RU/RU communication</th>
<th></th>
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<tbody>
<tr>
<td>Consignment note data</td>
<td>RAILDATA</td>
<td>ORFEUS</td>
</tr>
<tr>
<td>Shipment of ETI/ETA</td>
<td>RAILDATA</td>
<td>ISR</td>
</tr>
<tr>
<td>Exchange reporting</td>
<td>RAILDATA</td>
<td>ISR</td>
</tr>
<tr>
<td>Wagon movement</td>
<td>RAILDATA</td>
<td>ISR</td>
</tr>
</tbody>
</table>

**Databases which have to be implemented**

| Infrastructure restriction notice database     | -                     | IRNDB has to be ensured by each IM |
| Rolling stock reference database               | RSRD²                 | RSRD²            |
| Wagon and intermodal unit operational database  | RAILDATA              | ISR              |
| Trip plan for wagon/intermodal unit            | RAILDATA              | ISR              |
| Reference files                                | CCG – UIC             | Reference files  |

**Common interface**

| Common interface                               | CCG – UIC             | Common interface |

Source: Jan Hampl, OTIF, 2015. Analysis of how OTIF should proceed with TAF TSI
Box 22: European ORFEUS System and eRailFreight project

The RAILDATA, a special group of the International Union of Railways (UIC) established in 1995 is an international organization of European cargo railway undertakings that develops and provides IT services to implement the TAF specifications and support of European freight railway transport.

The scope of IT support provided was continually increased and improved over the years, and presently the RAILDATA offers several applications, with several types of messages and various scenarios for their use. One of the main applications is ORFEUS (Open Rail Freight EDI User System). The ORFEUS information system provides electronic data exchange of the CIM consignment note data and CUV wagon notes between the railway undertakings. In the beginning the electronic data were exchanged in addition to the paper-based consignment note.

Presently the system also offers fully paperless solution for electronic exchange and processing of electronic CIM consignment note of CUV wagon notes data for empty wagons.

The eRailFreight project launched in 2008 by International Rail Transport Committee (CIT), International Union of Railways (UIC) Community of European Railway and Infrastructure Companies (CER) and RAILDATA enables introduction of paperless railway transport and replacement of paper transport documents by electronic data exchange. The ORFEUS system is a core part of the eRailFreight project.

Under the eRailFreight project technical specifications have been developed including: message structure, data catalogue, and message flow, which are based on applicable legal and functional specifications. The Electronic Consignment Note (ECN) message format and message flows were introduced first in 2009.

Figure 42: Exchange Electronic Consignment Note with ORFEUS system

Source: RAILDATA http://www.raildata.coop/orfeus-overview

Different national information systems of the participating railway undertakings electronically exchange CIM consignment notes and CUV wagon notes data using ORFEUS application and Central Data-management System (CDS).

149 More information on RAILRADATA and list of 14 Railways Undertakings presently members of RAILDATA is available at: http://www.raildata.coop/
Box 22: European ORFEUS System and eRailFreight project (continued)

The data delivered to the system by the sending railway undertaking (or the first railway undertaking that uses ORFEUS system), are translated to corresponding message format (if necessary when railways are using different formats) and distributed to other railway undertakings involved in the transportation.

The ORFEUS system uses the FTP (file transfer protocol) for transmission of messages and VPN (Virtual Private Network) the communication infrastructure. The system also offers specific web based tool, accessible only to authorized staff of the member companies, for monitoring of traffic and specific queries.

The railway undertakings that apply the system, receive the consignment note data in advance, and they can improve the processing of the information and optimize the processes. The system offers an option to eliminate the need for collection of the consignment notes data at the borders. The benefits provided include improved speed and reliability of the international freight rail transport and significant cost savings. Presently four European railway undertakings use the paperless transport using the electronic consignment note for all conventional transports.\(^\text{150}\)

The next steps in development and implementation of ORFEUS system include: geographical scope extension, finalization of activities for introduction of new CIM/SMGS ECN message, development of a paperless transport options for dangerous goods, and including customs data for transit declaration.

Source: RAILDATA web site: http://www.raildata.coop/

The EU technical standards for interoperability and EU electronic data exchange projects have an impact on railway freight services operated from or to third countries, where compatibility with the standards could be achieved through COTIF provisions or with bilateral agreements. In that way, the EU technical standards are becoming relevant for railway border crossings on external EU borders. The EU standards and relevant projects for introduction of electronic information exchange between railways undertakings could provide some of the best practice solutions that may be considered in other regions.

The data provided in the process of railways to railways EDI before arrival of the train at the border crossing station, can be used for railway related processes and for resubmission to the control authorities at border checkpoints. Efficient electronic information exchange and providing data in advance enables simplified creation and processing of railway and customs documents and streamlines processes and procedures upon arrival of the train at the border station. The exchange of information

\(^\text{150}\) CDB Schenker Rail Deutschland, Fret SNCF, Trenitalia, ČD Cargo and DB Schenker Rail Nederland. UIC web site: http://www.uic.org/erail-freight-intermodal (last accessed 16.09.2016)
also minimizes the risks for loss of cargo and incorrect customs declaration and increases the reliability of rail transport services.

3. Information exchange between railways and control authorities

The efficiency of information exchange between railways and control authorities on international railway freight transport data can be further enhanced with electronic exchange of information. Customs authorities have a major regulatory role with respect to goods entering in their jurisdiction and consequently advance electronic information can support them in completing the related formalities expeditiously.

The railways of the regions would be able to increase reliability of freight train services through electronic exchange of information between railways and control authorities. Therefore, implementation of such systems is recommended. It is further suggested to set standards for exchange of such information at regional level.

Efficient electronic information exchange between railways undertaking and control authorities at border crossing checkpoints is a foundation for developing streamlined processes and reducing delays.

The cooperation between the railways undertaking and control authorities on electronic information exchange may be based on institutional arrangement (e.g. a memorandum of understanding (MoU) or an EDI Agreement) and supported with specific IT development projects. The information systems of all partners involved should be on corresponding level that enables an interoperability to be achieved.

The scope of the information that could be electronically exchanged may be driven by: regulatory requirements (e.g. introduction of advance information requirement by customs legislation); endeavor to optimize interaction and processes at border crossings (e.g. messages related with stops/movement at different locations at railway border crossing relevant for customs authorities and railway administration); and options for simplification of railway processes and customs procedures by replacing paper based documents/communication with their electronic counterparts.

To enable efficient electronic exchange, the railway information system and the information systems of control authorities have to be connected with interface solution. When achieving interoperability and interaction between the information systems is more demanding a temporary solution may be considered. For example, e-mail communication may be established without interface between information systems or scanned documents can be exchanged. However, such solutions do not provide an exchange of information in real time and require manual processing and re-keying of data in information systems, which is far from optimal solution.
Following the WCO recommendations and in accordance with the relevant customs legislation (e.g. in Eurasian Economic Union, European Union and national customs legislation in many countries), submission of advance electronic information is required to enable adequate risk assessment. Practical implementation of this means introduction of requirement for railways to submit advance information to the customs authorities, with EDI support.

There are numerous examples of electronic information exchange between railways and control authorities in the ESCAP region. For example, the operational systems for information exchange between railways undertakings and customs authorities exist in China, Georgia, Kazakhstan, the Russian Federation. Many other countries are in the stage of pilot project stage and working on introduction of systems for efficient electronic information exchange between railways and control authorities.

**Box 23: Electronic Information Exchange between JSC RZD and Federal Customs Service (FCS) of Russian Federation**

Electronic information interaction between JSC RZD and FCS of Russian Federation is based on the Agreement from 2004, jointly developed plans on related general measures and methodologies from 2011 and several FCS instructions on methodology for electronic exchange of documents and information as presented in Figure 43 below. The information exchange covers movement in of trains and goods departing and arriving in the customs territory of the Customs Union.

**Figure 43: Information interaction between RZD and FCS of Russian Federation**

<table>
<thead>
<tr>
<th>Month</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2004</td>
<td>Agreement between State Customs Committee of Russian Federation and JSC RZD on information interaction</td>
</tr>
<tr>
<td>October 2011</td>
<td>Plan on general measures for organization of electronic interaction between FCS of Russia and JSC RZD</td>
</tr>
<tr>
<td>July 2012</td>
<td>Temporary methodology on exchange of electronic documents and information for customs operations and customs control of trains and goods departing from the customs territory of the Customs Union (Order of the FCS of Russia on 24th July 2012 № 1490)</td>
</tr>
<tr>
<td>March 2013</td>
<td>Temporary methodology on exchange of electronic documents and information in electronic form for customs formalities of customs control of railway transport means and goods arriving to the customs territory of the Customs Union (Order of the FCS of Russia on 11th March 2013 № 444)</td>
</tr>
<tr>
<td>June 2015</td>
<td>Temporary methodology on customs operations for railway transport means and the goods they transport in international freight transport in the presentation of documents and information in electronic form (Order of the FCS of Russia on 1st June 2015 № 1053)</td>
</tr>
</tbody>
</table>

Source: RZD Presentation (V.A.Titov); September 2015 (Gdansk); Application of information technology in cross-border movement of goods and vehicles in international rail traffic

To enable electronic interaction the RZD and the FCS of Russian Federation had to work on providing interoperability of their information systems. The activities for implementation of communication and data exchange in electronic form included:

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151 WCO SAFE Framework of Standards, Pillar 1, Standard 6
development, test and infrastructure upgrade for electronic interaction

- design and test of software for processing of electronic documents
  (e.g. 12 types of documents in export direction are in use at five railway BCPs)

The pilot project in export direction became operational in December 2013 on voluntary basis.

Regarding exchange of documents and electronic interaction in import direction seven major technological stages are identified:

- Registration of the arrival of goods and means of transport
- Operations related to customs formalities of goods in transit transport or goods intended for placement in import customs procedure
- End of customs transit procedure
- Placement in temporary storage and delivery of goods after their release
- Reports to the customs authorities on all types of carrier activities
- Temporary importation of transport means in international transport
- Unloading, reloading and other cargo operations, replacement of transport means, extension of the time limits for customs transit

In 2015 and 2016 the RZD and FCS of Russian Federation have been testing the exchange of documents and electronic interaction in all technological stages in import direction.

Based on decision for mandatory requirements introduced in October 2014, the RZD submits to the customs authorities the advance information in electronic form, about the goods imported at the customs territory of Eurasian Customs Union by railway transport. The data on advance information are provided from electronic data information exchanged between RZD and other partner railways.

Present operational solution for advance information, supports the submission of notification for arrival to the customs territory. In 2016 the RZD and FCS of the Russian Federation have been developing solution and testing the electronic information exchange that will enable translation of advance information into customs transit declaration.

The next step in development of electronic document management is the use of electronic transport documents for the carriage of goods. The RZD and FCS of Russian Federation are working on project for fully paperless transport of iron ore pellets to Finland. This project is expected to significantly reduce the time spent at border crossings and simplifies the procedure of registration of documents when crossing the border.\(^{152}\)

The JSC RZD exchanges electronic data and documents with the single automated information system of FCS of Russian Federation (EAIS) through an automated information system of electronic interaction (AIS EV) as shown in the Figure 44 below.

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\(^{152}\) OSJD, 2014, Best practices to improve efficiency of international carriage by rail in Eurasia (Vadim Morozov, RZD, Problems arising from the cross-border transport, and effective ways to address them, as an important component of modern integration processes, p.25-27)
The AIS EV provides data protection and security, as well as authentication methods that include use of electronic signature. The system maintains databases on sent and received messages, and offers reporting and analysis tools.

Figure 44: Structure of the systems for electronic interaction between JSC RZD and Federal Customs Service (FCS) of Russian Federation on movement of goods across the customs border

The AIS EV is linked with other RZD information systems and applications such as: ETRAN automated system for preparation and processing of railway transport documents; ASOUP automated system for operative transport management, and ASU PS automated management system of border stations. The system for electronic interaction enables preparation of transport documents (e.g. reusing data from customs declarations) and generation of data for customs authorities (e.g. reusing data from transport documents, transfer slips on departure/arrival or other relevant declarations and documents.

The electronic information exchange between RZD and FCS of Russian Federation allows simplification of border crossing procedures and reduction of dwell time at the border crossing checkpoints. For example, reduction of waiting time by 1.5 day is reported at
C Standardized, harmonized and reduced documentary requirements

1. Participation in major arrangements on international railway transport

The legal regime on railway transport in the country is based on major international arrangement, such as OSJD Agreements and/or COTIF. That enables harmonized application of same rules, or compatible rules, by the countries in the region regarding various railway transport aspects, including documentary requirements on railway consignment note, use of wagons, handover of trains etc.

While different bilateral arrangements on freight transport may impose different rules, the OSJD Agreements and/or COTIF support harmonization of rail freight transport regime on broader international level within their own domain. With the unified rules on railway consignment note, use of wagons, handover of trains and other railway transport aspects, the operations for moving from one border crossing to another could be organized with minimal disruption created with new rules and new railway documentary requirements at each subsequent border crossing station.

Table 11: Participation in major international railway transport arrangements from the ESCAP region

<table>
<thead>
<tr>
<th>OSJD Agreement on the International Goods Transport by Rail (SMGS)</th>
<th>Members from ESCAP region</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSJD Agreement on Rules for the Use of Wagons in International Traffic (PGW)</td>
<td>China, Democratic People’s Republic of Korea, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Mongolia, the Russian Federation, Tajikistan, Turkmenistan, Uzbekistan and Viet Nam</td>
</tr>
<tr>
<td>COTIF/CIM Convention</td>
<td>Armenia, Azerbaijan, Georgia, Islamic Republic of Iran, Pakistan, Russian Federation and Turkey</td>
</tr>
<tr>
<td>COTIF/CUV</td>
<td>Armenia, Islamic Republic of Iran and Turkey</td>
</tr>
<tr>
<td>COTIF/CUI</td>
<td>Armenia, Islamic Republic of Iran and Turkey</td>
</tr>
</tbody>
</table>

The countries from the ESCAP region that have harmonized legal regimes on railway transport based on OSJD Agreements and/or COTIF, have enhanced their opportunities to develop international railway transport connectivity. The main features of OSJD

153 RETRACK Project / May 2007 - July 2012; Deliverable no. 13.2; Potential for Eurasia land bridge corridors & logistics developments along the corridors (p.115)
Agreements, COTIF and the initiatives on unification of railway transport regimes have been discussed in the first chapter of this Study.

The countries in the ESCAP region, that presently are not taking part in some of the major legal railway transport regimes, should be encouraged to consider participation in international railway organizations and joining relevant conventions/agreements.

2. Use of a common railway consignment note

The use of a common railway consignment note eliminates the need to reissue new transport documents at each subsequent border crossing, which simplifies the border crossing processes and reduces the dwell time. Any mistakes that may happen in the process of re-writing of the transport documents and related additional delays are also avoided.

This good practice is implemented for the transport of goods within the area of same international railway transport regime (e.g. SMGS, COTIF/CIM) or within area of the railway transport regimes established by subregional, multilateral or bilateral agreements. To extend the usage of a common railway consignment note across different railway transport regimes additional measures are needed.

Introduction of CIM/SMGS consignment note in 2006 provides a single common transport document applicable in the territories of both legal regimes on international railway transport (SMGS and COTIF/CIM).\(^\text{154}\) The CIM/SMGS consignment note enables streamlined movement across the border crossings where jurisdiction changes from one legal regime to other without need for re-consignment.

The use of a CIM/SMGS consignment note is not obligatory, and in some occasions separate CIM and SMGS consignment notes are still being used. There are also cases where a local consignment note is preferred for national part of the journey, which leads to need for reissue of consignment note at the border crossing.

**Box 24: Use of CIM/SMGS railway consignment note across ESCAP region**

The use of the CIM/SMGS railway consignment note, at the main land railway border ports in China, was approved from January 2012. The use of the unified consignment note

\(^{154}\) An overview of SMGS and CIM legal regimes as well as on initiatives for unification is provided in Chapter 1 of this Study.
CIM/SMGS, started in Kazakhstan for transit routes from January 2012, and for import routes from January 2013.155

The first train with CIM/SMGS consignment note on rail route that connects Chongqing (China) and Duisburg (Germany) was organized in November 2012 in cooperation with the Ministry of Railways of China, Kazakhstan KTZ, Russian Railways, Belorussian Railways, PKP Cargo Poland and DB Shenker Rail Germany.156

Participation in major legal railway transport regimes and using unified CIM/SMGS consignment note expands the area where the common railway consignment note could be implemented. The unified CIM/SMGS is now widely used and supports reduction of transport costs, decrease of delivery times and improves services in international railway transport.

Table 12: Use and benefits of common CIM/SMGS consignment note

<table>
<thead>
<tr>
<th>Use of common CIM/SMGS consignment note (between CIM and SMGS areas)</th>
<th>Over 80 percent (in 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of common CIM/SMGS consignment note for container cargo</td>
<td>Over 70 percent (in 2014)</td>
</tr>
<tr>
<td>Savings in time per wagon</td>
<td>~ 40 minutes</td>
</tr>
<tr>
<td>Savings in time per train</td>
<td>8 - 10 hours</td>
</tr>
<tr>
<td>Cost savings per consignment</td>
<td>~ 45 USD</td>
</tr>
</tbody>
</table>

Sources: OSJD, 2014, Best practices to improve efficiency of international carriage by rail in Eurasia and Dr. Erik Evtimov CIT 2015, Presentation at UNESCAP: Common consignment note as way forward for legal challenges in international railway transport

155 The Ministry of Transport and Communications of the Republic of Kazakhstan, 2013, Information on implementation of the Almaty Programme of Action

3. Reduced data and document requirements

Data and document requirements are reduced only to those necessary for efficient control of customs and other control authorities. Supporting documents are not translated on regular bases, even though translation may be required when it is necessary for processing of declaration and for control of the goods. When documents and data are submitted in electronic form, the paper-based version does not have to be presented to the control authorities. When it is necessary in selected and duly justified cases the control authorities may check the paper-based documents (including supporting documents identified in the customs declaration and stored by the railways/forwarders) during regular or post clearance audit.

The number of documents required for import, export or transit deemed to be necessary differs from country to country. Customs manifest, customs declaration, railway consignment note, commercial invoice, and packing list are the documents most frequently required by customs authorities. Some customs authorities may require on regular basis only 3-4 documents, while other may have more extensive requirements for 10 or even more documents that may include: sales contracts, bill of lading, letter of credit, other commercial documents and various certificates.

Box 25: Reduction of requirements for supporting documents in Mongolia

With customs modernization in Mongolia the number of supporting documents for customs declaration was reduced from 10 for import and 11 for export in 2007 to 8 for both import and export in 2012, and further reduced to 6 for imports and 4 for exports since 1 January 2013. The number of customs stamps in use was reduced from 7-8 to a single customs stamp.

Source: Mongolian Customs, June 2016, information provided to ESCAP study team

It should be noted that efficient clearance and control at the border crossings could be organized with fewer documents required on regular basis, however the reduction of number of documents/data required have to be introduced as a comprehensive set of measures for increased control capacity of the competent authorities.

The control authorities should strive to develop efficient risk analysis/intelligence, and to increase capacity to perform effective audit and post clearance controls. Then, they will be able to abandon any excessive administrative-led actions of piling up and stamping numerous documents at border crossings.

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157 Even though the information is not provided particularly for rail transport, and specifics for transit are not provided the data available at the World Bank Doing Business web site http://www.doingbusiness.org/data can provide an overview of export and import documents generally required.
The documentary control processes can be simplified for majority of the cargo and additional documents may be required only if it is justified and necessary for selected high-risk cargoes. To reduce possibility for abuse of powers given to the control authorities for asking additional documents during control process it is necessary to: increase transparency and cooperation with railways and trading community, as well as to put in place integrity and anticorruption programs including efficient internal control.

Significant reduction of document requirements is more easily achievable in the case of customs transit procedure that should not be treated the same as the import mainly because the risks for non-compliance are not the same as for the import procedure.

C    Single Window and Government to Government information exchange

1.  Standardization and harmonization of data requirements

Formal standardization and harmonization of data requirements of the railways and the control authorities responsible for border and customs control, medico-sanitary, veterinary and phytosanitary inspections, enables seamless electronic data exchange and introduction of Single window facility.

Standardization and harmonization of data requirements should identify all documents and the types of data related to cross-border railway transport, which are required by multiple control agencies.

The control authorities and the railways undertakings in practice require many common information, documents and certificates. For example, information on description of goods and loading / unloading places are usually required by railways, customs authorities, quarantine and health inspections as presented at the Figure 45.

Figure 45: Common information needed by major agencies relating to railway cross-border transport
IHM Computerized management, coordinated or integrated control (many of them identified as separate good automated readers exchange of information between railways, customs and other control authorities; restandardized and harmonized data, information and documents are prethe border crossings. ESCAP Model on Integrated Controls at Border Crossings (2012) offers relevantrout description of the goods, railway consignment note, invoice, packing list, goodsdata on locomotive and other train crews (e.g. passport ID and visa; personal effects and personal carriage declaration, etc.). ESCAP Model on Integrated Controls at Border Crossings (2012) offers relevant design for analysis on information related to cross-border railway transport operations, Border Crossing Management Information System, and simplification of workflows at the border crossings.

Standardized and harmonized data, information and documents are pre-condition for: streamlined and improved organization of border crossing processes; electronic exchange of information between railways, customs and other control authorities; re-use of electronic data and introduction of single window facilities; efficient joint use of automated readers and control equipment at border crossing; joint or coordinated risk analysis, coordinated or integrated control (many of them identified as separate good practices in this Chapter).

Table 13: Data collected/processed by control authorities in cross-border movement of goods by rail

<table>
<thead>
<tr>
<th>Data on goods</th>
<th>Data on Train/Wagons</th>
<th>Data on Locomotive/other Crews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterinary certificate</td>
<td>C, Q</td>
<td></td>
</tr>
<tr>
<td>Phytosanitary certificate</td>
<td>C, Q</td>
<td></td>
</tr>
<tr>
<td>Quality control certificate</td>
<td>C, Q</td>
<td></td>
</tr>
<tr>
<td>Personal effects carriage</td>
<td>C, Q</td>
<td></td>
</tr>
<tr>
<td>Certificates of Origin</td>
<td>C, Q, H</td>
<td></td>
</tr>
<tr>
<td>Sanitary certificate</td>
<td>C, Q, H</td>
<td></td>
</tr>
<tr>
<td>Description of goods</td>
<td>C, Q, H, R</td>
<td></td>
</tr>
<tr>
<td>Loading/unloading places</td>
<td>C, Q, H, R</td>
<td></td>
</tr>
<tr>
<td>Route</td>
<td>C, Q, H, R</td>
<td></td>
</tr>
<tr>
<td>Radiation train, wagon, containers</td>
<td>C, Q, H, P</td>
<td></td>
</tr>
<tr>
<td>Radiation goods</td>
<td>C, Q, H, P</td>
<td></td>
</tr>
<tr>
<td>Radiation (locomotive and other crews)</td>
<td>C, Q, H, P</td>
<td></td>
</tr>
<tr>
<td>Dangerous/hazardous/prohibited goods</td>
<td>C, H, R, P</td>
<td></td>
</tr>
<tr>
<td>Railway consignment note</td>
<td>C, R</td>
<td></td>
</tr>
<tr>
<td>Weight/volume</td>
<td>C, R</td>
<td></td>
</tr>
<tr>
<td>Container information</td>
<td>C, R</td>
<td></td>
</tr>
<tr>
<td>Packaging information</td>
<td>C, R</td>
<td></td>
</tr>
<tr>
<td>Foreign Railway</td>
<td>C, R</td>
<td></td>
</tr>
<tr>
<td>Collection of statistical data (train)</td>
<td>C, R</td>
<td></td>
</tr>
<tr>
<td>Wagon number/certificate,</td>
<td>C, R, P</td>
<td></td>
</tr>
<tr>
<td>Wagon information (type, net weight etc.)</td>
<td>C, R, P</td>
<td></td>
</tr>
<tr>
<td>Weights and dimensions</td>
<td>C, R, P</td>
<td></td>
</tr>
<tr>
<td>Criminal record</td>
<td>C, I, P</td>
<td></td>
</tr>
<tr>
<td>Weapon or explosive</td>
<td>C, P</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from ESCAP, 2012, Model on Integrated Controls at Border Crossings
<table>
<thead>
<tr>
<th>Type of data</th>
<th>Agencies concerned</th>
<th>Type of data and its code</th>
<th>Agencies concerned</th>
<th>Type of data and its code</th>
<th>Agencies concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of goods</td>
<td>C,Q,R</td>
<td>Special transport permit for over-sized or over-weighted goods or Dangerous goods</td>
<td>R</td>
<td>Passport (ID) and visa</td>
<td>I</td>
</tr>
<tr>
<td>Import/Export licenses</td>
<td>C</td>
<td>Wagon Number /certificate/</td>
<td>R,C,P</td>
<td>Professional Competency</td>
<td>P, R</td>
</tr>
<tr>
<td>Railway consignment note</td>
<td>C,R</td>
<td>Wagon information (type, net weight etc.)</td>
<td>T,C,P</td>
<td>Personal effects Personal carriage</td>
<td>C,Q</td>
</tr>
<tr>
<td>Invoices/ contracts</td>
<td>C</td>
<td>Weights and dimensions</td>
<td>R,P,C</td>
<td>Weapons or explosives</td>
<td>C,P</td>
</tr>
<tr>
<td>Packing lists</td>
<td>C</td>
<td>Temporary importation docs</td>
<td>C</td>
<td>Health</td>
<td>H</td>
</tr>
<tr>
<td>Certificates of Origin</td>
<td>C,Q,H</td>
<td>Foreign railway</td>
<td>C,R</td>
<td>Radiation</td>
<td>C,Q,H,P</td>
</tr>
<tr>
<td>Veterinary certificate</td>
<td>C,Q</td>
<td>Route</td>
<td>C,R,Q,H</td>
<td>Criminal record</td>
<td>I,P,C</td>
</tr>
<tr>
<td>Phytosanitary certificate</td>
<td>C,Q</td>
<td>Infection of human disease</td>
<td>H</td>
<td>Record of offense to traffic rules</td>
<td>P,R</td>
</tr>
<tr>
<td>Sanitary certificate</td>
<td>C,Q,H</td>
<td>Insect pest</td>
<td>Q</td>
<td>Record of offense to Customs rules</td>
<td>C</td>
</tr>
<tr>
<td>Quality control certificate</td>
<td>C,Q</td>
<td>Animal disease</td>
<td>Q</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guarantee for transit</td>
<td>C</td>
<td>Radiation infection</td>
<td>C,Q,H,P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loading / unloading places</td>
<td>C,Q,H,R</td>
<td>Certificate for carriage of Dangerous goods</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consignor / consignee</td>
<td>C</td>
<td>Certificate for carriage of Perishable goods</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight/volume</td>
<td>C,R</td>
<td>Collection of statistical data</td>
<td>R,C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Container information</td>
<td>C,R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaging information</td>
<td>C,R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duties/taxes</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dangerous/hazardous /prohibited goods</td>
<td>C,Q,H,P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiation goods</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value/valuation</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs seals</td>
<td>C, R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection of statistical data</td>
<td>C, R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from ESCAP, 2012, Model on Integrated Controls at Border Crossings
2. **Rail Transport Single Window Facility/System**

A Rail Transport Single Window Facility enables the railways, forwarders and traders to submit to standardized documents and data required for import, export and transit formalities in electronic form to the customs and other control authorities at the railway border crossing.

The single window could be introduced on national and/or cross-border level.

The single window principles and single window systems that provide single point of entry for submission documents and data relevant for regulatory clearance of goods in international trade and transport to the responsible authorities have been introduced in many countries. The single window facilities vary in scope and implementation modalities due to differences with respect to: involved stakeholders, transactions covered, territorial coverage and other relevant aspects.

The regulatory single windows usually are not specific to the mode of transport. For example, a national single window that covers all modes of transport including railway transport can support export, import and transit clearance at railway border crossing. The regulatory single windows can efficiently connect processes for issuing permits and licenses from various regulatory authorities, with customs clearance procedures. The single window systems may simplify application processes for different permits and licenses, notifications between applicants and authorities and provide information sharing between the authorities concerned.

Linking railway information systems at border crossings with national single window could be considered to reduce the need for resubmission of similar information and to maximize the opportunities for simplification of border crossing formalities. For seamless sharing of information and better integration of railway information systems in single window environment, interoperability between the systems has to be provided.

Presently there are no operational cross-border single window facilities that cover railway transport operators, however such possibilities may be considered in future.

The main benefits from use of single window systems are trade and transport facilitation, efficient electronic data exchange among stakeholders involved, support for redesign and streamlined business processes.

Government authorities exchange electronic information with other government authorities present at the railway border-crossing checkpoint. The data exchanged electronically may include: information on transport means and goods; licenses, certificates, authorizations, declarations and other information on border control clearance; information relevant for joint/coordinated risk analysis and/or joint/coordinated control.

The government control authorities exchange relevant electronic information on national level, and on cross border level with their counterparts in neighboring country.

The electronic information exchange among the control authorities at national / border-crossing level may be organized in many ways, for example: through national/border crossing single window facility; with interface solution between information systems of the control authorities concerned; or with exchange of relevant electronic messages and e-mails.

For example, the good practice for organization of border crossing controls in Russian Federation (e.g. Zabaykalsk border crossing check point) shows border crossing controls organized under “single window” principle where the documents for sanitary-quarantine, veterinary and phytosanitary control are submitted to customs (that is responsible for examination of documents). And then the Customs authorities exchange the information in electronic form with other state control authorities to confirm the clearance or coordinate further controls if necessary.

The objectives for exchange of information between control authorities may differ from case to case and may include endeavors to:

- streamline control procedures at border crossing by providing advance information and reuse of common data and documents required by multiple control authorities;
- accelerate border crossing procedures and processing of declarations/documents by sharing electronic form of the data on licenses, certificates, authorizations, control reports etc. issued by designated control authorities;
- improve security and reliability of data enabled by secure systems for electronic information exchange;
- increase efficiency of control actions by concluding joint/coordinated risk analysis or organizing joint/coordinated controls;
- simplify the control processes, increase the flow of traffic through border-crossing check points and reduce time spent at border crossings for cargo and transport means by improving organization of control processes.
The electronic information exchange among the control authorities at national / border-crossing level requires: national legislation that allows such exchange; MoUs between control authorities concerned to address practical issues on implementation; as well as technical capability to interconnect their information systems.

Cross-border electronic information exchange between partner control authorities of neighboring or other countries along international rail transport corridors is more demanding. Reaching bilateral agreement/MoU on information exchange, harmonizing data requirements, as well as providing functional and technical interoperability is challenging and it may take long time to be finalized.

The examples of cross border information exchange between customs authorities include: exchange on data on goods and transport means for improved risk assessment, increased reliability of data; and mutual recognition of customs inspection results (e.g. x-ray scans).

The Customs authorities can organize streamlined border crossing controls based on Customs to Customs information exchange, such as in the case of the Green Corridor pilot project at the border crossing Zabaykalsk/Manzhouli between the Russian Federation and China. The Project Green Corridor is also implemented between customs authorities of Russian Federation and customs authorities of Finland, Italy and Turkey.\footnote{FCS of Russian Federation web site; 15.06.2015: Customs check post ZHDPP Zabaykalsk and Trans-Baikal customs post included in the pilot project: “Green Corridor”; http://customs.ru/index.php?option=com_content&view=article&id=21275:----------1-r&catid=40:2011-01-24-15-02-45}

Higher level of cross border cooperation, as well as appropriate institutional arrangement and information system support is required for electronic information exchange in implementation of international customs transit procedure. Even though presently there is no operational agreement on international railway customs transit in the region, customs authorities are exploring such possibilities and requirements that include cross border electronic information exchange on processing of customs transit documents.

Cross border information exchange can be organized between other control and certification authorities as well. For example, China Inspection and Quarantine Electronic Certificate System (China E-Cert) is a web-based electronic certification system introduced in 2009. The system supports government-to-government exchange on information related with quarantine certification. Presently exchange of information is implemented between China and Australia, New Zealand, Netherlands, and Singapore.\footnote{More information of China E-Cert is available at http://ecert.eciq.cn/}

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159 More information of China E-Cert is available at http://ecert.eciq.cn/
E Good practices regarding Customs and OGA formalities

1. Pre-arrival information, risk assessment and selective controls

Pre-arrival intimation is submitted to the Customs and/or other control authorities at the railway border-crossing preferably in the electronic format. Customs and other control authorities jointly apply risk analysis and selective controls at the railway border crossing.

Inspection for targeted goods and transport means (wagons/containers) is done in coordination with all the relevant agencies- the agencies may designate Customs to do the inspections and share the results.

The inspections should as far as possible use non-intrusive technologies such as scanners. As these facilities are usually costly, they should be shared among the control agencies through appropriate arrangements.

Many Customs authorities in the ESCAP region have introduced requirements for providing advance information on transport means and goods, which applies to railways as well. For example, such practices are implemented in Eurasian Customs Union, China, Mongolia and other countries. The information on arrival of the train usually is submitted few hours in advance that enables the authorities to prepare for necessary formalities and offer simplification and accelerated operations at the border crossing.

To benefit fully from the advance information provided, an effective risk analysis and a control system based well-defined criteria is required. It is even better that Customs and other government agencies have integrated risk management in place so that inspections can be conducted collaboratively.

Increasing amount of cargo transported in international railway transport, makes the risk analysis and risk management a necessity for efficient control at the border crossing. Effective risk analysis is particularly important for border crossings with high traffic flows, given limited resources with control agencies.

The risk management process in general has several phases including: establishment of the risk management context; risk identification; risk analysis; risk evaluation and prioritization; risk treatment; and monitoring and reviewing the process through compliance measurement.

While establishing risk context and identifying risk parameters, the unique features of railway transport need to be considered. The risks of diversion of goods in transit are much lower compared with the transport by road. Important characteristics of rail transport is the existence of single or only few carriers – railway undertakings that carry
the goods in the country, which are known to the control authorities and may have established cooperation with them.

The railways are fully in charge of transport operations and the process of handover of goods and transport means at the border crossings is soundly organized, supervised and recorded into accounts of railways undertakings.

The main risk for customs transit is the uncertainty that the goods will arrive at the customs office of destination in the same state and quantities as they left the customs office of departure. In the case of railway transport such risks are minimized and it could be successfully addressed (e.g. all trains stops are strictly scheduled and located at areas with controlled access, which could be under video surveillance).

The organization of railway transport can successfully restrict unauthorized access to the transport means and the goods in transit. Therefore, a customs transit guarantee for transport of goods by rail usually is not required, and the goods in transit may not be subject of physical customs control.

The customs authorities and other control authorities at the railway border crossing analyze the risks systematically using all available information. Electronic advance information, electronic documents and exchange of electronic information with partner customs authorities are main sources of information that could be processed by automated risk management system.

Efficient risk management systems are fully integrated with other customs information systems and use ICT solutions to support analysis of selectivity criteria. Customs and other agencies may develop joint risk assessment and risk management.

2. Use of a railway consignment note as a customs declaration

Use railway consignment note is used as customs declaration. For example, paper based railway consignment note (e.g. CIM, SMGS or CIM/SMGS railway consignment note) or electronic consignment note represents as a customs declaration.

The Customs authorities (e.g. in transit countries and destination country) accept the railway consignment note as: a) goods declaration (entry manifest) and/or b) transit declaration. The customs authorities do not require other customs forms for arrival at the border station and for customs transit procedure.

The customs authorities usually require submission of the goods declaration (entry manifest) in electronic form. The transport document (e.g. railway consignment note) provide all data required for the goods declaration (entry manifest). If a paper based document has to be also submitted for arrival at the border crossing, then the consignment note (or other already available transport documents) could be sufficient for initial processing by Customs authorities.
For simplification of border crossing procedures, recognition of railway consignment note as a transit customs declaration has a very important role. If the customs transit declaration is submitted in electronic form, then the data elements of such declaration could be based on the data available in the transport documents (e.g. railway consignment note). If a paper-based document is submitted for processing of customs transit procedure (at the office of departure, transit offices and the office of destination), then the paper based transport document (e.g. railway consignment note) could be used for such purpose. The creation of other paper based customs transit declaration is not needed.

The recognition of a railway document as customs declaration streamlines procedures at railway border crossings could reduce the time and costs for customs formalities, especially for customs transit procedure. For example, the benefits presented from the use of common CIM/SMGS consignment note in Table 12 above include the achievements using CIM/SMGS consignment note as a customs declaration as well.

The recognition of railway consignment note as a customs declaration may take different forms during implementation, for example:

- replacement of customs declaration paper based form, only
- simplified processing of customs transit
- part of comprehensive international railway customs transit arrangement.

The of use of the railway consignment note as customs transit declaration is enabled in the legislation of the Eurasian Economic Union, European Union, national customs legislation of some countries and few international agreements as presented below.

### Box 26: Railway Consignment Note as Customs Transit Document

The railway consignment note (SMGS, CIM or CIM/SMGS) is acceptable as customs transit document in:

- Eurasian Economic Union
  
  Agreement on special conditions of customs transit of goods carried by railway within the customs territory of the Customs Union (2010)

- European Union;
  
  EU Customs Legislation and European Convention on a common transit procedure (1987)

- EFTA countries (countries that acceded the Convention on a common transit procedure)
  
  European Convention on a common transit procedure (1987) and national customs legislation

- some of TRACECA countries
  
  Basic Multilateral Agreement on International Transport for Development of the Europe-the Caucasus-Asia corridor (1988)
  
  (The Technical Annex on The International Customs Transit Procedures for the Carriage of Goods by Rail Using the SMGS Railway Bill)

- other countries (based on national customs legislation and bilateral agreements)
It is apparent that the present arrangements still do not offer comprehensive solution for using railway consignment note as customs document for wider transcontinental international railway customs transit.\textsuperscript{160}

Keeping in view benefits that introduction of simplified international customs transit can offer, amendments of present conventions / agreements or introduction of new international convention on railway customs transit could be considered.

3. Use of new technologies and non-intrusive inspections

Use new technologies and non-intrusive inspections could support efficient completion of border crossing formalities.

The application of new technologies such as use of mobile scanners would allow completion of required controls expeditiously reducing delays. Where possible use of non-intrusive inspection of the cargo and transport means is suggested.

Joint use of inspection facilities among the railways and control authorities and sharing of control results is encouraged.

The use of modern and non-intrusive control technologies can significantly contribute to improvement of organization of railway technical inspections, customs controls and controls of other authorities and inspections at railway border crossings.

The relevant technologies include:

- train signaling systems
- automated shunting systems
- electronic dynamic and static weighing scales
- automated wagon and container number readers
- automated sensor (e.g. heat, impact, chemical leaking, noise etc.) readers
- RFID systems composed tags installed on wagons and readers
- laser or optical dimension control systems
- video and electronic surveillance systems
- radiation scanners
- x-ray scanner

\textsuperscript{160} For example, CIM and SMGS rules do not regulate this issue and Convention on International Customs Transit Procedures for Carriage of Goods by Rail under Cover of SMGS Consignment Notes (2006) has not entered into force.
- thermal imaging system

Various control systems may be combined, interconnected and linked with railway electronic information systems, as well as with the information systems of customs and other control authorities.

**Figure 46: Multifunctional automated technical control system**

* (video monitoring, electronic markers, oversize sensors, thermal images, chemical sensors)

Source: Lithuanian Railways; Train Inspection System on Lithuanian railway border stations

* (Screenshots of the animation presented at Inter-ministerial meeting of OSJD members on Railway Border Crossing Practice in September 2015 at Gdansk Poland)

The control systems should be installed in the proximity of railway border crossings and ideally, they should record the data as the train approaches the railway border station and the train is still in motion.

**Figure 47: Thermal imaging for liquid level measurement**
The data collected from the control system needs to be transmitted to the control centers at the border crossing (e.g. railways and customs) so when the train arrives at the station the railways administration, customs and other control authorities will have advance information provided from control systems already available at their own electronic information systems.

**Box 27: X-Ray Scanner Systems**

Use of railway x-ray scanner system is a good practice employed at many major railway border crossings in Europe and Asia. The x-ray scanners provide efficient inspection tool for fast and non-intrusive control to determine potential smuggling.

The x-ray scanner at Zilupe (Latvia) railway border crossing checkpoint with Russian Federation is depicted at Figure 48 below. The x-ray system enables dynamic scanning when the train is moving in the range between 7 to 25 km / hour.\(^{161}\)

**Figure 48: X-ray scanner at Zilupe (Latvia) railway border crossing**

Source: Information Ministry of the Republic of Latvia Department of Railway Transport (M.Riekstins)
22.09.2015 (Gdansk), presentation: Experience of border crossings control in the Republic of Latvia

The use of x-ray scanner system at Kena (Lithuania) railway border crossing with Belarus depends on risk management. Customs authorities and border guards jointly define risk indicators for x-ray scanning. The system targets only selected wagons for x-ray scanning. The scanning is done at the x-ray gate located on inbound railway tracks, on moving trains at the speed between 10 to 20 km/hour. The possibility for x-ray exposure of drivers is prevented by automated distinction of the locomotive from the wagons supported by the system.

The x-ray scan images are being used for analysis and making decision for detailed control if necessary (e.g. for wagons in transit). The x-ray scan images are also shared with the inland customs offices, where the cargo may be sorted out and redistributed for further

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\(^{161}\) Information Ministry of the Republic of Latvia Department of Railway Transport (M.Riekstins)
22.09.2015 (Gdansk), presentation: Experience of border crossings control in the Republic of Latvia
destination or cleared for import. Accordingly, the inland customs office could also use the x-ray scans for analysis and making decision for detailed control if necessary.  

**Box 28: Use of control technologies at Kena (Lithuania) railway border crossing**

Several modern control technologies are put in operation at Kena railway border crossing at the border between Lithuania and Belarus:

- electronic surveillance system with video monitoring covers the route from actual border line to the railway border station. The use of the surveillance system increases security and eliminates the need for escort. Attempts for smuggling (e.g. accessing the train at slow speed or during brief stops and throwing out the goods that are not cleared or smuggled goods) are promptly detected and enforcement authorities can react immediately and stop the perpetrators.

- dynamic weigh scales are situated at main railroad lines at the entrance of the railway border crossing station. Static scales are available at sidelines if more precise weighing is necessary.  

- automated train and wagon commercial inspection system (AKAS / ASKO PV system) that contains electronic gate sensors and video monitoring for checking correct loading of the goods, cargo fastening elements, security and safety of cargo; oversized cargo etc.

- automated system for recognition and registration of wagons that detects the number of wagon car/container numbers and works in conjunction with the automated inspection system.  

- radiation monitoring equipment control system, as well as x-ray scanning system.

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164 Gudok 1520 Newspaper; 05.02.2016; Olegas Lounici, JSC ”Lithuanian Railways”; Available at: http://www.gudok.ru/1520/newspaper/detail.php?ID=1326656
Implementation of automated control systems and their integration can significantly reduce processing time for inspection of trains and improve the efficiency of technical and commercial inspections as well as the efficiency of the customs control and control of other border control authorities. For example, the Lithuanian railways have installed automated train and wagon commercial inspection system (AKAS system) at several border crossings that improved the quality of inspections with decreased number of employees and provided savings of 263.3 thousand Euro per year.165

Table 14: Processing time limits on train handling at BCP Kena (Lithuania)

(before and after implementation of facilitation measures)

<table>
<thead>
<tr>
<th></th>
<th>Outbound</th>
<th>Inbound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>before (min)</td>
<td>after (min)</td>
</tr>
<tr>
<td>Contrailer train &quot;Neman&quot; and Container block train &quot;Viking&quot;</td>
<td>165</td>
<td>130</td>
</tr>
<tr>
<td>Trains of empty wagons</td>
<td>165</td>
<td>36</td>
</tr>
<tr>
<td>Trains with goods which are not subject to veterinary and phytosanitary control</td>
<td>175</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Data from Lithuanian Railways (J.Tsekhanovich); September 2015 Gdansk; Presentation: Facilitation of Border Crossing - Experience of Lithuanian Railways

The experience of Lithuanian railways shows that significant savings in time for processing of trains at railway border crossings can be achieved with the use of control technologies together with other facilitation measures and good practices implemented such as: advance information provided from railway station administration to control authorities; use of SMGS, CIM and CIM/SMGS consignment note as customs transit declaration; simplifications for block container trains; mutual recognition of customs seals applied by foreign customs authorities and railway companies; risk management; electronic interaction between information systems of ports and railways; use of paperless technologies and exchange of information with neighboring railways companies.

165 Gudok 1520 Newspaper; 05.02.2016; Olegas Lounici, JSC "Lithuanian Railways»; Available at: http://www.gudok.ru/1520/newspaper/detail.php?ID=1326656
4. Simplification for customs transit procedures at railway border crossings

Simplify customs transit procedures at railway border crossings by instituting such measures as: use of consignment note as a customs transit declaration; reduced document requirements; transit guarantee waiver; electronic exchange of transit information; acceptance of railway seals or mutual recognition of customs of country of departure; minimal inspection for transit goods at railway border crossing; and grant of authorized economic operator status to railways.

At border crossing with significant international traffic, it is suggested that export/import procedures may be shifted to inland locations such as dry ports. This will reduce time for freight trains in transit.

Majority of control formalities associated with export and import customs procedures do not have to be performed at the border crossing. Such controls can be more efficiently organized at the departure and destination customs offices which are usually located inland at major railway stations and marshaling yards, were the goods are loaded/unloaded at transport means, and the trains are configured and reconfigured.

With such a shift, the transit formalities and controls at railway border crossing checkpoints could be significantly simplified. The simplification of customs transit procedure can be achieved through variety of measures including many of good practices presented above in this Chapter such as:

- recognition of railway consignment note (e.g. SMGS or CIM/SMGS consignment note) as customs transit declaration
- electronic exchange of consignment note data (or electronic consignment note) between railways and re-submission of those data to customs authorities as advance information and/or customs transit declaration in electronic form
- documentary and physical control based on risk analysis adapted for transit. Risk analysis is done on data provided from advance information before arrival of train at the railway border checkpoint. The data already available from electronic consignment note should be sufficient for advance information purposes and additional data should not be requested
- x-ray scanning control is done only on selected wagons only if necessary based on risk management. Systematic x-ray scanning of all transport means in transit is not recommended
for the goods in transit systematic translation and control of all accompanying documents to customs transit declaration (e.g. invoices, packing list, contracts, etc.). Such documents should be identified in customs transit declaration, and controlled only if necessary based on risk management. The railways should be obliged to keep copies of accompanying documents to the customs declaration and make them available to the customs authorities if necessary (e.g. if customs transit procedure is not properly terminated and discharged.);

detailed customs control for goods in transit should be occasional, only if it is duly justified in accordance with risk analysis or if reliable intelligence information on suspected fraudulent activity is provided;

veterinary, phytosanitary, quarantine and other control requirements for goods and transport means in transit are substantially reduced in accordance with international standards and conventions;

the railways undertakings has been granted with authorized economic operator status in accordance with national customs legislation that may include: approval of custom transit guarantee waiver; use of railways seals; and other simplifications with respect to customs transit procedure;

specific simplified customs transit procedure for goods transported by rail in accordance with bilateral/ multilateral agreements;

simplified customs transit procedures where the railways is entitled to register customs transit in their own records. Access to the railways records is provided to the customs authorities and the customs could control the transit by auditing the entries recorded by railways undertakings.

European Convention on Common Transit Procedure introduces regional transit system in Europe for all means of transport including for rail transport. The common transit procedure is used for the movement of goods between the EU Member States, the EFTA countries and other countries that have acceded to the Convention.\textsuperscript{166}

Present simplifications of customs transit for goods transported by rail refer to paper based common transit procedure.

The simplified customs transit procedure for goods transported by rail, provided by the Convention on common transit procedure and EU customs legislation, is offering one of the most streamlined practices for clearance of customs transit. The interactions between customs and railway undertakings for processing the goods in transit are minimal; handling of customs transit is fully integrated in transport processes without additional burden for customs formalities at the transit customs offices; any delays in caused by regular customs activities are diminished.

\textsuperscript{166} Convention of 20 May 1987 on a common transit procedure (as amended) is presently applicable in the 28 EU Member states, EFTA countries (Iceland, Norway, Liechtenstein and Switzerland), Turkey, the FYR of Macedonia and Serbia.
Box 29: Simplified Customs Transit Procedure for goods transported by rail - European Convention on Common Transit Procedure

The European Convention on Common Transit procedures defines that:

- No guarantee shall be required for goods carried by rail;
- as a general rule, neither the means of transport nor the individual packages containing the goods shall be sealed, where the goods are carried by rail and identification measures are applied by the railway companies;
- the goods, together with the transit accompanying document, do not have to be presented at each customs office of transit, and the customs office of transit will not record the border passage of the goods if the customs can verify the border passage of the goods by other means (e.g. checking the entries in the records of the railway company). Such verification shall take place only in case of need. The verification may take place retrospectively;
- the customs authorities may authorize simplification for the use of the paper-based common transit procedure specific for the goods carried by rail. The conditions for granting the authorization are specified in the Convention as well;

Specifics on paper-based common transit procedure for goods carried by rail:

- CIM consignment note as a transit declaration for the paper-based common transit procedure for goods carried by rail;
- obligation of accounting offices of authorized railway undertakings to:
  - keep the records and use the commonly agreed system for investigation of irregularities;
  - provide access to the customs authorities to the data and entries in their records;
- obligations of the holder of the paper-based common transit procedure for goods carried by rail to:
  - fill in particular rubrics in CIM consignment note and take responsibility for the implicit statements;
  - declare itself jointly liable with the other involved authorized railway undertakings for any potential debt to the customs authority;
  - operate a commonly agreed system to check and investigate irregularities;
- labeling the goods transported under the paper-based common transit;
- use of CIM consignment note (at the customs office of departure and the customs office competent for the station of destination)
- No formalities need to be carried out at the customs office of transit;
- for the movement of goods to/from third countries the customs authorities competent for frontier station shall act as customs office of destination/departure. No formalities need to be carried out at that customs office. (including movement of goods through the territory of the contracting parties);
- authorized consignor and authorized consignee status.
Box 30: EU Customs Legislation and Simplified Customs Transit Procedure for goods transported by rail

EU Customs legislation on simplifications for and the provisions of the Convention of common transit procedure are fully harmonized.

The EU Customs legislation recognizes CIM/SMGS consignment note as customs transit declaration. In addition, the EU customs regulation requires submission of entry summery declaration and/or exit summery declaration to the customs authorities for goods entering and/or exiting the customs territory. The summery declarations have to be submitted in electronic form in advance, before arrival of the transport means at the border. The entry summery declaration and exit summery declaration provide data necessary for risk analysis to be performed.

Even though no formalities need to be carried out at the customs office of transit, based on risk analyses or in other fully justified cases the customs authorities may decide to take appropriate control actions. At the customs offices of transit the customs authorities do not register customs transit declarations (e.g. CIM/SMGS consignment note) however they may require appropriate arrival/exit notification to check the eligibility for implementation of simplified paper-based common transit procedure for goods carried by rail. An example of simplified common transit procedure for goods transported by rail is presented in Figure 50 below.

Figure 50: Example of Simplified Common Transit Procedure by rail

The new EU Union Customs Legislation provides transitional period with regard to upgrade of the New Computerized Transit System, to be able to support simplified paperless common transit procedure for goods transported by rail. Accordingly changes in implantation of EU legislation will influence future amendments of the Convention on common transit procedure.
5. **Joint controls by border agencies at the railway border crossings**

Introduce joint controls at the railway border crossings. The Customs and other control authorities institute control formalities at the railway border-crossings jointly either through transfer of responsibilities to single agency, or through institution of joint controls.

It is suggested to extend the principle of joint controls across the border by:

- coordination of customs and border crossing control formalities for streamlined movement across both border crossing checkpoints (Mode 3 BCP)
- designation of joint border crossing checkpoint where the procedures and controls are organized at one location (Mode 2 BCP)
- organization of common procedures in major inland stations, in parallel with the operational procedures for traffic management, without stopping at the border station (Mode 1 BCP)

a) **Transfer of responsibilities to Customs**

Reduced number of control authorities at the railway border crossings enables streamlined border crossing processes. Transfer of responsibilities of other regulatory and control authorities to the Customs authorities could reduce the number of control authorities operating at the railway border crossing. The transfer may be limited to first level of documentary control.

For example, the border crossing control at the Russian Federation is organized under “single window” principle, where the customs authorities are empowered to examine the documents in the field of sanitary-quarantine, veterinary and phytosanitary control.

**Box 31: Transfer of responsibilities at Zabaykalsk checkpoint**

At Zabaykalsk checkpoint, the border crossing controls are organized under “single window” principle. The responsibility for first level examination of documents in the field of sanitary-quarantine, veterinary and phytosanitary control is transferred to Customs authorities. Customs authorities coordinate with other relevant state control authorities if additional controls (other than first level examination of documents) are required.

Several challenges have to be addressed for successful implementation in the case of transfer of responsibilities, such as: training of customs officials; introducing electronic systems for information exchange between customs and other relevant authorities; and efficient mechanisms for coordinated controls to avoid any extended delays.
b) One-stop control process at the national level

One stop control process, based on coordination and integration of the border crossing formalities for customs, border security and passport control as well as transport, sanitary, food safety, veterinary, phytosanitary and other inspections, highly streamlines the border crossing control process.

Customs and other control authorities conduct control activities jointly or independently at one location at the railway border-crossing checkpoint (e.g. at customs yard / side rail tracks, or at side tracks dedicated for veterinary/phytosanitary control).

Efficient cooperation among border control authorities may include: exchange of information in electronic format and joint use of surveillance and control equipment.

An example of one-stop control process is initial customs inspection at the Zabaykalsk border-crossing checkpoint in the Russian Federation where the inspection is organized jointly with a commission that includes Customs, border guards and railway station staff.  

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c) Active cross border cooperation on border crossings

The cross-border cooperation between railways and control authorities at neighboring border stations (organized as Mode 3 BCP, where the train stops twice) 168 is characterized with regular meetings. The cooperation is usually focused on coordination of procedures and implementation of facilitation options.

With the review of border crossing practices at major border crossings in ESCAP region in this Study, several examples of active cross border cooperation on railway border crossing have been identified as presented below.

| Box 32: Examples of cross border cooperation in ESCAP region |
| Cross border cooperation between China and Russian Federation |
|
Customs authorities of China and Russian Federation have active cooperation organized within the framework of the Sub-Commission on Customs Cooperation. The three-year plan of strategic partnership in the field of Customs was signed between Russian Federal Customs Service and the General Administration of Customs of China in 2014. Several Russian-Chinese working groups are cooperating in key customs areas and facilitate joint projects. The main projects among them are "Green Corridor" project, as well as the mutual recognition of customs inspection results.  

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167 Chapter 2, Part A, 1.Zabaykalsk (Russian Federation) – Manzhouli (China); (p.44)
168 Note that Mode 3 BCP is a general setting for border crossings in ESCAP region
169 Federal Customs Service of Russian Federation web site information; 15.12.2015; Сотрудничество со странами дальнего зарубежья (EN: Cooperation with foreign countries); Available at: http://www.customs.ru/index.php?option=com_content&view=article&id=22289&Itemid=2639
The Federal Customs Service of Russian Federation and the General Administration of Customs of the People’s Republic of China have signed a Protocol for organization of pilot project on exchange information in the mutual trade in 2007. The implementation of the Protocol was further operationalized with national instructions. The border crossing Zabaykalsk/Manzhouli was included in the Green Corridor pilot project, which means that customs operations could be organized based on exchange on information between the Customs authorities.

The Green Corridor project enables simplified customs clearance in the form of a reduction of number of documents needed, streamlined submission of declaration for the goods, reduced customs control, which eventually leads to reduced time for customs operations at the border crossing check point.

Cross border cooperation between Mongolia and China
Joint Customs Control (JCC) meetings of the Customs Administrations of Mongolia and China are organized on regular yearly basis to deepen cooperation between the customs authorities and address relevant issues. Facilitation of cross border movement is one of the issues tackled with several cross-border initiatives discussed. Specific topics addressed at JCC meetings include: use of unified cargo manifest; electronic exchange of cargo manifest; and mutual acceptance of control and inspection.

Cross border cooperation between Mongolia and Russian Federation
Cross border cooperation on local level is active with regular monthly meetings between railways and meetings each four month between Customs authorities. If necessary it is possible to have informal communication more frequently. Issues discussed include exchange of data and information between Mongolian Customs and Federal Customs Service of Russian Federation.

Box 32: Examples of cross border cooperation in ESCAP region (continued)
Cross border cooperation between Kazakhstan and China


171 Федеральная таможенная служба; 15.06.2015; Таможенный пост ЖДПП Забайкальск и Забайкальский таможенный пост включены в эксперимент «Зеленый коридор»; (EN: Federal Customs Service; 06/15/2015; Customs post ZHDPP Zabaykalsk and Trans-Baikal customs post included in the pilot "Green Corridor"). Available at: http://customs.ru/index.php?option=com_content&view=article&id=21275:----------1-r&catid=40:2011-01-24-15-02-45

172 Mongolian Customs, 05 August 2015, website Information: 7th Joint Customs Control Meeting Between Mongolia and China Customs Was Held. Available at: http://www.customs.gov.mn/en/2012-03-14-03-24-50/2014-04-01-08-36-07/2013-07-12-07-37-32/341-7th-joint-customs-control-meeting-between-mongolia-and-china-customs-was-held
Subcommittee on border crossings and customs cooperation of Kazakhstan-Chinese Cooperation Committee established in 2004 provides a regular forum for cross border cooperation. The Subcommittee address various common issues and recommends initiatives for improvement of border crossing and customs operations. For example, on the sixth meeting of the Subcommittee held in 2010 the methods of comparative analysis of customs statistics were discussed as well as the initiative for exchange of preliminary information about goods and vehicles moved through the customs border of the two countries.

An agreement on Customs Cooperation and Assistance between Kazakhstan and China from 1997 provides a framework for cooperation in various fields including cooperation at the border crossing points. As a part of measures for implementation of the Customs Cooperation and Assistance Agreement a Plan on cooperation between the Ministry of Finance of the Republic of Kazakhstan and the General Administration of Customs of the People’s Republic of China in the field of customs and border crossing points for 2014-2018 was adopted in 2013.

Customs cooperation between Kazakhstan and China about border crossings was further detailed with a program on cross border cooperation for the period 2015-2020 and a memorandum of understanding between customs authorities on promotion of bilateral trade signed in 2015.

Active cross border cooperation on border crossings is important first step to agree on joint policies for improvement of border crossing efficiency. However, it should be noted that implementation of intended reforms and practical measures can take very long time. Therefore, great efforts to make border cooperation effective are needed from all parties included in the process.

d) Joint railway border crossing for carrying control formalities

The railway transport processes and control formalities between neighboring countries could be organized at one joint border crossing station/checkpoint (Mode 2 BCP). In such case, the train does not have to stop at both (outbound and inbound) border-crossing stations, but only at one designated joint border-crossing station.

Such arrangements are normally part of the bilateral agreement that details formalities at the joint border crossing station/checkpoint including arrangements for the organization of railway processes and control formalities (e.g. customs, sanitary, food safety, veterinary, phytosanitary) of one country at the joint border crossing located in other.

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However, the joint border railway stations are not common despite the potential they offer for reduction of time needed to cross the railway border. The reluctance for introduction of joint border crossings is probably more result of political and trust-building issues rather than operational and technical challenges. In ESCAP region Padang Besar (Malaysia) joint border crossing station that covers railway transport processes and passenger rail transport as Mode 2 BCP.

An IBRD/World Bank 2011 study presents a model framework of border-crossing agreement destined for the South-East Europe countries. The model includes the principles for: open access standards; single window; one-stop shop; joint border zone; joint border railway station with possibility for the border control authorities of one country to conduct controls in the neighboring country; exchange of information and status of the official personnel.\textsuperscript{175}

The railway border crossing at Dimitrovgrad (Serbia) at the border with Bulgaria has some elements of Mode 2 BCP, since the railway freight operations can be organized at joint border crossing zone in Dimitrovgrad in cooperation between railways undertakings of both countries. However Bulgarian Customs and border control police are not present at the joint border zone and they enforce their controls at the checkpoint located at Bulgarian side. While existence of joint border zone improves the border crossing processes, further options for cooperation and use of EDI are being evaluated and considered.\textsuperscript{176}

e) Crossing the border without stopping at the border station

Highest level of border crossing facilitation is arranged when the train does not have to stop at the border station(s) at all, which could be achieved by establishing common border crossing procedures in major railway inland stations, in parallel with the operational procedures for traffic management (Mode 1 BCP).

Such arrangement is only possible if there is very high level of cross-border harmonization and integration of the railway operations supported by bilateral/multilateral agreement. Various aspects of transport and control rules and requirements need to be jointly agreed, and operational mechanisms for cross border cooperation established.

Mode 1 BCPs is very demanding and they are extremely rare despite the ultimate facilitation potential it offers.

\textbf{Box 33: Railway Border Crossing Facilitation between Norway and Sweden}

\textsuperscript{175} IBRD/World Bank; March 2011; Railway Reform in South East Europe and Turkey On the Right Track? (Annex 4); Available at: \url{http://ec.europa.eu/transport/modes/rail/studies/doc/2011_03-railway-reform-south-east-europe-and-turkey.pdf}

\textsuperscript{176} Details on Border Crossing Practice at Dimitrovgrad Joint Border Zone and options for future development are discussed in IBRD/World Bank; May 2015: Rail Electronic Data Interchange In A Border Crossing Point In South East Europe: An Assessment Of Options; Available at: \url{https://openknowledge.worldbank.org/bitstream/handle/10986/22811}
Crossing the border between Norway and Sweden by rail is greatly facilitated as result of high-level of cooperation between control authorities. Based on bilateral agreement the customs authorities are empowered to perform customs control and clearance on behalf of each other.

Having in mind that both countries are part of Schengen area and therefore border police controls are not taking place when crossing the border, there is no need for trains to stop at the borders at all. Customs clearance is organized electronically and if the goods are selected for control the inspection takes place at the first inland station in Norway or in Sweden where the train stops.177

The concept behind Mode 1 BCP could be utilized as an ideal for improving facilitation at Mode 3 and Mode 2 BCPs. That means minimizing controls at the border (e.g. only for brief initial border crossing control and customs transit procedure) and transfer of regular controls for import and export customs clearance to the inland marshaling yard, where other railway operations are usually done (e.g. sorting of wagons, re-configuration of trains); or where the goods should be reloaded to other transport means and other modes of transport.

If detailed examination is needed for initial border crossing control or for the customs transit procedure, such control can be also transferred at first railway station on the route where appropriate facilitates and equipment are available. The transfer of clearance and control at inland railway station and marshaling yards enables simultaneous handling of customs controls with the railway processes. That should contribute to reduction of overall processing time of freight trains and it will enable more productive use of facilities and equipment.

F Border crossing facilitation for container block trains

For the container block trains that run on regular schedule, the challenges with availability of flat wagons could be reduced with their timely organization. This would reduce risk for excessive delays at border crossing due to issues with availability of the flat wagons.

Additional facilitation on container block trains could be provided since there is no need for shunting, sorting and other activities for re-configuring the train. The processing of the train by the railways at the border crossing will be streamlined and it will consist only of preparation of railway documentation, technical inspections and transshipment activities.

Introduction of container block train service is usually accompanied with increased level of cooperation between railway undertakings and other stakeholders concerned (e.g. port stevedores, freight forwarders, logistics services providers). They may decide

to run joint pilot projects, sign memorandums of understanding or agreements or even create joint venture companies that will operate container block train service.

As result of such cooperation railway transport documents could be further unified; and exchange of information could be improved. The use of single railway transport documents (e.g. CIM/SMGS consignment note) and introduction of advance electronic exchange of railway data and documents could significantly contribute to facilitation of border crossing.

Customs and other control authorities at border crossing could be also involved in introduction and implementation of activities related with container block services in the part of customs and other regulatory clearance. Facilitation measures may be introduced such as: recognition of railway consignment note as customs transit declaration, mutual recognition of customs seals, and other simplifications particularly for customs transit procedure.

Good practice examples of border crossing facilitation and fast processing of container block trains at: Alashankou (China) / Dostyk (Kazakhstan) border crossing, Erenhot (China) / Zamyn Uud (Mongolia) border crossing, and Zabaykalsk (Russian Federation) – Manzhouli (China) border crossing are presented earlier in this Study.

The OSJD supports planning and implementation of a container block train demonstration runs. The advantages of container trains that operate between Asia and Europe on about 11,000 km route make rail container traffic a viable alternative of maritime transport.

**Box 34: Advantages of block container trains between Asia and Europe**

- Distance covered up to 1000 km / day
- Shorter routes for transportation
- Reduced time of delivery:
  - 30 - 35 days by sea
  - 15 - 20 days by block container trains on northern TAR routes *(depending on the route)*
- Competitive tariff rates
- Improved transport services *(e.g. electronic waybill tracking and tracing cargo in transit)*

Source: OSJD 2014, Best practices to improve efficiency of international carriage by rail in Eurasia (p.13)
The OSJD member railways have continued to create new container routes in 2015 and organized up to 280 container block trains on regular basis or on request.\(^{178}\) The OSJD publishes annually a list of all container trains and con-trailer traffic services offered by the member railways.\(^{179}\)

### Table 15 - Container train routes between Europe and Asia

<table>
<thead>
<tr>
<th>Train Number (Railways)</th>
<th>Route</th>
<th>Train Characteristics</th>
<th>Run Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1066/1065 (BC, RZD) “Ostwind”</td>
<td>Berlin / Großbeeren (Germany) – Malaszewicze (Poland) – Brest – Osinovka (Belarus) – Krassnoje – Bekassovo-Sort., Kunzevo-2, Vorsino (Russia)</td>
<td>Container</td>
<td>on request</td>
</tr>
<tr>
<td>42453 (PKP Kargo) “Ostwind”</td>
<td>Großbeeren (Germany) – Malaszewicze (Poland) – CIS countries</td>
<td>Container</td>
<td>3 times a week</td>
</tr>
<tr>
<td>1201/1202 (UBZD) “Ostwind”</td>
<td>Zamyn-Uud (Mongolia) – Ulan Bator (Mongolia)</td>
<td>fast container train</td>
<td>2 trains daily</td>
</tr>
<tr>
<td>1078/1077 (BC, KZH, RZD) “Kazakhstan Vector”</td>
<td>Germany – Malaszewicze (Poland) – Brest – Osinovka (Belarus) – Krassnoje – Ozinki (Russia) – Semiglavy Mar – Arys-1 (Kazakhstan)</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1086/1085 (BC, RZD) “Mongolian Vector”</td>
<td>Brest – Osinovka (Belarus) – Krassnoje – Nauchki (Russia) – Sühbaatar (Mongolia)</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1406 (UBZD) “Mongolian Vector”</td>
<td>Brest (Belarus) – Nauchki (Russia) / Sühbaatar (Mongolia) – Ulan Bator (Mongolia)</td>
<td>container</td>
<td>2 times a month</td>
</tr>
<tr>
<td>80619 (KZD)</td>
<td>Tianjin (China) – Almaty-1 (Kazakhstan)</td>
<td>container</td>
<td>/</td>
</tr>
<tr>
<td>80309 (KZD)</td>
<td>Urumqi (China) – Berlin (Germany)</td>
<td>container</td>
<td>/</td>
</tr>
<tr>
<td>(KZD)</td>
<td>Shenzhen, Alashankou (China) – Dostyk (Kazakhstan) – Iljezk-1, Suzemka (Russia) – Zernovo, Chop (Ukraine) – Hungary via Kazakhstan, Russia, Ukraine</td>
<td>container</td>
<td>once a week</td>
</tr>
<tr>
<td>1253/1254 (BC, RZD, UZ) “New Silk Road”</td>
<td>China – Dostyk – Iljezk-1 (Kazakhstan) – Kanisaj – Suzemka (Russia) – Zernovo – Chop (Ukraine), Batevo – Dobra (Slovakia) / Budapest (Hungary)</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1251/1252 (KZH) “New Silk Road”</td>
<td>China – Kazakhstan – Russia – Ukraine – Poland (Dostyk – Iljezk-1 – Zernovo – Izov – Slawkow)</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1265/1266 (KZH, RZD) “Saule”</td>
<td>China – Dostyk / Altynkol – Iljezk-1 (Kazakhstan) – Kanisaj – Krassnoje – Ozinki (Russia) – Brest (Belarus) – Malaszewicze (Poland) – Germany</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1255/1256 (RZD)</td>
<td>China – Altynkol / Dostyk – Saryagash(Kazakhstan) – Abylk / Sergeli / Chukursaj (Uzbekistan)</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1282/1281 (KZH, RZD)</td>
<td>China – Dostyk – Semiglavy Mar (Kazakhstan) – Ozinki – Samur (Russia) – Yalama (Azerbaijan) – Beyuk-Kyasik – Tbilisi-Uzlovaja (Georgia)</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1023/1024 (RZD)</td>
<td>Mandschurei (China) – Zabaikalsk – Suzemka (Russia) – Zernovo – Chop / Batevo (Ukraine) – European Countries</td>
<td>container</td>
<td>on request</td>
</tr>
<tr>
<td>1025/1026 (RZD)</td>
<td>Mandschurei (China) – Zabaikalsk – Krassnoje (Russia) – Osnovka – Brest (Belarus)</td>
<td>container</td>
<td>on request</td>
</tr>
</tbody>
</table>

\(^{178}\) OSJD web site information available at: http://osjd.org/statico/public/ru?STRUCTURE_ID=5024

\(^{179}\) The list of Container Trains and Con-trailer Traffic published in 2015 is available at: http://osjd.org/dbmm/download?vp=51&load=y&col_id=2066&id=2342
Presently, the rail cargo container flows are unbalanced with most of the traffic running in direction from China, Kazakhstan and Russian Federation towards Europe. Examples of the operational container train routes between Asia and Europe are presented at the Table 15 above. Some of them are organized as block container trains.

**Box 35: YuXingOu International Container Block Train Service**

The YuXingOu railway provides international container block service that links the Chongqing (China) with Duisburg (Germany) on the 11,179 km “New Silk Road route via Kazakhstan, Russian Federation, Belarus and Poland. The service is launched in 2010, in cooperation with railway undertakings and relevant authorities in the countries along the route. The number of trains has increased over the years and presently the container block trains run several times a week achieving the travel time of 15 to 16 days, which is twice faster than maritime transport. Around 80 percent of the whole cargo value transported by rail between China and Europe is transported at the YuXingOu railway route.180

The Customs and other authorities concerned have taken several measures to improve coordination mechanisms, upgrade customs supervision, streamline and accelerate customs clearance along the route. 181

**Box 36: Faster processing of container trains at Zabaykalsk/Manzhouli**

Container train services started to operate across Zabaykalsk/Manzhouli border crossing at the end of 2013 with introduction of Suzhou-Manzhouli-Europe New Silk Road train. Several measures have been implemented in order to provide fast processing of container trains.

The Customs authorities in China (Manzhouli Customs and Suzhou Customs) have introduced improved communication mechanism. The Customs authorities of China and Russian Federation have signed a protocol to ensure that the freight container train would enjoy the same beneficial time limit for customs clearance.

A green channel was established for movement of Suzhou-Manzhouli-Europe New Silk Road train across Zabaykalsk/Manzhouli border crossing.182

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180 Yuxinou Railway boosts China-EU trade development; 03-20-2016; CNTV News available at: ahttp://english.cntv.cn/2016/03/20/VIDEOlAGM7kVPFwAbkK4kFBs160320.shtml

181 YuXinOu Logistics Co. website, News; The nine party cooperation in customs power "new Europe" Huang Qifan put forward 6 point expectation; Available at: http://yuxinoulogistics.com/website/h-English/enews-show.jsp?weixinNo=dBa7GCs25Z9Shd13277B8Xf450Nh

182 China Daily; 2014-07-11; Century-old port's new changes; Available at: http://innermongolia.chinadaily.com.cn/2014-07/11/content_17734145_2.htm
Box 37: Time Distance Analysis on Trans-Mongolian railway routes

Recent time distance analysis show that it takes 30 hours for a container train to travel the 1,110 km long Trans-Mongolian route from the border port with Russian Federation (Sukhbaatar) to the border port with China (Zamyn Uud) and 36 hours in opposite direction.

Border stops in the case of processing a container train are much shorter than the average times. Outbound processing for border and customs control in Zamyn Uud and in Sukhbaatar border crossings takes less then few hours. Inbound border stop at Sukhbaatar takes around three hours with processing of customs documents as a major border operation. Inbound processing in Zamyn Uud that involves transshipment operations and customs and border control takes around eight hours.

Figure 51: Container train travelling time Russia to China and China to Russia

Source: UBTZ, 2015, Presentation “How to Improve Inter Change in Cross Border Traffic”

Regarding wagon train turnover time in transit transportation from the Russian Federation to China the average time is 3.3 days. In this case the transportation time takes 2.8 days in territory of Mongolia and 0.5 day is spent on activities at border ports in Mongolia. In opposite direction from China to Russian Federations wagon turnover time in transit transportation in average is 4.3 days with same transportation time of 2.8 days; however activities at of border ports take an average 1.5 day.

The longer periods of time where the cargo is not moving (stops) at the entry of border stations is due to transshipment operations (e.g. at Zamyn Uud). Clearance and border control time (customs and other border agencies) and other railway formalities (e.g. preparation of railway documents; change of locomotive, formation of train etc. also contribute to extension of border stops. There are also several technical stops en-route that are affecting transit time as presented in the figures above.

Source: D. Jigjidnyamaa – Deputy Chairman of UBTZ in charge of transportation; 2015, Ulaanbaatar; Presentation “How to Improve Inter Change in Cross Border Traffic”
Box 38: Faster processing of container trains at Alashankou/Dostyk border crossing

The container block train services started to run at the Alashankou/Dostyk border crossing at 2011 and since than such railway transport services are becoming more and more attractive for the traders. The main advantages of container block trains are the simplified border operations and minimal time spent at the borders. The time for processing container block trains was shortened from 9 hours, to only four hours and 15 minutes at Dostyk border station and from 6 to 8 hours to four hours at Alashankou border station.183,184

The simplification of the border processes and procedures for container block trains is achieved by using a single or unified transport documents and fast transfer of containers from one track gauge to the other that according to the NC KTZ takes in average about 5-6 minutes per container.185

That practically means, that a container block train can move across the Alashankou/Dostyk border crossing in one day, which is much faster than the average of 2-3 days. The movement of containers on wagons other than those on container block trains takes longer time, due to necessary railway operations on formation of trains and marshaling.

The GACC “Declare at home, Release at port” clearance model in China also supports the simplification of the customs procedures and clearance formalities on China-Europe container block trains. The streamlined customs transit formalities can be usually done in half an hour, while the whole clearance formalities can be finalized in 4 hours. The Customs is using non-intrusive cargo train inspection system to speed up the clearance process. The majority of the outbound China-Europe cargo trains are using the routes across the Alashankou/Dostyk border crossing.186

183 National railway company Kazakhstan Temir Zholy (KTZ) web site; 21.07.2016; Transportation across the border station Dostyk: The account goes on millions: http://www.railways.kz/ru/node/10451


185 ESCAP, 2016 (unpublished), Development of seamless rail-based intermodal transport services in Northeast and Central Asia: Report on Transport Facilitation procedures and documentation in Kazakhstan (Author: P.J. Hodgkinson)

4 PERFORMANCE MEASUREMENT AND MONITORING MECHANISM

A Available tools for performance measurement and key performance indicators on border crossing by railway

The Railways, Customs and other control authorities often implement various programs and projects, related to modernization and improvement of performance for: better services, improved controls, and facilitated movement across the border-crossing. Introducing a performance measurement and monitoring mechanisms to evaluate the effects of the improvement and facilitation activities is an essential element to support modernization endeavors.

Presently there are several performance measurements methodologies, performance indicators and monitoring mechanisms developed and implemented that are relevant for international freight railway transport and railway border crossing checkpoints.

1. ESCAP Time Cost Distance Methodology

The Time/Cost-Distance Methodology (TCD) methodology developed by ESCAP is a simple assessment tool that can be utilized to measure and assess the corridor performance.187 The TCD methodology is applicable evaluation of different transport modes (road, rail, inland waterway, maritime), intermodal transfers (ports, rail-freight terminals, inland clearance depots) and cross-border movements (road and railway border crossings).

The TCD is based on recording and tracking information on costs, time and distance of physical movement of cargoes from origin to destination. The information may be captured by transport operators and/or freight forwarders involved in cargo transport along the specified route and/or recorded by the electronic vehicle/cargo tracking system employed.

The graphical representation of cost and time data associated with transport processes may be used as a useful tool in evaluation of freight transport operations and transit times by mode and route. It enables identification of inefficiencies and bottlenecks along a particular transport route by analysis of every section along a transport route, which includes movement across border crossing.

The TCD methodology may include a detailed break-down of cost and time spent, associated with border crossings operations and formalities. The charges and the time spent at intermodal transfers and border crossings are represented as a vertical shift upwards in the cost/time curve at that point, which can then be cumulated with other incurred expenses and time needed for completion of the transport operations.

187 More information available at ESCAP website: http://www.unescap.org/resources/timecost-distance-methodology
In preparation for implementation of TCD methodology the identified stakeholders have to agree on principles for the application of the TCD methodology and outline of the corridor. With preliminary assessment, the origin and destination of the corridor, which is going to be evaluated, have to be agreed upon, and the nodal links / border crossings have to be identified. The survey method and data sources considered could include interviews, questionnaires, and use of databases. To reduce risk of bias and improve dealing with sensitive issues (e.g. costs and informal payments) a neutral independent body (e.g. university, research institute) can be entrusted to conduct a study based on TCD methodology. Wide range of freight flows within a corridor should be covered with focus on main types of commodities that represent majority of the traffic flow in the corridor. Seasonal changes in freight flow patterns have to be understood and considered when the TCD methodology is applied. The specifics for dealing with different types of transport means (e.g. wagons, container/wagon platform, tank) have to be reflected as well.

One of the main data collection methods in TCD methodology is corridor-wide monitoring based on trip diaries or questionnaires filled by transport operator. Relevant data could be also collected with bottleneck monitoring based on independent surveys, corridor-wide monitoring based on interviews of freight forwarders, shippers consignees and a partnership with port authorities and/or customs and other border crossing authorities, demonstration, secondary sources, customs database or operators’ satellite positioning records. In order to reduce the limitation of each method it is recommended to explore possibility of using more than one method.

The minimum information needed to build the Time/Cost-Distance model includes:

- origin and destination of the cargo;
- full routing from origin to destination, with indication of the places where the cargo is essentially stationary (border crossings and points of intermodal transfer);
- mode of transport for each leg;
- distances involved for each leg;
- transit time for each leg (in hours and minutes);
- cost or quotes for each leg;
- average traffic volume per day;
- breakdown of different vehicles types and average load in ton.

Representative sample size has to be provided by collecting data from multiple transport operations and multiple transport operators. Collected data has to be validated (e.g. by using data triangulation). Data processing is a next step that includes determination of statistical values (e.g. mean and average time/cost values, range and variation) and plotting obtained time and cost data against the distance for each leg of the journey. The ESCAP developed tools for processing and plotting the graphical representation of time/distance and cost/distance are publicly available.\(^{188}\)

The graphical output of data collected along a particular corridor with TCD methodology, illustrates the cost and time components of movement from origin to destination as well as the delays at transshipment points and border crossings. The obtained range or variation in transit time and cost can also reflect on the level of reliability for the movement along the corridor.

The y-axis represents either the time or the cost incurred, while the x-axis represents the distance from origin to destination. The steeper the curve, the more time consuming or costly is a transport along the analyzed route. Vertical steps in each curve indicate a sharp increase of time/cost without an increase in distance and typically occur at stops (e.g. points of transshipment and border crossings). The higher the vertical step, the more time/cost are used for activities undergone at a stop, which indicates inefficiencies or bottlenecks on a transport route. Further analysis of the bottlenecks can be done through activity mapping and evaluation of the impact of each activity undertaken in the bottleneck (e.g. actors involved, documents required and organization of the operations).

The TCD methodology enables policy makers and transport industry to compare the changes of cost and/or time required for transportation on a certain route over a period of time, evaluate competing modes of transport operating on the same route and assess alternative transport routes.

\(^{188}\) Available at ESCAP website: http://www.unescap.org/resources/timecost-distance-methodology
Since first introduced in 2004 the TCD methodology found a wide practical use in ESCAP region and other different regions around the world for the assessment of operational efficiency of transport routes, evaluating logistics performance and for planning of trade and transport facilitation measures.

2. CAREC Corridor Performance Measurement and Monitoring

The Central Asia Regional Economic Cooperation (CAREC) Programme, supported by ADB, runs a Corridor Performance Measurement and Monitoring (CPMM) regional study that collects and analyses data on road and rail transport in the CAREC region.\(^\text{189}\) The analysis under CPMM can identify the bottlenecks at border crossing checkpoints and support implementation of CAREC transport and trade facilitation strategy\(^\text{190}\) by monitoring the trade facilitation indicators.\(^\text{191}\)

Two out of five CPMM trade facilitation indicators (TFI) are relevant for railway border crossings:

- **TFI 1: Time to Clear a Border Crossing Point (in hours)**
  
  This indicator is defined as the average length of time (in hours) that takes to move cargo across a border from the exit point of one country to the entry point of another. The entry and exit points are border-crossing checkpoints where customs and other border controls are handled.\(^\text{192}\)

  In the case of rail transport the data collected include recordings of the stops for activities regarding:

  - Material handling (loading cargo; unloading cargo; preventing cargo shift; removing excess cargo; transloading at gauge-change point);
  - Transporting (picking up and delivering wagons; replacing or repairing an inoperable wagon; emergency repair; classification of trains);
  - Documents (document errors: reissue of transit documents);
  - Inspections (customs inspection; technical inspection; commercial inspection; border control; sanitary and phytosanitary control);

\(^\text{189}\) The 10 CAREC countries are Afghanistan, Azerbaijan, China, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan.


\(^\text{191}\) Detailed information on CPMM and the indicators are available at the web site of the CAREC Federation of Carrier and Forwarder association: [http://cfcfa.net/cpmm/information](http://cfcfa.net/cpmm/information)

Waiting/queues (waiting for transloading, loading and unloading, documentation, inspection, congestion and other reasons).

The details included in this indicator intent to capture the complex organization of clearance at the border crossing point and to identify inefficient border crossing processes.

- TFI 2: Cost Incurred at Border Crossing Clearance (in US$)

This indicator is defined as the average total cost, in US dollars, of moving cargo across a border from the exit point of one country to the entry point of another. It includes both official and unofficial payments for assumed 20 tons of cargo.

The CPMM methodology is based on Time/Cost Distance (TCD) developed by ESCAP, which is modified to provide additional inputs and details relevant for identification of bottlenecks at border crossing checkpoints and to support policy decisions for further facilitation.

Training sessions are organized for the carriers and freight forwarders who collect the data using survey instruments (CPMM data collection form) on regular bases. The data from handwritten reports are entered into the database and combined in TCD templates by CPMM coordinator, who checks and validates the data.

At the next stage the TCD templates are reviewed by the international consultants and then forwarded to the CPMM database manager at ADB for data aggregation using statistical software. Subsequently data analysis is done, trade facilitation indicators are calculated, and the trends and variances are identified.193

The CPMM findings are published on quarterly and annually bases.194

The reports from several previous years include findings for the following railway border crossings: Alashankou (China) – Dostyk (Kazakhstan); Erenhot (China) – Zamyn Uud (Mongolia); Naushki (Russian Federation) – Sukhbaatar (Mongolia); Keles (Uzbekistan) and Farap (Turkmenistan). Some of the 2014/2015 CPMM findings on the TFI 1 (Time to Clear a Border Crossing Point) are presented in the previous Chapter of this Study.


194 CPMM annual and quarterly reports are available at: http://cfcfa.net/cpmm/annual-and-quarterly-reports-cpmm
The CPMM has supported CAREC countries in identification of transport and trade facilitation issues. The findings of this performance measurement and monitoring tool has offered better understanding of complex border crossing activities and influences of the changes in operating environment. The CPMM provides valuable input in implementation of trade and transport facilitation strategy by pointing to the deficiencies that have to be addressed (e.g. improving the infrastructure, harmonizing the border crossing procedures) and by confirming the benefits from the good practices introduced.

3. **WCO Time Release Study**

The Time Release Study (TRS) is a tool developed by World Customs Organization (WCO) for performance measurement of operational procedures carried out by customs authorities and other control authorities on import, export and transit formalities. The TRS is applicable for all types of transport, including transport of goods by rail at border crossings and at inland customs offices.

The TRS measures the average time taken for the release of goods from their arrival (e.g. at the railway border crossing check point) to their release (e.g. to customs transit procedure, or as cleared for home use). The TRS allows detailed analysis of border crossing procedures and processes. The main objective of the TRS is to identify bottlenecks and reasons for delays related with activities of Customs, other border agencies and other stakeholders (e.g. carriers, freight forwarders, traders etc.). The TRS findings and analysis could support planning the actions for improvement and overcoming the identified weaknesses.
The WCO provides detailed guidance for TRS implementation. The WCO Guide includes explanations on the outline of the TRS for each phase and each step that has to be taken, and discuses various options for modifications. A TRS should be divided into three phases: preparation of the study; collection and recording of data; and analysis of data and conclusions. The TRS could be treated as ongoing program for continuous improvement.

**Figure 54: Outline of the Time Release Study**

Phase 1 - Preparation of the Study
1. Establishment of a Working Group
2. Determination of Scope and Design of the Study
3. Planning and Methodology
4. Detailed Drawing Plan
   - Duration and Timing of the Study
   - Geographical Scope
   - Types of Goods
   - Choice of Traffic
5. Sampling
6. Form
7. Simplified Form
8. Test-Run

Phase 2 - Collection and Recording of Data

Phase 3 - Analysis of Data and Conclusions
- Verification of Data
- Analysis of Data
- Final Report
- Press Release
- Proposals for Changes
- New Study

Source: information from WCO, 2011, Guide to Measure the Time Required for the Release Of Goods

At the annexes of the WCO Guide, the specifics on TRS working group functions and responsibilities are elaborated. The performance measurement working group team should guide the TRS process through all phases, while ensuring good cooperation between Customs, other control authorities and all other stakeholders involved.

---

Table 16: Performance measurement team recommendations

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>Specific skills/abilities</th>
<th>Main tasks</th>
<th>Full-time or part-time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Customs officer</td>
<td>1</td>
<td>Direct and legitimate access to DG</td>
<td>Team management</td>
<td>Either</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Presentation of the results</td>
<td></td>
</tr>
<tr>
<td>Customs officer</td>
<td>2-3</td>
<td>Field experience</td>
<td>Writing</td>
<td>Full-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Competence to handle simple software (Excel, Word, PowerPoint)</td>
<td>Writing reports and making presentations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Writing</td>
<td>Development of indicators and contracts</td>
<td></td>
</tr>
<tr>
<td>IT expert</td>
<td>2-3</td>
<td>SQL programming</td>
<td>Development of indicators and outcomes of contracts</td>
<td>Full-time (at least 1) and part-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creating simple software</td>
<td>Automating the production of indicators and outcomes of contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customs database expert</td>
<td>Networking indicators and results of contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Networking (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistician (optional)</td>
<td>1</td>
<td>Providing data analysis to explain the trends when presenting the indicators and the results of contracts</td>
<td></td>
<td>Part-time</td>
</tr>
</tbody>
</table>


The series of questions that can be used to capture data are listed and several definitions are given to ensure uniformity of application. The sample forms for capturing data with simplified and detailed survey questionnaire are presented.

The WCO and the World Bank have developed online software for conducting a TRS that is available to the Members. The TRS software facilitates the process for developing the survey questionnaire, supports analysis of the findings and producing a report. A basic guidance on the WCO TRS online software is given in the WCO TRS guide. The guide contains the models for final report and press release.

Many WCO members have undertaken TRS, and some of them are conducting the study on regular bases. Several national practices presented at the WCO TRS Guide offer the overview of experiences in practical implementation, which could be useful for the countries that intend to undertake TRS. The WCO Secretariat provides technical assistance to design, plan and implement national TRS.

The WCO TRS methodology is also applicable for international (regional) environment, where the study is undertaken jointly by neighboring countries (e.g. a land-locked country and a country with a major sea port).

Using the findings from WCO TRS the Customs and other control authorities at the border crossing checkpoints can identify gaps and inconsistencies; enhance the efficiency; and carry out modernization efforts to improve their performance in more efficient manner.
4. **OSJD Standards Time Targets**

The OSJD members have developed standards of time as a target for completion of specific types of operation in accordance with comprehensive plans for improvement of transport and development for each of the thirteen OSJD transport corridors.

**Table 17: Time standards to complete operations at selected border crossings**

<table>
<thead>
<tr>
<th>Border Crossing Station</th>
<th>Type of operation</th>
<th>Standard Time (in min.)</th>
</tr>
</thead>
</table>
| **Sary-Agach (Kazakhstan)**  
Cargo train | technical  
commercial  
customs control | 180 |
| **Keles (Uzbekistan)**  
Cargo/passenger train | receiving sending train/  
border control | 20/80 |
| **Naushki (Russian Federation)**  
Cargo even train (export) | railways operations  
border operations  
customs operations | 265  
42  
190 |
| **Naushki (Russian Federation)**  
Cargo odd train (import) | railways operations  
border operations  
customs operations | 305  
225  
40 |
| **Sukhbaatar (Mongolia)**  
Cargo train | receiving sending train | 280-288 |
| **Zamyn Uud (Mongolia)**  
Cargo train | receiving sending train | 150-225 |
| **Zamyn Uud (Mongolia)**  
Cargo train (break of gauge) | transhipment, preparation of documents and border operations 1440mm-1520 mm | 180-300 |
| **Dostyk (Kazakhstan)**  
export | reconfiguring, technical, customs and commercial inspection, data entry into system transfer to agent, registration of cargo, train formation | 295-305 |
| **Alashankou (China)** | transhipment operations | 2970 |
| | railways operations | 1110 |
| | border operations | 90 |
| | customs operations | 30 |
| **Dong Dang (Viet Nam)**  
Cargo transit: export/import | railways operations  
border and customs operations | 60/60 |
| **Dong Dang (Viet Nam)**  
Cargo own formation: export/import | railways operations  
border and customs operations | 60/60 |
| **Beyouk Kesik (Azerbaijan)** | railways operations | 20 |
| | customs operations | 120 |
| | border operations | 60 |

Source: OSJD, 2013 Comprehensive Plan for improvement of transport and development of OSJD Corridors
The Table 17 shows an excerpt of OSJD standard times for selected border crossing checkpoints in the ESCAP region. The time standards to complete operations at Zabaykalsk (Russian Federation) are presented in previous Chapter of this Study.

The OSJD standards set a realistic goal for improvement of time for completion of processes and procedures at railway border crossings. The existence of standard times encourages the main actors at checkpoints to continue with their efforts for fulfillment of development objectives and in same time it increases the predictability of the time needed for crossing the borders.

The OJSD members periodically undertake performance measurement to check if the standard times are being achieved.

5. Other performance indicators and monitoring tools

The World Bank Logistics Performance Index (LPI) is a benchmarking tool that rates the performance of logistics sector across 160 countries. The LPI is constructed of six categories of indicators: the efficiency of customs and border management clearance; the quality of trade and transport infrastructure; the ease of arranging competitively priced shipments; the competence and quality of logistics services; the ability to track and trace consignments; and frequency with which shipment reach consignees within scheduled or expected delivery times.

The LPI methodology for collection of data is based on worldwide online survey of international freight forwards, who respond on set of questions in each of the six categories with regard to country were they operate (for calculation of domestic LPI) and with regards to partner countries (for calculation of international LPI). Based on their expert assessment and perception, the respondents of the survey evaluate different aspects covered with the survey by ranking their answers on scale from worst (1) to best (5). Using statistical methods, the responses are aggregated and weighted to obtain a single value for the each of the components and for LPI itself.

The Report on LPI and its indicators is produced every second year, which includes wide range of logistics information, such as: lead time on export/import; number of agencies involved for export/import; clearance time with and without physical


197 Chapter 2, Part A, 1.Zabaykalsk (Russian Federation) – Manzhouli (China); (Table 5, p.44)

inspections, percent of shipments physically inspected, efficiency of clearance and delivery on exports/imports, transparency of customs and other border agencies, etc.\textsuperscript{199}

The LPI presents an overall perception of logistics performance, which includes many valuable details valid for railway infrastructure, customs and border management clearance, however it does not provide detailed assessment on railway border crossings (for example railway infrastructure or efficiency of customs and border management clearance at railway border crossings).

Several performance indicators and monitoring tool for international road transport have been created and implemented in Asia and Europe such as: TRACECA Route Attractiveness Index (TRAX); New Eurasian Land Transport Initiative (NELTI), and World Bank (Trade and Transport Facilitation is South East Europe). The methodologies developed for these monitoring tools might not be directly applicable for performance monitoring at railway border crossing, however the concepts, the experiences in preparation, cooperation and implementation of the studies for performance measurements may represent a valuable input for the countries interested in introduction of performance indicators and monitoring tools for railway transport.

\textsuperscript{199} 2016 LPI Report is available at: \url{https://wb-lpi-media.s3.amazonaws.com/LPI_Report_2016.pdf}
B  Recommended monitoring mechanism

This Study recommends introduction performance indicators and monitoring mechanism that will enable efficient performance measurement at railway border crossing stations and checkpoints. The recommended process for introduction of the monitoring mechanism could be organized through several stages:

Stage 1: Define the objectives of the monitoring mechanism

The objectives may include:

▪ verify the overall time that the transport means and goods spent at the railway border crossing to finalize all railway and logistics processes as well as all control procedures of customs and other control authorities with regard to export, import and transit of goods
▪ examine all railway and logistics processes as well as all control procedures of customs and other control authorities in order to identify major bottlenecks at railway border crossing checkpoints
▪ develop new policies and recommendations for improvement and facilitation of processes and procedures at railway border crossing checkpoints, based on identified best practices
▪ examine whether newly introduced improvement and facilitation measures have been effective and suggest necessary adjustments
▪ make comparative analysis with the findings of previous monitoring exercises

Stage 2: Agree on methodology to be used

The methodology should include the issues with regard to:

▪ the level on which the monitoring mechanism will be applied to (e.g. local, national, cross-border);
▪ the stakeholders to be involved (e.g. customs and other control authorities, railways companies, forwarders and logistics providers, traders);
▪ the relevance of the monitoring mechanism for the outcomes (e.g. facilitated trading across the borders for goods transported by rail) and for the key performance indicators in monitoring the progress made from introduction of improvement and facilitation activities. The examples of key performance indicators are:
  - time taken to cross the border by rail
  - costs incurred for crossing a border crossing point by rail
  - per cent of electronic pre-arrival declaration relative to all customs declaration (e.g. for customs transit, import)
- number of paper-based documents required in clearance, controls and inspections
- per cent of supporting documents that are submitted electronically relative to all kind of supporting documents
- per cent of customs declarations selected for documentary control
- per cent of customs declaration selected for physical inspection
- number and percent of irregularities detected during physical inspection relative to number and percent of physical inspections
- evidence of steps taken to simplify customs transit procedure
- per cent of information for crossing the borders by rail publicly available
- the level of perception of corruption

- data required for analysis of key performance indicators. For example the data on the key performance indicator “time taken to cross the border by rail” may include:
  - time for border security control
  - time for customs clearance
  - time for controls of other control authorities
  - time to prepare and re-issue transport/transit documents
  - time for technical inspection by railways
  - time for commercial inspection by railways
  - time for break of the gauge activities (e.g. trans-loading of goods to other wagons, transfer of containers to other platform wagons, bogie change)
  - time to load/unload cargo
  - time for train classification and marshaling
  - time for waiting in between the processes and procedures
  - time savings due to simultaneous processes and procedures
  - delays due to:
    - errors in documents
    - repairs or transport means
    - faulty equipment for handling the transport means and reloading of cargoes
    - busy reloading facilities
unavailable wagons
unavailable locomotives
restriction on entry due to limited capacity of the border crossing checkpoint (in the country or in the neighboring country)

It is crucial to have a clear definition of the key performance indicators and data on indicators in order to avoid any misunderstandings and enable comparison with: previous findings, the findings from different collection locations within the country or the findings of same indicators in other countries.

While defining the key performance indicators already available standards and practices developed by WCO, World Bank and ADB may be considered

- methods on collection of data (e.g. surveys, interviews, data mining from time release studies). Again the methods already developed by ESCAP, WCO, World Bank and ADB may be considered
- monitoring and evaluation team (e.g. within analytics offices of Customs authorities and railway undertaking, ad hoc multiagency team, external independent surveyors)
- data collection locations and data collection periods (it is recommended to select railway border crossing with high levels of traffic, where the structure of cargo and the type of the border crossing processes and procedures reflect the broader trends in international rail transport in the country), the collection periods should be sufficiently long to provide a representative data sample, within the season/weekdays when the traffic flows are more intensive
- frequency for collection of data (ad hoc data collection, periodic surveys)
- target population (e.g. all imports, all exports, all customs transits, all empty wagons).

Stage 3: Prepare for implementation of monitoring mechanism

In this stage following activities are necessary:

- evaluate costs and provide funding
- build capacity of monitoring and evaluation team
- develop tools and systems for collection and analysis of data (e.g. design data collection questionnaires, design online surveys; provide specialized software for data mining, data collection and analysis etc.)

In the Annex 8 of this Study a generic draft Questionnaire is presented that could be adapted based on specific needs for performance monitoring on selected railway border crossings.

- build awareness and provide support from all stakeholders involved
organize trainings for the parties which are going to be involved in collection of data (e.g. customs officers, railway administration employees, freight forwarders)

**Stage 4: Implement the monitoring mechanism**

Implementation of the monitoring mechanism is the last phase in the process of introduction of a system that will enable performance measurement at railway border crossing stations and checkpoints. The successful implementation of the monitoring mechanism depends largely on how well previous preparatory stages were settled.

The implementation of the monitoring mechanism include:

- collection of data (e.g. executing surveys, interviews, time release studies)
- analysis of the collected data, and analysis of key performance indicators and preparing reports
- dissemination of reports and findings and using the findings in accordance with objectives set for the monitoring mechanism

The monitoring mechanism for performance measurement at railway border crossing stations and checkpoints could be an efficient tool that will enable monitoring of progress in implementation of Regional Cooperation Framework for Facilitation of International Railway Transport and monitoring the progress in introduction of good practices identified in this Study.
## Annex 1 – List of International Legal Instruments

<table>
<thead>
<tr>
<th>Conventions and Agreements</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Railway Transport Regime</strong></td>
<td></td>
</tr>
<tr>
<td>OSJD agreements:</td>
<td></td>
</tr>
<tr>
<td>Agreement on the International Goods Transport by Rail (SMGS)</td>
<td>Entered into force in 1951</td>
</tr>
<tr>
<td></td>
<td>25 Contracting Parties</td>
</tr>
<tr>
<td></td>
<td>(14 from ESCAP region)</td>
</tr>
<tr>
<td>Agreement on the International Railway Transit Tariff (MTT)</td>
<td>Entered into force in 1997</td>
</tr>
<tr>
<td></td>
<td>15 Contracting Parties</td>
</tr>
<tr>
<td></td>
<td>(8 from ESCAP region)</td>
</tr>
<tr>
<td>Agreement on the Uniform Transit Tariff (ETT)</td>
<td>Entered into force in 1991</td>
</tr>
<tr>
<td></td>
<td>17 Contracting Parties</td>
</tr>
<tr>
<td></td>
<td>(11 from ESCAP region)</td>
</tr>
<tr>
<td>Agreement on Rules for the Use of Wagons in International Traffic (PGW)</td>
<td>Entered into force in 2009</td>
</tr>
<tr>
<td></td>
<td>20 Contracting Parties</td>
</tr>
<tr>
<td></td>
<td>(9 from ESCAP region)</td>
</tr>
<tr>
<td>Agreement on Organizational and Operational Aspects of Combined Transportation between Europe and Asia</td>
<td>Entered into force in 1997</td>
</tr>
<tr>
<td></td>
<td>15 Contracting Parties</td>
</tr>
<tr>
<td></td>
<td>(6 from ESCAP region)</td>
</tr>
</tbody>
</table>

### Footnotes:


201 Соглашение о международном железнодорожном грузовом сообщении (СМГС) (с изменениями и дополнениями по состоянию на 1 июля 2016 года); Available at: http://osjd.org/doco/public/ru?STRUCTURE_ID=5038&layer_id=4581&refererLayerId=4621&id=955&print=0

202 Azerbaijan, Afghanistan, China, Georgia, Democratic People's Republic of Korea, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Mongolia, the Russian Federation, Tajikistan, Turkmenistan, Uzbekistan and Viet Nam

203 Договор о Международном железнодорожном транзитном тарифе (MTT) (с изменениями и дополнениями по состоянию на 1 сентября 2015 года)); Available at: http://osjd.org/doco/public/ru?STRUCTURE_ID=5034&layer_id=4581&refererLayerId=4621&id=836&print=0

204 Договор о Едином транзитном тарифе (ETT) (с изменениями и дополнениями по состоянию на 1 октября 2015 года). Available at: http://osjd.org/doco/public/ru?STRUCTURE_ID=5034&layer_id=4581&refererLayerId=4621&id=836&print=0

205 Договор о "Правилах пользования грузовыми вагонами в международном сообщении ПГВ" (редакция с комплексными изменениями и дополнениями по состоянию на 1 июля 2017 года)); Available at: http://osjd.org/doco/public/ru?STRUCTURE_ID=5034&layer_id=4581&refererLayerId=5313&page5313_3531=3&refererPageId=5026&id=957

206 Соглашение об организационных и эксплуатационных аспектах комбинированных перевозок в сообщении Европа - Азия (с изменениями и дополнениями по состоянию на 1 января 2016 года); Available at http://osjd.org/dbmm/download?vp=51&load=y&col_id=2066&id=2289
<table>
<thead>
<tr>
<th><strong>Conventions and Agreements</strong></th>
<th><strong>Status</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIM/SMGS Consignment Note Manual (GLV CIM/SMGS)</td>
<td>Applicable with effect from 1 September 2006 CIT members</td>
</tr>
<tr>
<td>Recommendations to undertakings intending to use an electronic version of the CIM/SMGS consignment note: Technical Specifications for the Electronic CIM/SMGS Consignment Note</td>
<td>Applicable with effect from 8 July 2009 CIT members</td>
</tr>
<tr>
<td>Towards unified railway law in the pan-European region and on Euro-Asian transport corridors</td>
<td>Approved by ECE Inland Transport Committee in 2011 (9 common members of ECE and ESCAP)</td>
</tr>
<tr>
<td>Joint Declaration on the Promotion of Euro-Asian Rail Transport and Activities towards Unified Railway Law (2013)</td>
<td>Adopted by 37 Ministers of Transport (10 from ESCAP region)</td>
</tr>
</tbody>
</table>

**Customs related Conventions**

| Customs Convention on Containers (1972)                                                       | Entered into force in 1975 39 Contracting Parties (13 from ESCAP region)                         |

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207 Text of the Convention is available at: http://www.otif.org/index.php?id=143\&L=2


209 Armenia, Azerbaijan, Georgia, Islamic Republic of Iran, Pakistan, Russian Federation and Turkey


212 Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkey and Uzbekistan

213 Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, the Russian Federation, Tajikistan, Turkey and Uzbekistan

214 Text of the Convention is available at: Available at: http://www3.wcoomd.org/Kyoto_New/Content/content.html

215 Armenia, Australia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Japan, Kazakhstan, Malaysia, Mongolia, New Zealand, Pakistan, Papua New Guinea, Philippines, Russian Federation, Sri Lanka, Thailand, the Republic of Korea, Turkey and Viet Nam (http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/conventions/pf_revised_kyoto_conv/instruments.aspx visited on 08.07.2016)


217 Armenia, Australia, Azerbaijan, China, Georgia, Indonesia, Kazakhstan, Kyrgyzstan, New Zealand, the Republic of Korea, the Russian Federation, Turkey and Uzbekistan

180
### Conventions and Agreements

<table>
<thead>
<tr>
<th>Convention</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convention on International Customs Transit Procedures for carriage of goods by Rail under cover of SMGS consignment notes</td>
<td>Not in force yet (Adopted in 2006 – presently has only 1 signatory) 218</td>
</tr>
<tr>
<td>Convention on Temporary Admission (Istanbul Convention) (26 June 1990)</td>
<td>Entered into force in 1993 67 Contracting Parties (12 from ESCAP region) 219</td>
</tr>
</tbody>
</table>

### Facilitation and Harmonization on Frontier Controls

<table>
<thead>
<tr>
<th>Convention</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Convention to Facilitate the Crossing of Frontiers for Goods Carried by Rail (1952)</td>
<td>Entered into force in 1953 12 Contracting Parties (1 from ESCAP region) 220</td>
</tr>
</tbody>
</table>

### Regional

<table>
<thead>
<tr>
<th>Convention</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Cooperation Framework for Facilitation of International Railway Transport</td>
<td>Adopted in 2015 (ESCAP region) 222</td>
</tr>
<tr>
<td>Intergovernmental Agreement on the Trans-Asian Railway Network (2006)</td>
<td>Entered into force in 2009 18 Contracting Parties (all from ESCAP region) 223</td>
</tr>
</tbody>
</table>

---


221  Australia, China, Georgia, Indonesia, Kazakhstan, Mongolia, Pakistan, Russian Federation, Tajikistan, Thailand, Turkey


224  Armenia

225  Armenia, Azerbaijan, Georgia, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Lao People’s Democratic Republic, Mongolia, Russian Federation, Tajikistan, Turkey and Uzbekistan


227  Text of the Agreement is available at: [http://www.unescap.org/resources/intergovernmental-agreement-trans-asian-railway-network](http://www.unescap.org/resources/intergovernmental-agreement-trans-asian-railway-network)

228  Bangladesh, Cambodia, China, Democratic People’s Republic of Korea, Georgia, India, Islamic Republic of Iran, Lao People’s Democratic Republic, Mongolia, Nepal, Pakistan, Republic of Korea, the Russian Federation, Sri Lanka, Tajikistan, Thailand, Uzbekistan, Viet Nam. (Note that Armenia, Azerbaijan, Indonesia, Kazakhstan and Turkey are signatory of the Agreement however they have not ratified the Agreement yet)
<table>
<thead>
<tr>
<th>Conventions and Agreements</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subregional</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Eurasian Economic Union</strong></td>
<td></td>
</tr>
<tr>
<td>Agreement on Customs Code of Customs Union (27.11.2009) (as amended with the Protocol of amendments from 16.04.2010)</td>
<td>Entered into force 01.07.2010 3 (+2) Contracting Parties (2 +2 from ESCAP region)</td>
</tr>
<tr>
<td>Agreement on special conditions of customs transit of goods carried by railway within the customs territory of the Customs Union (2010)</td>
<td>Entered into force 17.02.2011 3 (+2) Contracting Parties (2 +2 from ESCAP region)</td>
</tr>
<tr>
<td>Agreement on provision and exchange of preliminary information on goods and transport means transferred across the customs border of the Customs Union (2010)</td>
<td>Entered into force 24.01.2011 3 (+2) Contracting Parties (2 +2 from ESCAP region)</td>
</tr>
<tr>
<td>Decision on Introduction of mandatory advance information on goods imported in single customs territory of the Customs Union by railway transport (Decision No 196 of 17 September 2013)</td>
<td>Entered into force 1.10.2014 3 (+2) Contracting Parties (2 +2 from ESCAP region)</td>
</tr>
<tr>
<td><strong>CIS</strong></td>
<td></td>
</tr>
<tr>
<td>Agreement on railway transport coordination among authorities of the Commonwealth of Independent States (1992)</td>
<td>9 CIS MS + 2 AS (8+1 from ESCAP region)</td>
</tr>
<tr>
<td>Rules on carriage of dangerous goods by rail (5 April 1996);</td>
<td>9 CIS MS + 2 AS (8+1 from ESCAP region)</td>
</tr>
<tr>
<td>Rules of goods carriage by rails in open-top rolling stock</td>
<td>9 CIS MS + 2 AS</td>
</tr>
</tbody>
</table>

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229 Договор о Евразийском экономическом союзе. Available at: https://docs.eaeunion.org/ru-ru/Pages/DisplayDocument.aspx?s=be9e798-3978-42f3-9e2-d0fb3d53b75f&w=632c7868-4ee2-4b21-bc64-1995328e6ef3&lc=540294ae-c3c9-4511-9bf8-aaf5d6e0d169&EntityID=3610

230 Republic of Belarus, the Republic of Kazakhstan and the Russian Federation (original signatories), Armenia (accessed on 10 October 2014), Kyrgyzstan (accessed on 1 January 2015)

231 Договор о Таможенном кодексе таможенного союза от 27 ноября 2009 года (as amended with the Protocol of amendments from 16 April 2010). Available at: https://docs.eaeunion.org/docs/en-us/0047363/itit_26112009


233 Text of the Agreement available: https://docs.eaeunion.org/docs/en-us/0144721/itot_17052013

234 Коллегия Евразийской экономической комиссии, Решение №196, О введении обязательного предварительного информирования о товарах, ввозимых на единую таможенную территорию Таможенного союза железнодорожным транспортом. Available at: http://www.eurasiancommission.org/ru/Lists/EECDocs/635151118000847728.pdf

<table>
<thead>
<tr>
<th>Conventions and Agreements</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation on international rail carriage of perishable goods in thermostatic rail cars (19 May 2007);</td>
<td>9 CIS MS + 2 AS (8+1 from ESCAP region)</td>
</tr>
<tr>
<td>Protocol 6 on Railway Border and Interchange stations (2011)</td>
<td>Not in force yet</td>
</tr>
</tbody>
</table>

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236 Afghanistan, Azerbaijan, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, and Turkey (Note that Turkmenistan is signatory of the Agreement, however it has not ratified the Agreement yet)


239 Brunei Darussalam, Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, Singapore, Philippines, Thailand, Viet Nam


241 Armenia, Azerbaijan, Georgia, Iran, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Uzbekistan
### General Annex

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Standard</th>
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</thead>
<tbody>
<tr>
<td>Correlate the business hours and the competence of Customs offices located at a common border crossing</td>
<td>(Standard 3.3.)</td>
</tr>
<tr>
<td>Operate joint customs controls at common border crossings whenever possible</td>
<td>(Transitional Standard 3.4.)</td>
</tr>
<tr>
<td>Co-operate with neighboring Customs to establish a juxtaposed Customs office at common border crossings wherever possible</td>
<td>(Transitional Standard 3.5.)</td>
</tr>
<tr>
<td>The format of the electronically lodged Goods declaration should be based on recommended international standards for electronic information exchange</td>
<td>(Standard 3.11.)</td>
</tr>
<tr>
<td>Limit the data required in the Goods declaration only to such particulars deemed necessary (e.g. for assessment of duties and taxes)</td>
<td>(Standard 3.12.)</td>
</tr>
<tr>
<td>Limit requirements for supporting documents to the Goods declaration only to those necessary (e.g. to permit control of the operations)</td>
<td>(Standard 3.16.)</td>
</tr>
<tr>
<td>Permit lodgement of supporting documents by electronic means</td>
<td>(Transitional Standard 3.18.)</td>
</tr>
<tr>
<td>Do not require a translation of the particulars of supporting documents except when necessary to permit processing of the Goods declaration</td>
<td>(Standard 3.19.)</td>
</tr>
<tr>
<td>Permit the lodging of the Goods declaration by electronic means</td>
<td>(Transitional Standard 3.21.)</td>
</tr>
<tr>
<td>Provide lodging and registering or checking of the Goods declaration and supporting documents prior to the arrival of the goods</td>
<td>(Standard 3.25.)</td>
</tr>
<tr>
<td>Provide simplifications (e.g. release of the goods on the provision of the minimum information necessary to identify the goods; lodgement of the Goods declaration by means of an entry in the records) for authorized persons who meet specified criteria (e.g. a satisfactory system for managing commercial records)</td>
<td>(Transitional Standard 3.32.)</td>
</tr>
<tr>
<td>Ensure coordinated (and if possible simultaneous) inspections of goods by the Customs and other competent authorities</td>
<td>(Transitional Standard 3.35.)</td>
</tr>
</tbody>
</table>

### Specific Annex A - Arrival of goods in a Customs territory

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Specific Annex A Ch.1 – Standard 4</th>
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</thead>
<tbody>
<tr>
<td>The carrier is responsible to ensure that all goods are included in the cargo declaration or brought to the attention of the Customs</td>
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<tr>
<td>The carrier is obliged to directly convey the goods introduced into the Customs territory to a designated Customs office/other specified place (any seals to stay intact)</td>
<td>(Specific Annex A Ch.1 – Standard 5)</td>
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<tr>
<td>Limit information requirements to that available in carriers’ normal documentation (based</td>
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</tbody>
</table>
on relevant international transport agreements) (Specific Annex A; Ch.1 – Recommended Practice 9.)

| Accept the cargo declaration as the only required documentation for the production of the goods | (Specific Annex A; Ch.1 – Recommended Practice 10.) |
| Do not require regular translation of the particulars from other languages given in the documents produced to the Customs | (Specific Annex A; Ch. 1 – Recommended Practice 12.) |

**Specific Annex E - Customs transit / Transhipment**

| Goods being carried under Customs transit shall not be subject to the payment of duties and taxes (security may be required) | (Specific Annex E; Ch.1 – Standard 3.) |
| Accept any commercial or transport document setting out clearly the necessary particulars as the descriptive part of the Goods declaration for Customs transit | (Specific Annex E; Ch.1 – Standard 6.) |
| Accept adequate commercial or transport documents as the Goods declaration for Customs transit | (Specific Annex E; Ch.1 – Recommended Practice 7.) |
| Take all necessary action at the office of departure to enable the office of destination to identify the consignment and to detect any unauthorized interference | (Specific Annex E; Ch.1 – Standard 8.) |
| When Customs sealing is required, transport-unit has to be constructed and equipped in a way that meets the requirements for sealing (e.g. no goods can be removed from or introduced into the sealed part of the transport-unit without leaving visible traces of tampering or without breaking the Customs seal) | (Specific Annex E; Ch.1 – Standard 10.) |
| Allow transfer of the goods from one means of transport to another without Customs authorization, provided that any Customs seals are not broken or interfered with | (Specific Annex E; Ch.1 – Standard 20.) |
| Goods admitted to transhipment shall not be subject to the payment of duties and taxes | (Specific Annex E; Ch.2 – Standard 2.) |
| Accept any commercial or transport document setting out clearly the necessary particulars as the descriptive part of the Goods declaration for transhipment | (Specific Annex E; Ch.2 – Standard 5.) |
| Accept adequate commercial or transport documents as the Goods declaration for transhipment | (Specific Annex E; Ch.2 – Recommended Practice 6.) |

**Specific Annex G - Temporary admission**

| Grant temporary admission without a written Goods declaration when there is no doubt about the subsequent re-exportation of the goods | (Specific Annex G; Ch.1 – Recommended Practice 9.) |
| Grant temporary admission with total conditional relief from duties and taxes for means of transport (in accordance with the Convention on Temporary Admission (Istanbul Convention) of 26 June 1990) | (Specific Annex G; Ch.1 – Recommended Practice 22.) |

**Specific Annex J - Means of transport for commercial use**

<p>| Allow means of transport for commercial use to be brought temporarily into a Customs territory under conditional relief from payment of import duties and taxes (if they are not used for internal transport and they are intended for re-exportation) | (Specific Annex J; Ch.3 – Recommended Practice 3.) |</p>
<table>
<thead>
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<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Require security or a temporary admission document for means of transport</td>
<td>Require security or a temporary admission document for means of transport for commercial use registered abroad only if it is essential for the control purposes (Specific Annex J; Ch.3 – Standard 4.)</td>
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<tr>
<td>for commercial use registered abroad only if it is essential for the control purposes (Specific Annex J; Ch.3 – Standard 4.)</td>
<td>(Specific Annex J; Ch.3 – Standard 4.)</td>
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<tr>
<td>Allow special equipment for loading, unloading, handling and protection of cargo, from the means of transport for commercial use to be brought temporarily into a Customs territory under conditional relief from payment of import duties and taxes (Specific Annex J; Ch.3 – Recommended Practice 7.)</td>
<td>Allow special equipment for loading, unloading, handling and protection of cargo, from the means of transport for commercial use to be brought temporarily into a Customs territory under conditional relief from payment of import duties and taxes (Specific Annex J; Ch.3 – Recommended Practice 7.)</td>
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<tr>
<td>Allow parts and equipment intended for repair or maintenance, to be brought temporarily into a Customs territory under conditional relief from payment of import duties and taxes (Specific Annex J; Ch.3 – Recommended Practice 8.)</td>
<td>Allow parts and equipment intended for repair or maintenance, to be brought temporarily into a Customs territory under conditional relief from payment of import duties and taxes (Specific Annex J; Ch.3 – Recommended Practice 8.)</td>
</tr>
<tr>
<td>Keep Customs formalities as simple as possible where means of transport for commercial use call at subsequent places in the Customs territory and take into account any Customs control measures already taken (Specific Annex J; Ch.3 – Standard 11.)</td>
<td>Keep Customs formalities as simple as possible where means of transport for commercial use call at subsequent places in the Customs territory and take into account any Customs control measures already taken (Specific Annex J; Ch.3 – Standard 11.)</td>
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# Annex 3 – Railway Border Crossing Points along Trans Asian Railway

<table>
<thead>
<tr>
<th>Country</th>
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<th>Border Crossing</th>
<th>Neighboring countries</th>
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<td>Yerashk</td>
<td>Belidag–Ordubad</td>
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<td>Dong Dang</td>
<td>Pingxiang</td>
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Annex 4 – Case Study of Rezekne railway border crossing in Latvia

The international railway transport in Latvia is linking the European Union, CIS and Asia. The East-West railway corridor connects Latvian ports with railway networks of Russian Federation and Belarus, and further East with Central Asia and China. The South-North corridor links Central and Northern Europe. The main function of the dominant East-West railway corridor is to ensure freight transport from the Russian Federation and Belarus to the Latvian ports at the Baltic Sea.

The railways in Latvia run on 1520 mm track gauge, which is interoperable with the 1520 mm railway systems of the neighboring Russian Federation and Belarus, as well as the neighboring EU member states Estonia and Lithuania. At the railway border crossings of Latvia there is no need for transshipment and other brake-of-gauge operations.

Latvia and Russian Federation are connected with two railway border crossings Karsava (Latvia) – Skangali (Russian Federation) and Zilupe (Latvia) – Posin (Russian Federation). The capacities of the Karsava and Zilupe border crossing stations are limited and insufficient to provide effective dealing with high volumes of freight. To prevent major bottlenecks at the railway border crossings the Latvian Government has designated the Rezekne railway station, which has more adequate capacities, to serve as border crossing station only in relation to goods moved by freight trains from/to Karsava and Zilupe border crossings.242

The Rezekne border crossing goods station is located about 45 km from border crossing station Karsava and 60 km from border crossing station Zilupe. The freight trains do not stop at any other railway stations while moving on sections between Karsava and Rezekne or Zilupe and Rezekne.

Figure 55: Karsava/Zilupe - Rezekne Border Crossing Stations

242 Republic of Latvia, Cabinet of Ministers, Regulation No. 704 adopted on 27 July 2010, Regulations Regarding Border Crossing Points and Checks to be Performed Therein
The legal requirements on international railway transport between Latvia and Russian Federation are based on SMGS, PGW and other OSJD agreements, as well as on bilateral agreements between the two countries and their railways companies.

**Volumes of transport and type of goods**

The Latvian Railways (Latvijas Dzelzceļš) have transported 47.8 million tons of freight in 2016, which is about 14 per cent reduction from 55.6 million tons of cargo transported in 2015.

**Figure 56: Volume of freight transported by Latvian Railways (in million tons)**

![Volume of freight transported by Latvian Railways](image)

Source: Latvian Railways, 2017, Performance Indicators 2016

The most actively transported goods in 2016 were oil and oil products (16.6 million tons or 35 per cent of the total volume of transportation) and coal (15.9 million tons or 33 per cent of the total volume). Other important categories of goods transported were chemical fertilizers, ferrous metals, grain and grain products and timber products.

**Figure 57: Categories of goods transported by Latvian Railways (in 2016)**

![Categories of goods transported by Latvian Railways](image)

Source: Latvian Railways, 2017, Performance Indicators 2016
The freight transport patterns are not balanced, and they are overwhelmingly in favor of Latvian import side (including EU imports through Latvian ports) with 42 million tons or 88 per cent of total volume transported in 2016. In the same year the exported goods in volume of 2.4 million tons or 5 per cent of total volume (including EU exports from Latvian ports) have been transported; along with 1.9 million tons of overland railway transit (4 per cent) and 1.5 tons of domestic railway transport (3 per cent).

Vast majority of the cargo transported in 2016 or 80 per cent was destined for import at port stations (which includes the EU imports, which transited through Latvian territory by rail e.g. from the railway border crossings with Russian Federation and Belarus to Latvian ports).

**Figure 58: Structure of freight transported by Latvian Railways (in 2016)**

![Diagram showing freight transport structure]

Source: Based on Latvian Railways, 2017, Performance Indicators 2016

The Rezekne border crossing goods station is a major railways station that in 2015 handled a total of 22 million tons of internationally transported goods that moved from/to Karsava and Zilupe border crossing stations by rail.243

**Characteristics of the Karsava (Latvia) and Zilupe (Latvia) border crossings**

The Karsava and Zilupe border crossing operate 24 hours and fully process passenger trains. At the Karsava and Zilupe border crossings there are very limited railways operations on freight trains because the processing of international railway transport of goods is organized in Rezekne railways border crossing station. For fright trains only partial border crossing formalities by the control authorities are completed at Karsava/Zilupe entry border crossing stations.

In addition to immigration/passport control for drivers and staff of the freight trains the Latvian border guard authorities at the Karsava and Zilupe border crossings are authorized for radiation control and operation of the radiometric equipment.

**Figure 59: Stationary radiometric gates and control panel**

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At Karsava and Zilupe border crossings there are only few customs officers present which in general only visually inspect the entry/exit of the freight trains without any processing of railways and customs documents. Preliminary information in electronic form on freight train is submitted directly from the Russian Railways at least two hours before arrival of the train at the railway border crossing.

The customs authorities at Karsava/Zilupe border crossings operate dynamic weight scales and dynamic X-ray scanner, which enable collection information on weight and control of the cargo when the train is moving in slow speed range at the entry of the border crossing. The weight measurements and x-ray scan images of each wagon are shared electronically with the customs authorities at Rezekne border crossing station for risk analysis and selection of wagons for detailed physical control, if necessary.

**Figure 60: Dynamic weight scales at Karsava and Zilupe border crossings**

**Technical characteristics:** The maximum weight is 180 tons, it operates at a train speed of 15 km / h at temperatures from -40 C to +70 C.

Source: Information Ministry of the Republic of Latvia Department of Railway Transport (M.Riekstins) 22.09.2015 (Gdansk), presentation: Experience of border crossings control in the Republic of Latvia

**Figure 61: Dynamic X-ray scanner at Zilupe border crossing**

Source: Information Ministry of the Republic of Latvia Department of Railway Transport (M.Riekstins) 22.09.2015 (Gdansk), presentation: Experience of border crossings control in the Republic of Latvia
Technical characteristics: 6 MeV, work place for two operators, works at the speed of the train in the range from 7 km/h to 25 km/h, at temperatures from -30°C to +40°C.

Source: Information Ministry of the Republic of Latvia Department of Railway Transport (M.Riekstins) 22.09.2015 (Gdansk), presentation: Experience of border crossings control in the Republic of Latvia

At the Karsava or Zilupe border crossing the customs authorities in general do not physically control the freight trains, however in exceptional and duly justified cases (e.g. suspected fraud or smuggling) the customs officers may conduct physical inspections or inform the customs office at Rezekne border crossing station, where further detailed control could be organized, about their suspicions.

The stop of the freight trains at the border crossings Karsava or Zilupe for completion of all entry border-crossing formalities of the border guards and customs takes about 20-30 minutes.

Upon finalization of entry border crossing formalities the train as well as the locomotive and the driver of the Russian Railways are allowed to continue at the Latvian railway infrastructure from the entry border station to the Rezekne border crossing station where remaining border crossing formalities will be finalized.

The movement from the entry border crossing Karsava or Zilupe to the Rezekne border crossing station does not have a status of customs transit but represents a customs formality for bringing the goods entered into the customs territory to the designated border crossing customs office.

Characteristics of the Rezekne railway border crossing station

In accordance with OSJD rules and bilateral arrangements the commercial and technical handover of the freight trains is organized at railway border crossing station on receiving side. For movements from the Russian Federation to Latvia, handover is organized in Rezekne (Latvia), and for movements in opposite direction from Latvia to Russian Federation, in corresponding railway border crossing stations in Russian Federation.

The Rezekne railway border crossing station can support full range of railways operations. Presently the Rezekne deals in average with 1500 wagons for 24 hours or 25 trains arriving/departing from/to the border crossings with the Russian Federation.
Before arrival entry of the train at the Latvian territory the Russian Railways and Latvian Railways exchange two types of information based on bilateral agreement. First is the information on goods that is provided upon loading of cargo at the wagon, which can take place several days before arrival of the train (natural list). The first information contains all details available to the railways with regard to the goods loaded on the wagon. Second is the information on composition of the train (as confirmed at the exit border crossing from neighboring country) and submitted at least 2 hours in advance, before arrival of the train at the customs territory. The second information contains essential data such as: wagon number, weight, code of the goods; consignee of the goods and indicated time of arrival. The information is exchanged through automated railways information systems using standardized UN EDIFACT messages.

The information received from the Russian Railways is distributed by the Latvian Railways to the Latvian Customs and other government authorities at the entry railway border crossing station (e.g. Zilupe) and at the Rezekne railway station.

An automated commercial inspection system that was installed in 2015 (at location approximately 20 km before the entry to the station), supports commercial handover of the freight trains at Rezekne station. The automated system provides visual video surveillance and automated platform/wagon number recognition while the train is moving towards the Rezekne railway station. The video feed and all other information captured by the system are electronically transmitted to the Rezekne railway station. The use of the system enables expeditious commercial handover and improves the commercial inspection of wagons regarding control of load safety compliance, oversize detection and recognition of irregularities.

Commercial handover at the Rezekne railway border crossing station is organized in four steps. First step is monitoring of the freight train arrival, using the automated commercial inspection system at control room of the Rezekne station.

**Figure 62: Video surveillance from the Rezekne control room**

In this stage the data on train composition (obtained in advance from electronic information exchange with the Russian Railways) is automatically matched with the platform/wagon numbers captured by the automated commercial inspection system and any discrepancies are identified; the video feeds and images received by the automated commercial inspection system are analyzed (before arrival of the train at the station). The arrival of the train at the station is confirmed and commercial inspection and handover is initiated.
At the second step the paper-based documents received from the train document pouch are opened for the first time (it should be noted that documents are not opened at entry border crossing Karasava or Zilupe). The data received in advance from the electronic information exchange with the partner railways undertakings (natural list) are compared with the data from paper-based documents. The railways documents are also pared with the information on cargos selected for specialized controls (e.g. phytosanitary of veterinary inspection), which is received by fax or e-mail from border control agencies.

The third step is preparation for formalities for the principals, where customs declaration are prepared and submitted to the customs office in Rezekne station. The railways can act as a declarant/principal, e.g. for customs transit declaration regarding movement from the Rezekne border crossing to the Latvian ports or any EU country (e.g. to the customs warehouses in Estonia or Lithuania). Customs declarations are submitted in electronic form only. The railways and customs information systems are interfaced to enable seamless exchange of information.

Even though presently railways documents and supporting documents are paper-based, for the future a paperless environment is envisaged. At the moment empty wagons/containers could be processed in fully paperless manner, only with exchange of electronic information.

At the fourth step a handover document is prepared using the railways IT software. Handover details are checked for the last time, the handover document is printed, signed and delivered physically to the Russian Railways at corresponding railway station. The Russian Railways in accordance with a bilateral agreement stamp the handover document and return one copy to the Latvian Railways.

It should be noted that technical inspection of the rolling stock is organized in parallel with the commercial inspection of the train. This first part of railways operations at Rezekne railway border crossing that includes all commercial and technical inspections for the handover takes up to 3 hours and 45 minutes.

**Customs and other government agencies formalities**

Pre arrival information submitted in electronic form by the railways to the customs enables risk assessment before arrival of the train at the Rezekne railway border crossing station. Based on risk assessment and evaluation of the x-ray scans gathered from dynamic X-ray scanners at the entry border crossing (e.g. Zilupe) the customs authorities select wagons for physical inspections.

The data on wagon weight received from pre-arrival information and measurements from dynamic scales at the entry border crossing (e.g. Zilupe) are automatically matched and in case of any discrepancies or uncertainties the wagons can be additionally weighed with static scales available at the Rezekne border crossing.
The pre-arrival information in electronic form is also available to other government agencies (e.g. phytosanitary of veterinary control authorities), which also use risk assessment to select the wagons for detailed physical control.

The railways have an authorized economic operator status (authorized consignor and consignee) that allows them to prepare customs declarations by themselves and to ask for control to be performed in other railways stations if necessary. The customs declarations are submitted through the Rail Freight Declaration System (DKDS) to the Electronic Customs Data Processing System (EMDAS) that enables electronic submission of customs declarations and documents for customs purposes (e.g. electronic summary declaration and customs transit declaration). Customs declarations are processed by Customs Management Information System (CMIS), which covers several customs functions, including risk management. Customs IT systems and interfaced Railways IT systems ensure simplified electronic data exchange between railways and customs.

Less than 10 per cent of the goods declared at Rezekne railway border crossing station are subject to physical inspection. The wagons selected for physical inspections are shunted to dedicated side lines for customs and other specialized controls (e.g. phytosanitary of veterinary control). At the customs side lines unloading/loading equipment such as reach stacker is available.

**Figure 63: Unloading equipment at customs side lines for detailed physical control**

![Unloading equipment at customs side lines for detailed physical control](image)

Source: ESCAP/OSJD Case Study team

Physical inspections of customs and other government agencies (e.g. phytosanitary/veterinary control authorities) are well coordinated.

Preparation and submission of necessary documents for customs clearance takes up to 85 minutes and it is organized in parallel with railway commercial and technical inspections. The customs inspections at Rezekne railway border crossing take in average 30 minutes.
The Latvian Railways as an authorized economic operator have been granted a guarantee waiver, and a customs transit guarantee is not required for the goods transported in customs transit procedure. Most of the cargo moves in customs transit procedure under customs seal. The customs seals of the foreign customs authorities and authorized customers are accepted.

After finalization of customs clearance and other customs/other government agencies formalities the railways can continue with operations for formation of freight train (in general with the same wagons and Latvian locomotive / driver) that will be dispatched from the Rezekne railway border crossing station.

The Rezekne railway border crossing station is an example were several good practices for efficient management of railway border crossing are implemented including:

- transfer of main railway operations and regulatory formalities from the entry railway border crossing(s) (with limited capacities to deal with high transport flows) to the first major railway station located inland which is designated to serve as a railway border crossing station. Such transfer eliminates bottlenecks at the entry railway border crossing(s) and provides optimized use of resources (infrastructure, technical and human).
- electronic information exchange, which includes pre arrival information, between railways as well as between railways, customs and other government agencies;
- electronic submission of customs declarations;
- use of modern control and inspection technologies (e.g. dynamic scales, dynamic X-ray scanner, automated commercial inspection system) that provides expeditious, automated and improved processing and control of freight trains;
- use of risk analysis, selectivity, coordinated and joint inspections and controls at national level.

Well-organized railway operations and regulatory formalities at Rezekne border crossing station enable efficient rail freight movements in international transport without undue delays and major challenges. Present capacities of the station appear sufficient for current and expected traffic levels. Replacing paper-based railways and accompanying documents with their electronic counterparts could contribute to further simplifications of border crossing operations and formalities. The railways and customs authorities could consider automated sharing of some of the information gathered from automated control and inspection technologies (e.g. dynamic scale wagon weight readings to be exchanged from customs to railways, and wagon number readings to be exchanged from railways to customs.)
## Annex 5 – List of Bilateral / Tripartite Agreements

<table>
<thead>
<tr>
<th>Contracting Parties</th>
<th>Bilateral/Tripartite Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>China</strong>&lt;br&gt;Mongolia&lt;br&gt;Russian Federation</td>
<td>Agreement between the Government of Russian Federation, the Government of Mongolia and the Government of the People’s Republic of China determining points of joint of frontiers of three states from January 27, 1994.&lt;br&gt; (Rus: Соглашение между Правительством Российской Федерации, Правительством Монголии и Правительством Китайской Народной Республики об определении точек стыков государственных границ трех государств от 27 января 1994 года.)&lt;br&gt;Inter-Governmental Agreement on “access to the seaport and transit transport” (2014)&lt;br&gt;Inter-Governmental General Agreement on development of cooperation of the railway transit transport (2014)&lt;br&gt;Inter-Governmental MOU on Development of Railway Cooperation (2014)&lt;br&gt;Inter-Governmental Agreement on establishing of economic corridor (2016)&lt;br&gt;Inter-Governmental of mutual recognition of the results of customs control for inspection of certain goods (2016)</td>
</tr>
<tr>
<td><strong>China</strong>&lt;br&gt;Viet Nam</td>
<td>Agreement on Cross-border Railway Transport between the Ministry of Transport of Viet Nam and the Ministry of Railway of China (1992)&lt;br&gt;Agreement on Transit of Goods between Viet Nam and China (1994)</td>
</tr>
</tbody>
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(Information if the agreements entered into force is not available)

245 Same as above

246 Same as above

247 Same as above

248 Same as above


(Information if the agreements entered into force is not available)

250 Same as above
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<th>China</th>
<th>Russian Federation</th>
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<tr>
<td><strong>Border agreements</strong></td>
<td></td>
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<tr>
<td>Agreement on cooperation between the Russian Federation Ministry of Security and the Ministry of Public Security of the People’s Republic of China (18 December 1992) (Rus: Соглашение о сотрудничестве между Министерством безопасности Российской Федерации и Министерством общественной безопасности Китайской Народной Республики (от 18 декабря 1992 года))</td>
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</tr>
<tr>
<td><strong>Customs Agreements</strong></td>
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<tr>
<td>Protocol between Federal Customs Service of Russian Federation and General Administration of Customs of People’s Republic of China on information exchange in order to ensure the security of the supply chain for container transport (03.09.2015) (Rus: Протокол между ФТС России и ГТУ КНР об информационном обмене в целях обеспечения безопасности цепи поставок при контейнерных перевозках)</td>
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<tr>
<td>China</td>
<td>Kazakhstan</td>
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<tr>
<td><strong>Agreement between the Russian Federation and the Government of the People’s Republic of China on cooperation and mutual assistance in customs matters (3 September 1994)</strong>&lt;br&gt;(Rus: Соглашения между Правительством Российской Федерации и Правительством Китайской Народной Республики о сотрудничестве и взаимной помощи в таможенных делах (3 сентября 1994))</td>
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<tr>
<th><strong>Border Agreements</strong></th>
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<tr>
<td>Agreement between the Republic of Kazakhstan and the People’s Republic of China on the Kazakh-Chinese border (26.04.94)</td>
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<tr>
<td>Agreement between the Government of the Republic of Kazakhstan and the Government of the People’s Republic of China on the border crossing points at the Kazakh-Chinese state border and the mode of their operation (06.06.2012) (as amended with the Protocol from 01.09.2014)</td>
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<th><strong>Railways Agreements</strong></th>
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<tr>
<td>Agreement between the Ministry of Transport and Communication of the Republic of Kazakhstan and the Ministry of Railways of the People’s Republic of China (17.05.2004)</td>
</tr>
<tr>
<td>Border Railway Agreement between the Ministry of Transport of the Republic of Kazakhstan and the Ministry of Railways of the People’s Republic of China (10.08.1992) (as amended with the Protocol from 08.12.2012)</td>
</tr>
<tr>
<td>Agreement between the Ministry of Railways of the People’s Republic of China and JSC NC KTZ on mutual use of large-capacity containers belonging to the railways (31.05.2006)</td>
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<td>Agreement on the joint forwarding when using the large-capacity containers belonging to KZH and KZD (13.08.1998)</td>
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<th><strong>Cooperation Agreements</strong></th>
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<th><strong>Customs Agreements</strong></th>
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<tr>
<td>Memorandum of understanding between State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan and General Administration of Customs of People’s Republic of China on promotion and development of bilateral trade;</td>
</tr>
<tr>
<td>Protocol between the Customs Committee of the Ministry of State Revenues of the Republic of Kazakhstan and the General Administration of Customs of the PRC on the methodological and information cooperation in the field of customs statistics of foreign trade. Beijing, 25/12/00. It entered into force upon signature</td>
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251 Text of the Agreement is available at: [http://adilet.zan.kz/rus/docs/P040000545](http://adilet.zan.kz/rus/docs/P040000545).

252 Text of the MoU Available at: [http://palata.kz/uploads/content/files/МеморандумРУС.PDF](http://palata.kz/uploads/content/files/МеморандумРУС.PDF)
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<td>India - Pakistan</td>
<td>Agreement relating to Rail Communication between India and Pakistan (1976) (as amended)</td>
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<td></td>
<td>Agreement between India and Pakistan on Cooperation and Mutual Assistance in Customs Matters (2012)</td>
</tr>
<tr>
<td>India - Bangladesh</td>
<td>Agreement on re-opening of Petrapole (India) - Benapole (Bangladesh) BG interchange route for movement of goods traffic and resumption of rail communication on the section (1997)</td>
</tr>
</tbody>
</table>

254 The legal text of the Agreement is available at: http://mea.gov.in/TreatyDetail.htm?1694
255 The legal text of the Agreement is available at: http://mea.gov.in/TreatyDetail.htm?727
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<td>Russian Federation</td>
<td>Border agreements</td>
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<tr>
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<td></td>
<td>Agreement between the Russian Federation and the Government of Mongolia on cooperation on border issues from the November 15, 1994</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transit Transport Agreements</td>
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<tr>
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<td></td>
<td>Agreement concerning Access to the Sea and Transit Transport for Mongolia across the territory of the Russian Federation, signed at Moscow on 19th Oct, 1992</td>
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<td></td>
<td>Railway Agreements</td>
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<tr>
<td></td>
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<td>Customs Agreements</td>
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<tr>
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<td></td>
<td>Соглашение между Правительством Российской Федерации и Правительством Монголии о Сотрудничестве в Таможенных Делах (20.01.1993) (entered into force 10.09.1993)</td>
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<tr>
<td>Nepal</td>
<td>India</td>
<td>Rail Services Agreement between Ministry of Industry, Commerce and Supplies, Government of Nepal and Ministry of Railways, Government of India (21 May 2004)257 (Nepal-India Rail Services Agreement) as last amended</td>
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<td></td>
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<td>- Protocol to The Treaty of Transit (1978) (as amended)</td>
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<td>- Memorandum to the Protocol to the Treaty of Transit (1978) (as amended)258</td>
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258 Same as previous
Questionnaire on Rail Border Crossing Issues

Please list all rail border crossing stations for freight transport in your country and counterpart stations in neighboring countries.

For each selected rail border crossing station please provide brief information on:

- Type of the border crossing and other general information such as, available infrastructure, available equipment, throughput and handling capacity;
- Current status of cross-border rail transport, including ways to deal with the break-of-gauge; options for intermodal transport, storage facilities and equipment available, types of customs clearance, and opening hours;
- Statistics on traffic (number of trains/wagons) and volume of goods (inbound: transit and import; outbound: transit and export) in last three years; as well as main types of goods, and volumes of containerized and bulk cargo;
- Stakeholders present at the rail border crossing station including: agencies competent for regulatory controls/inspections, railways undertaking(s) and number of carriers, forwarders and customs brokers, other logistics service providers. Describe national and cross-border coordination of various agencies and other participants;
- Processes and procedures relevant for the rail border crossing station (including processes before entry of the train at the station e.g. issuing visas, pre-arrival information, risk analysis; and during border crossing formalities e.g. receiving of train, technical inspections, regulatory control of documents, physical inspections, etc.). Identify sequencing of the processes/procedures and availability for simultaneous handling of processes and procedures;
- Documents required during relevant processes and procedures, existing legal basis for international railway transport (international, multilateral and bilateral agreements or national legislation); as well as relevant legal bases for regulatory controls and inspections;

If available please also provide information on:

- Relevant standards for key performance indicators. Recent information on the status of key performance indicators from regular performance monitoring exercises or provide estimates (e.g. average overall time for processing a train, broken down to average time for main individual processes/procedures;
- Major challenges in cross-border and transit transport by rail and reasons for delays at the border crossing station (e.g. reasons for rejected rolling stock, infrastructure or equipment insufficiency etc.);
- Current measures in place for facilitation of international railway transport such as: simplified border crossing procedures, use of single window facilities, joint/coordinated controls at national and cross-border level; electronic information exchange and use of electronic documents.
### Annex 7 – Overview of Railway Border Crossing Issues

<table>
<thead>
<tr>
<th>RAIL FREIGHT TRAFFIC BORDER CROSSING OPERATIONS</th>
<th>Zabaykalsk (Russian Federation) - Manzhouli (China)</th>
<th>Erenhot (China) - Zamyin Uud (Mongolia)</th>
<th>Sukhbaatar (Mongolia) - Naushki (Russian Federation)</th>
<th>Alashankou (China) - Dostyk (Kazakhstan)</th>
<th>Padang Besar (Malaysia) - Padang Besar (Thailand)</th>
<th>Pingxiang (China) - Dong Dang (Viet Nam)</th>
<th>Sarakhs (Iran) - Saraks (Turkmenistan)</th>
<th>Raxaul (India) - Birgunj (Nepal)</th>
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<td>(1676)</td>
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<tr>
<td>Change of locomotive and crews</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Transfer of wagons between neighboring railways</td>
<td>OSJD / PGW Yes - change of bogie systems</td>
<td>OSJD / PGW Yes - change of bogie systems</td>
<td>OSJD / PGW Yes</td>
<td>OSJD / PGW Yes - change of bogie systems</td>
<td>Yes - Bilateral Agreement</td>
<td>Yes - Chinese wagons only</td>
<td>OSJD / PGW Yes - change of bogie systems</td>
<td>Yes - Indian wagons only up to ICD Birgunj</td>
</tr>
<tr>
<td>Technical inspections and control of compliance with railway transport standards</td>
<td>Handover at receiving side</td>
<td>Handover at receiving side</td>
<td>Handover of even (odd) trains at receiving (sending) side</td>
<td>Handover at receiving side</td>
<td>Joint Operations at PB (MY)</td>
<td>Handover at DD (VN), joint checks in case of inconsistency</td>
<td>Handover at receiving side</td>
<td>Joint Operations at Raxaul (IND)</td>
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</table>
### Transfer of goods between neighboring railways

<table>
<thead>
<tr>
<th>DOCUMENTARY REQUIREMENTS</th>
<th>In ZA (RU): by Railways: SMGS</th>
<th>In ER (CN): By Railways: SMGS</th>
<th>In SU (MO): by Railways: SMGS</th>
<th>In AL (CN): by Railways: SMGS</th>
<th>In PB (MY): by Railways: WL, CN and SMGS</th>
<th>In PI (CN): by Railways: SMGS</th>
<th>In SA (IR) by Railways: SMGS</th>
<th>In RA (IN) by Railways: Railway</th>
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<tbody>
<tr>
<td>Type of documents required</td>
<td>(e.g. Wagon list - WL, Consignment)</td>
<td>(e.g. Wagon list - WL, Consignment)</td>
<td>(e.g. Wagon list - WL, Consignment)</td>
<td>OSJD / SMGS a. In same wagons (change of bogies); b. transfer of containers from wagon to wagon or c. reloading of goods</td>
<td>OSJD / SMGS a. In same wagons (change of bogies); b. transfer of containers from wagon to wagon or c. reloading of goods</td>
<td>OSJD / SMGS In same wagons / containers</td>
<td>OSJD / SMGS a. In same wagons (change of bogies); b. transfer of containers from wagon to wagon or c. reloading of goods</td>
<td>Bilateral Agreement In same wagons/containers</td>
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<tr>
<td>Note - CN</td>
<td>Use of a common transport document</td>
<td>Zabaykalsk (Russian Federation) - Manzhouli (China)</td>
<td>Erenhot (China) - Naushki (Russian Federation)</td>
<td>Sukhbaatar (Mongolia) - Dostyk (Kazakhstan)</td>
<td>Alashankou (China) - Padang Besar (Malaysia)</td>
<td>Padang Besar (Viet Nam)</td>
<td>Pingxiang (China) - Dostyk (Kazakhstan)</td>
<td>Sarakhs (Iran) - Sarakhs (Turkmenistan)</td>
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<tr>
<td>WL&amp;CN by Customs: notification of arrival; carriage documents, transfer slip, commercial documents; customs declaration for transit, import, export</td>
<td>Yes</td>
<td>SMGS (or CIM/SMGS) Consignment Note</td>
<td>Yes</td>
<td>SMGS (or CIM/SMGS) Consignment Note</td>
<td>Yes</td>
<td>SMGS (or CIM/SMGS) Consignment Note</td>
<td>No</td>
<td>Yes SMGS Consignment Note VN translation required at BCP</td>
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<tr>
<td>SMGS WL&amp;CN by Customs: manifest for inbound / outbound train; customs declaration for transit, import, export</td>
<td>WL&amp;CN by Customs: manifest for inbound / outbound train; customs declaration for transit, import, export</td>
<td>WL&amp;CN by Customs: manifest for inbound / outbound train; customs declaration for transit, import, export</td>
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<td>WL&amp;CN by Customs: manifest for inbound / outbound train; customs declaration for transit, import, export</td>
<td>WL&amp;CN - Bill of lading by Customs: customs documents In SA (TM): by Railways: by Customs:</td>
</tr>
<tr>
<td>In ZU (MO): by Railways: by Customs: arrival check: pass-over docs, railway car docs, railway bill, invoice, foreign certificates; cargo manifest; transit manifest and customs declaration for import, export</td>
<td>In NA (RU): by Railways: SMGS WL&amp;CN by Customs: notification of arrival: carriage documents, transfer slip, commercial documents; customs declaration for transit, import, export</td>
<td>In DO (KZ): by Railways: SMGS WL&amp;CN by Customs: notification of arrival: carriage documents, transfer slip, commercial documents; customs declaration for transit, import, export</td>
<td>In PB (TH): by Railways: by Customs:</td>
<td>Cargo Manifest by Customs: (CN, Invoice, Packing List - for entry check - No copies retained); K8 - Transit; K1 - Import; K2 - Export</td>
<td>In DD (VN): by Railways: SMGS WL&amp;CN (waybill) by Customs: initial entry check: waybill; customs transit transport document; customs declaration for import, export</td>
<td>Receipt by Customs: ICCD/ECCD; Import License, L/C, Transshipment Permit, (ICD, ECD) In BL (NP): by Railways: Railway Receipt by Customs: Transshipment Permit, (ICD, ECD)</td>
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<tr>
<td>Note - CN</td>
<td>Use of a common transport document</td>
<td>Zabaykalsk (Russian Federation) - Manzhouli (China)</td>
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<td>WL&amp;CN by Customs: notification of arrival; carriage documents, transfer slip, commercial documents; customs declaration for transit, import, export</td>
<td>Yes</td>
<td>SMGS (or CIM/SMGS) Consignment Note</td>
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<td>SMGS (or CIM/SMGS) Consignment Note</td>
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<td>In ZU (MO): by Railways: by Customs: arrival check: pass-over docs, railway car docs, railway bill, invoice, foreign certificates; cargo manifest; transit manifest and customs declaration for import, export</td>
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<td>In DO (KZ): by Railways: SMGS WL&amp;CN by Customs: notification of arrival: carriage documents, transfer slip, commercial documents; customs declaration for transit, import, export</td>
<td>In PB (TH): by Railways: by Customs:</td>
<td>Cargo Manifest by Customs: (CN, Invoice, Packing List - for entry check - No copies retained); K8 - Transit; K1 - Import; K2 - Export</td>
<td>In DD (VN): by Railways: SMGS WL&amp;CN (waybill) by Customs: initial entry check: waybill; customs transit transport document; customs declaration for import, export</td>
<td>Receipt by Customs: ICCD/ECCD; Import License, L/C, Transshipment Permit, (ICD, ECD) In BL (NP): by Railways: Railway Receipt by Customs: Transshipment Permit, (ICD, ECD)</td>
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<tr>
<td>Zabaykalsk (Russian Federation) - Manzhouli (China)</td>
<td>Erenhot (China) - Zamyn Uud (Mongolia)</td>
<td>Sukhbaatar (Mongolia) - Naушки (Russian Federation)</td>
<td>Alashankou (China) - Dostyk (Kazakhstan)</td>
<td>Padang Besar (Malaysia) - Padang Besar (Thailand)</td>
<td>Pingxiang (China) - Dong Dang (Viet Nam)</td>
<td>Sarakhs (Iran) - Saraks (Turkmenistan)</td>
<td>Raxaul (India) - Birgunj (Nepal)</td>
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<td>No</td>
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**ELECTRONIC INFORMATION SYSTEMS and EDI**

**Use of EDI in general**

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<tbody>
<tr>
<td>In ZA (RU): Railways - Yes (Partially) Customs - Yes</td>
<td>In ER (CN): Railways - No Customs - Yes</td>
<td>In ZU (MO): Railways - No Customs - Yes</td>
<td>In NA (RU): Railways - No Customs - Yes</td>
<td>In PA (TH): Railways - No Customs - Yes</td>
<td>In PI (CN): Railways - No Customs - Yes</td>
<td>In SA (IR): Railways - No Customs - Yes</td>
<td>In RA (IN): Railways - No Customs - Yes</td>
<td>In BI (NP): Railways - No Customs - Yes</td>
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<tr>
<td>In MA (CN): Yes</td>
<td>In ZU (MO): Railways is not connected with CAIS</td>
<td>In NA (RU): Railways is not connected with CAIS</td>
<td>In AL (CN): Railways is not connected with CAIS</td>
<td>In PB (MY): Railways is not connected with Customs</td>
<td>In PI (CN): Railways is not connected with Customs</td>
<td>In SA (IR): Railways is not connected with Customs</td>
<td>In RA (IN): Railways is not connected with Customs</td>
<td>In BI (NP): Railways is not connected with Customs</td>
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<tr>
<td>Location</td>
<td>Railways to railways communication / electronic data interchange (EDI)</td>
<td>Electronic information exchange between railways and control authorities</td>
<td>Government to Government electronic information exchange (National Level / Cross Border Level)</td>
<td>Single window (National Level / Cross Border Level)</td>
<td>CUSTOMS and OGA FORMALITIES</td>
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<tr>
<td>Zabaykalsk (Russian Federation)  - Manzhouli (China)</td>
<td>EDI / Exchange of paper based documents</td>
<td>In ZA (RU): Yes (Partially) / In MA (CN): / In ZU (MO): No</td>
<td>In ZA (RU): Yes on national level Cross Border Level: Yes - Green Corridor</td>
<td>No</td>
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<tr>
<td>Alashankou (China) - Dostyk (Kazakhstan)</td>
<td>EDI / Exchange of paper based documents</td>
<td>In AL (CN): / In DO (KZ): Yes (Partially)</td>
<td>In PB (MY): No</td>
<td>No</td>
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<td>Padang Besar (Malaysia) - Padang Besar (Thailand)</td>
<td>Manual (Phone / Exchange of Paper based documents / direct contacts)</td>
<td>In PB (MY): / In DD (VN): No</td>
<td>In PI (CN): / In SA (IR): No</td>
<td>No</td>
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<tr>
<td>Pingxiang (China) - Dong Dang (Viet Nam)</td>
<td>Manual (Phone / Exchange of Paper based documents)</td>
<td>In SA (IR): / In SA (TM): No</td>
<td>In SA (IR): Yes on national level Cross Border Level: No</td>
<td>No</td>
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<td>Sarakhs (Iran) - Saraks (Turkmenistan)</td>
<td>Manual (Exchange of Paper based documents)</td>
<td>In SA (IR): / In BI (NP): No</td>
<td>In RA (IN): No</td>
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<tr>
<td>Raxaul (India) - Birgunj (Nepal)</td>
<td>Manual (Exchange of Paper based documents)</td>
<td>In RA (IN): / In BI (NP): No</td>
<td>In SA (IR): Yes on national level</td>
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</table>

- EDI: Electronic Data Interchange
- National Level: National level
- Cross Border Level: Cross Border Level
- Single Window: Single Window
- Customs and OGA Formalities: Customs and OGA Formalities

**Notes:**
- **Yes (Partially):** Yes, but not fully implemented.
- **No:** No electronic information exchange.
<table>
<thead>
<tr>
<th></th>
<th>Zabaykalsk (Russian Federation) - Manzhouli (China)</th>
<th>Erenhot (China) - Zamyn Uud (Mongolia)</th>
<th>Sukhbaatar (Mongolia) - Naushki (Russian Federation)</th>
<th>Alashankou (China) - Dostyk (Kazakhstan)</th>
<th>Padang Besar (Malaysia) - Padang Besar (Thailand)</th>
<th>Pingxiang (China) - Dong Dang (Viet Nam)</th>
<th>Sarakhs (Iran) - Saraks (Turkmenistan)</th>
<th>Raxaul (India) - Birgunj (Nepal)</th>
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<tr>
<td>Stop at border line</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Pre-arrival information</td>
<td>In ZA (RU): advance information about arrival of a train two hours in advance</td>
<td>In ER (CN): submission of electronic manifest data at least two hours before arrival</td>
<td>In SU (MO): entry notification</td>
<td>In AL (CN): submission of electronic manifest data at least two hours before arrival</td>
<td>In PE (MY): pre arrival information one hour for railway transport (in practice upon arrival)</td>
<td>In PD (CN): submission of electronic manifest data at least two hours before arrival</td>
<td>in SA (IR): No</td>
<td>in RA (IN): No</td>
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<tr>
<td>Recognition of railways/foreign customs seals</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Recognition of controls</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Location</td>
<td>Risk assessment and selective controls</td>
<td>Use of modern and non-intrusive control technologies</td>
<td>Simplification for block container trains</td>
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<td>Zabaykalsk (Russian Federation) - Manzhouli (China)</td>
<td>In ZA (RU): / In MA (CN): /</td>
<td>In ZA (RU): / In MA (CN): video monitoring system</td>
<td>Yes</td>
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<td>Erenhot (China) - Zamyn Uud (Mongolia)</td>
<td>In ER (CN): /</td>
<td>In ER (CN): /</td>
<td>Yes</td>
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<td>Sukhbaatar (Mongolia) - Naushki (Russian Federation)</td>
<td>In SU (MO): Risk management for electronic manifest and customs declarations</td>
<td>In SU (MO): No In NA (RU): /</td>
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<td>Alashankou (China) - Dostyk (Kazakhstan)</td>
<td>In AL (CN): / In DO (KZ): No - for entry control entire train is scanned Yes - for detailed physical control</td>
<td>In AL (CN): No In DO (KZ): X-ray scanner</td>
<td>Yes</td>
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<td>Padang Besar (Malaysia) - Padang Besar (Thailand)</td>
<td>In PB (MY): No - for entry control (100 percent resealing of containers and wagons) Yes - for import, export, transit</td>
<td>In PB (MY): No In PB (TH): /</td>
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<tr>
<td>Pingxiang (China) - Dong Dang (Viet Nam)</td>
<td>In PI (CN): / In DD (VN): Detailed physical control based on risk management</td>
<td>In PI (CN): / In DD (VN): No</td>
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<td>Sarakhs (Iran) - Saraks (Turkmenistan)</td>
<td>In SA (IR): Yes In SA (TM): /</td>
<td>In SA (IR): No In SA (TM): /</td>
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<tr>
<td>Raxaul (India) - Birgunj (Nepal)</td>
<td>In RA (IN): / In BI (NP): /</td>
<td>In RA (IN): / In BI (NP): /</td>
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<tr>
<td>Location</td>
<td>Use of a transport document as a customs (transit) declaration</td>
<td>Other simplification for customs transit procedures</td>
<td>Temporary admission of wagons / containers</td>
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<td>Zabaykalsk (Russian Federation) - Manzhouli (China)</td>
<td>In ZA (RU): use of SMGS (CIM/SMGS) consignment note as a transit declaration. Electronic copy of the transit declaration.</td>
<td>- transit guarantee waiver;</td>
<td>without a customs declaration or security being required</td>
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<td>Erenhot (China) - Ulan Bator (Mongolia)</td>
<td>In ER (CN): /</td>
<td>In ER (MO): No Transit manifest in electronic and paper based form</td>
<td>without a customs declaration or security being required</td>
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<td>Sukhbaatar (Mongolia) - Hovd (Mongolia)</td>
<td>In SU (MO): No Transit manifest in electronic and paper based form</td>
<td>In SU (CN): /</td>
<td>without a customs declaration or security being required</td>
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<td>Alashankou (China) - Dostyk (Kazakhstan)</td>
<td>In AL (CN): /</td>
<td>In AL (KZ): use of SMGS (CIM/SMGS) consignment note as a transit declaration. Electronic copy of the transit declaration.</td>
<td>without a customs declaration or security being required</td>
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<td>Padang Besar (Malaysia) - Padang Besar (Thailand)</td>
<td>In PB (MY): No Electronic K8 customs declaration for customs transit</td>
<td>In PB (TH): /</td>
<td>In PB (MY) customs declaration for empty containers</td>
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<td>Pingxiang (China) - Dong Dang (Viet Nam)</td>
<td>In PI (CN): /</td>
<td>In PI (CN): /</td>
<td>without a customs declaration or security being required</td>
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<td>Sarakhs (Iran) - Saraks (Turkmenistan)</td>
<td>In SA (IR): Yes Permission from Customs is additionally required</td>
<td>In SA (TM): /</td>
<td>Yes - without a customs declaration or security being required</td>
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<tr>
<td>Raxaul (India) - Birgunj (Nepal)</td>
<td>In RA (IN): No</td>
<td>In BI (NP): No</td>
<td>Yes - without a customs declaration or security being required</td>
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</table>

Temporary admission of wagons / containers:
- Without a customs declaration or security being required
- Without a customs declaration or security being required
- Without a customs declaration or security being required
- Without a customs declaration for empty containers
- Without a customs declaration or security being required
- Yes - without a customs declaration or security being required
<table>
<thead>
<tr>
<th>Location</th>
<th>Coordination</th>
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</thead>
<tbody>
<tr>
<td><strong>Coordinated, integrated and joint controls</strong></td>
<td></td>
</tr>
<tr>
<td>Zabaykalsk (Russian Federation) - Manzhouli (China)</td>
<td>In ZA (RU): coordination when necessary - joint inspection commission (customs, border guards and railway staff) In MA (CN): coordination when necessary Cross Border: No</td>
</tr>
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<td>Erenhot (China) - Zamyn Uud (Mongolia)</td>
<td>In ER (CN): coordination when necessary In ZU (MO): coordination when necessary Cross Border: No</td>
</tr>
<tr>
<td>Sukhbaatar (Mongolia) - Naushki (Russian Federation)</td>
<td>In SU (MO): coordination when necessary In NA (RU): coordination when necessary Cross Border: No</td>
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<td>In AL (CN): coordination when necessary In DO (KZ): coordination when necessary Cross Border: No</td>
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<td>In PB (MY): coordination when necessary In PB (TH): Cross Border: No</td>
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<td>In SA (IR): No In SA (TM): No In BI (NP): No</td>
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<tr>
<td>Raxaul (India) - Birgunj (Nepal)</td>
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<tr>
<td><strong>Streamlined control processes and transfer of responsibilities</strong></td>
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<td>Single Stop control at one border station (Mode 2 BCP)</td>
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## QUESTIONNAIRE FOR COLLECTION OF INFORMATION

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<tr>
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<th>Country</th>
<th>Neighboring Country</th>
<th>Name of Rail Border Crossing</th>
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### Responding agency
- Railways
- Customs
- Other ________________________

#### A. General Information and type of rail border crossing

The main station of this rail border crossing is located at border line: ☐ Yes ☐ No

*Please answer the following part A.1. only if previous question is answered with No (if the main station is not located on border line) or leave this part blank if the previous question is answered with Yes (if the main station is located directly at the border line) and continue with part A.2*

#### A.1. Information on Border Gate (when the main border station is not located at border line)

- The trains have to stop at border line: ☐ Yes ☐ No
- Number of railroads at the border line: ______________
- (Construction of additional railroads planned: ____________)

- Agency(s) responsible for supervision at the border line check point:
  - ☐ None
  - ☐ Border Guards, ☐ Customs, ☐ Other ________________________________________________________________________

- Supervision of the entry of the train at the border line check point is provided with:
  - ☐ None
  - ☐ In general, observation only (without any systematic entry in the records or preliminary control)
  - ☐ Entry in the records of the agency concerned in following form:
    - ☐ manual, ☐ electronic, ☐ electronic (linked with the main station), ☐ with entries from automated electronic reader system,
    - ☐ with entries from surveillance equipment (e.g. CCTV) system, ☐ other

* ________________________________________________________________________

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☐ Preliminary control (and ☐ stamping) of documents at the border line check point

Number of documents required to be presented _____: Number of documents required to be stamped _____

Supervision of the entry of the train at the border line is provided with (continued):

Type of documents required to be presented / stamped _________________________________________________________________

_____________ _______________ ________________________ (describe the type of documents)

☐ Physical preliminary control at the border line:
  ☐ radiation control
    ☐ check of customs (railways) seals
    ☐ check of general conditions of the rolling stock
    ☐ other security, administrative or technical preliminary controls

____________________________________________________________ (describe the type of the control)

☐ Supervision of the movement from the border line to the main border station is provided with:
  ☐ CCTV video surveillance system
  ☐ electronic tracking system ______________________________________________________________ (describe the type of the system)
  ☐ physical escort by ___________________________ (identify the agency)

☐ Other supervision measures ______________________________________________________________ (describe the measures)

The average time for stop at the border line for entry of a train is: ____ min

This information is provided on basis of:
  ☐ regular performance monitoring. Last results from _________________________________________________
☐ estimation of the railways undertaking ☐ estimation of the ☐ Border Guards, ☐ Customs, ☐ Other ______________________

| Supervision of the exit of the train at the border line is provided with: |
|-----------------|----------------------------------|
| ☐ None           | ☐ In general, observation only    |
| (without any systematic entry in the records or exit control) |

Supervision of the entry of the train at the border line is provided with (continued):

<table>
<thead>
<tr>
<th>☐ Exit control (and ☐ stamping) of documents at the border line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of documents required to be presented ☐; Number of documents required to be stamped ☐</td>
</tr>
<tr>
<td>Type of documents required to be presented / stamped ____________________________</td>
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<td>(describe the type of documents)</td>
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<td>☐ check of customs (railways) seals</td>
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</table>
☐ other security, administrative or technical exit controls _________________________________________________________

☐ Supervision of the movement from the main border station to the border line is provided with:
   ☐ CCTV video surveillance system
   ☐ electronic tracking system _______________________________________________________________
      (describe the type of the system)
   ☐ physical escort by ________________________________________ (identify the agency)
   ☐ Other supervision measures
      _______________________________________________________________
      (describe such measures)

The average time for stop at the border line for exit of a train is: ____ min
   ☐ regular performance monitoring. Last results from ____________________________________________
   ☐ estimation of the railways undertaking
   ☐ estimation of the ☐ Border Guards, ☐ Customs, ☐ Other _______________________________________

Please continue answering the questionnaire regardless if the main station of this rail border crossing is located at the border line or not

A.2. Information on Border Station

Type of border station

<table>
<thead>
<tr>
<th>Distance from the main station to the border line (border gate) (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The rail border crossing station is designed for and facilitates:</td>
</tr>
</tbody>
</table>
   ☐ freight transport by rail only
   ☐ both passenger and freight transport by rail
      Passenger and freight operations are physically separated: ☐ Yes ☐ No
      If “Yes” the separation is done with: ☐ separate railroad(s), ☐ separate platforms, ☐ other
      _______________________________________________________________
The rail border crossing station is designed for and facilitates:

- ☐ bilateral cross border transport with neighboring country only
- ☐ bilateral and international cross border transport

At the rail border crossing station there is:

- ☐ Transit customs clearance only;
- ☐ Transit, import and export customs clearance;
- ☐ No customs clearance

Closest inland customs office is located at: ________________________________. _________ (km) away.

Opening hours for receiving / sending trains:  ☐ 24 hours;  ☐ from ____ to ____ daily;  ☐ closed for: _________________________________.

Opening hours for freight yard/terminal operations:  ☐ 24 hours;  ☐ from ____ to ____ daily;  ☐ closed for: _________________________________.

Opening hours for transit customs clearance:  ☐ 24 hours;  ☐ from ____ to ____ daily;  ☐ closed for: _________________________________.

Opening hours for import/export customs clearance:  ☐ 24 hours;  ☐ from ____ to ____ daily;  ☐ closed for: _________________________________.

Opening hours of other regulatory controls/inspections: __________________________________________________________________________________________

**Infrastructure, rolling stock, equipment and storage**

| Number of main railroads (/connected with neighboring country): _________ | (Construction of additional main railroads planned: ____)|
| Number of side rail tracks for cargo operations and control: _________ | (Construction of additional side rail tracks planned: ____)|

At the rail border crossing station marshaling yard services are provided:  ☐ Yes  ☐ No

If No closest marshaling yard at: ______________________________ is located _________ (km) away.

Estimated capacity for handling maximum ______ trains or about _____________________________ freight wagons daily

With regard to the current volumes of the freight traffic the available railway infrastructure is considered as:

- ☐ insufficient,
- ☐ partially sufficient,
- ☐ fully sufficient,
- ☐ sufficient for present and projected increased volumes in near future
With regard to the current volumes of the freight traffic the **available rolling stock** is considered as:

- ☐ insufficient,
- ☐ partially sufficient,
- ☐ fully sufficient,
- ☐ sufficient for present and projected increased volumes in near future

**Available loading/unloading equipment** (type/No units):

- ☐ gantry cranes/___;
- ☐ reach stackers/___;
- ☐ forklifts/___;
- ☐ other

With regard to the current volumes of freight traffic the available loading/unloading equipment for **rail to rail** transshipment is considered as:

- ☐ insufficient,
- ☐ partially sufficient,
- ☐ fully sufficient,
- ☐ sufficient for present and projected increased volumes in near future

**Intermodal transport and transshipment services** provided at the border station for:

- ☐ rail-road;
- ☐ rail-inland water transport

Estimated capacity for handling about ______________________________ loading units daily (rail-in and rail-out handlings).

With regard to the current volumes of the freight traffic **the capacity of platforms for loading/unloading** is considered as:

- ☐ insufficient,
- ☐ partially sufficient,
- ☐ fully sufficient,
- ☐ sufficient for present and projected increased volumes in near future

**Available loading/unloading equipment** (type/No units):

- ☐ gantry cranes/___;
- ☐ reach stackers/___;
- ☐ forklifts/___;
- ☐ other

With regard to the current volumes of the freight traffic the available loading/unloading equipment is considered as:

- ☐ insufficient,
- ☐ partially sufficient,
- ☐ fully sufficient,
- ☐ sufficient for present and projected increased volumes in near future

**Storage services** provided at the border station (or close to), such as:

- ☐ rail yard;
- ☐ container terminal;
- ☐ temporary storage facility;
- ☐ warehouse(s);
- ☐ other ____________

### B. Statistics on traffic and volume of goods at the rail border crossing station in last three years

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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</thead>
<tbody>
<tr>
<td>Number of inbound mixed passenger and cargo trains</td>
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<tr>
<td>Number of inbound cargo trains (wagon/container system)</td>
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<tr>
<td>Number of inbound cargo block trains</td>
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<td>Total number of inbound trains</td>
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</tbody>
</table>

| Number of inbound wagons in transit | 2014 | 2015 | 2016 |
| Number of inbound wagons - import |  |  |  |
| Total number of inbound wagons |  |  |  |
| Number of outbound wagons in transit |  |  |  |
| Number of outbound wagons - export |  |  |  |
| Total number of outbound wagons |  |  |  |

| Weight of inbound cargo in transit (tons) | 2014 | 2015 | 2016 |
| Weight of inbound cargo – import (tons) |  |  |  |
| Total weight of inbound cargo (tons) |  |  |  |
| Weight of outbound cargo in transit (tons) |  |  |  |
| Weight of outbound cargo – export (tons) |  |  |  |
| Total weight of outbound cargo |  |  |  |

<p>| Top 5 inbound cargo commodities in transit (2016) | Number of wagons | Weight of cargo (tons) |
| listed by number of wagons |  |  |
| 1. |  |  |
| 2. |  |  |</p>
<table>
<thead>
<tr>
<th>Containerized inbound cargo in transit (2016)</th>
<th>Number of containers</th>
<th>Weight of the cargo (tons)</th>
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<tr>
<th>Containerized outbound cargo export (2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of containers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top 5 outbound cargo commodities – export (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(listed by number of wagons)</td>
</tr>
<tr>
<td>Number of wagons</td>
</tr>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Containerized outbound cargo export (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of containers</td>
</tr>
</tbody>
</table>
C. Stakeholders present at the rail border crossing station
<table>
<thead>
<tr>
<th>Regulatory controls/inspections and competent authority/organization present at the rail border crossing station:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Border security, ___________________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Immigration control, ___________________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Radiation control, ___________________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Customs control, ___________________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Medico-sanitary inspection, ___________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Veterinary inspection, ________________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Phytosanitary inspection, ______________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Control of compliance with technical standards of goods, ____________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Quality control of the goods, _________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Other control(s) of the goods, _________________________________ (describe the control) (name of the agency)</td>
</tr>
<tr>
<td>☐ Transport regulation control. _________________________________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Inspection of technical standards of the rolling stock, ___________ (name of the agency)</td>
</tr>
<tr>
<td>☐ Inspection of technical standards for transport of dangerous goods, ____________________________ (name of the agency)</td>
</tr>
<tr>
<td>□ Other control(s)</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>(describe the control) ________________________________ (name of the agency)</td>
</tr>
<tr>
<td>Total number of agencies/organizations responsible for regulatory controls/inspections present ________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other participants present at the rail border crossing station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railways undertaking(s) ____________________________ (name of the undertaking(s))</td>
</tr>
<tr>
<td>Number of forwarders and customs brokers ____________</td>
</tr>
<tr>
<td>Type and number of other service providers (e.g. for loading/unloading, storage/warehousing and other logistics services providers)</td>
</tr>
<tr>
<td>________________________________________________________</td>
</tr>
</tbody>
</table>
# D. Processes and procedures relevant for the rail border crossing station

## D.1. Before entry of a train at the border station *(if relevant for both inbound and outbound traffic)*

### D.1.1. Issuing visas for locomotive crews, refrigerated unit crews, persons accompanying freight shipments, and staff at the border crossing station:

<table>
<thead>
<tr>
<th>Step No.</th>
<th>Simultaneously with processes and procedures Steps Nos.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Competent authority:</th>
<th>___________________________________________________________________________________________</th>
</tr>
</thead>
</table>

- □ visa is not required when operating within and across the country for citizens of: ________________
  __________________________________________

- □ visa is not required only for the movement in the border area (between border line and border station area) for citizens of: __________________________________________________________________________

- □ simplified issuing of multiple entry visas with validity of one year or longer period for citizens of: ____________________________________________________________

- □ other simplifications: __________________________________________________________________________
  for citizens of: ________________________________________________________________________

- □ no specific visa simplifications provided

Average time required for obtaining visa: ______________________________________ (days)

Costs for obtaining visa: __________________________________________________________ (USD equivalent)

Relevant bilateral and multilateral agreements with neighboring countries and countries in the regions
____________________________________________________________________________________

Relevant information is published □ No □ Yes; and ____ percent of information is publicly available at Web site(s): ______________________________________________________________________
<table>
<thead>
<tr>
<th>D.1.2. - Submission of pre-arrival information</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No</td>
<td>□ to the railways provided by the railway administration of the adjacent country concerning:</td>
<td>□ technical inspections and control of the rolling stock, containers, piggyback and semi-trailers</td>
</tr>
<tr>
<td>Step No. ____________</td>
<td>□ processing of shipping</td>
<td></td>
</tr>
<tr>
<td>Simultaneously with</td>
<td>□ goods and accompanying documentation</td>
<td></td>
</tr>
<tr>
<td>processes and procedures</td>
<td></td>
<td>type of documents / data __________________________</td>
</tr>
<tr>
<td>Steps Nos. ____________</td>
<td>□ paper-based ☐ electronic ☐ in real time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information on electronic exchange system__________________________</td>
<td></td>
</tr>
</tbody>
</table>

| | □ to the Customs provided by: ☐ the Customs administration of the adjacent country ☐ the railways |  |
| | ☐ other __________________________ |  |
| | □ paper-based ☐ electronic ☐ in real time ☐ through national Single Window ☐ voluntary ☐ mandatory |  |
| | Minimum: ____ hrs. in advance |  |
| | □ to the Border guards provided by: ☐ the Border guards of the adjacent country ☐ the railways |  |
| | ☐ other __________________________ |  |
| | □ paper-based ☐ electronic ☐ in real time ☐ through national Single Window ☐ voluntary ☐ mandatory |  |
| | Minimum: ____ hrs. in advance |  |
| | to Other inspection authorities __________________________ |  |
| | provided by: ☐ the competent inspection authorities of the adjacent country ☐ the railways |  |
| | ☐ other __________________________ |  |
| | □ paper-based ☐ electronic ☐ in real time ☐ through national Single Window ☐ voluntary ☐ mandatory |  |
| | Minimum: ____ hrs. in advance |  |

Relevant bilateral and multilateral agreements with neighboring countries and countries in the regions

Relevant information is published ☐ No ☐ Yes; and ____ percent of information is publicly available at Web site(s):
### D.1.3. - Risk Management

<table>
<thead>
<tr>
<th>Step No.</th>
<th>Simultaneously with processes and procedures</th>
<th>Steps Nos.</th>
</tr>
</thead>
</table>

- ☐ Yes
- ☐ No

- ☐ without support of electronic risk management system
- ☐ application of distinct electronic risk management system
- ☐ application of electronic risk management system partially integrated with Customs information systems
- ☐ application of electronic risk management system fully integrated with Customs information systems

- ☐ risk assessment of customs authorities only
- ☐ joint risk assessment with border guards
- ☐ joint risk assessment with other border crossing agencies

---

**percent of selected Customs Documents/Wagons for:**

<table>
<thead>
<tr>
<th>No Control (green channel)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Export</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Transit</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documentary Control (yellow channel)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Export</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Transit</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Control (red channel)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Export</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Transit</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taking samples for lab control</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>D.1.4. - Issuing Certificates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(before arrival of train)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Yes  ☐ No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step No. ____________**

Simultaneously with processes and procedures

**Steps Nos. ____________**

<table>
<thead>
<tr>
<th>Veterinary inspection agency ____________________________ (type of certificates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time for issuing the certificate _____________ Costs for issuing certificate_________ (USD equivalent)</td>
</tr>
<tr>
<td>Application: ☐ paper-based ☐ electronic ☐ through national Single Window</td>
</tr>
<tr>
<td>Certificate form: ☐ paper-based ☐ electronic (paperless)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phytosanitary inspection agency ____________________________ (type of certificates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time for issuing the certificate _____________ Costs for issuing certificate_________ (USD equivalent)</td>
</tr>
<tr>
<td>Application: ☐ paper-based ☐ electronic ☐ through national Single Window</td>
</tr>
<tr>
<td>Certificate form: ☐ paper-based ☐ electronic (paperless)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical standards of goods agency ____________________________ (type of certificates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time for issuing the certificate _____________ Costs for issuing certificate_________ (USD equivalent)</td>
</tr>
<tr>
<td>Application: ☐ paper-based ☐ electronic ☐ through national Single Window</td>
</tr>
<tr>
<td>Certificate form: ☐ paper-based ☐ electronic (paperless)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality control of the goods agency ____________________________ (type of certificates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time for issuing the certificate _____________ Costs for issuing certificate_________ (USD equivalent)</td>
</tr>
<tr>
<td>Application: ☐ paper-based ☐ electronic ☐ through national Single Window</td>
</tr>
<tr>
<td>Certificate form: ☐ paper-based ☐ electronic (paperless)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other agency ____________________________ (type of certificates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time for issuing the certificate _____________ Costs for issuing certificate_________ (USD equivalent)</td>
</tr>
<tr>
<td>Application: ☐ paper-based ☐ electronic ☐ through national Single Window</td>
</tr>
<tr>
<td>Certificate form: ☐ paper-based ☐ electronic (paperless)</td>
</tr>
</tbody>
</table>
Application: ☐ paper-based  ☐ electronic  ☐ through national Single Window
Certificate form:  ☐ paper-based  ☐ electronic (paperless)

Relevant information is published ☐ No  ☐ Yes; and ____ percent of information is publicly available at Web site(s):

<table>
<thead>
<tr>
<th><strong>D.1.5. - Costs for processes before entry of a train</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other costs for processes before entry of a train</td>
</tr>
<tr>
<td>Overall costs for processes before entry of a train: ______________ (USD equivalent)</td>
</tr>
</tbody>
</table>

**After arrival of a train** at the border station *(if relevant for both inbound and outbound traffic)*

**D.2. Railway processes**

<table>
<thead>
<tr>
<th>D.2.1. - Notification of train arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step No. ____________</td>
</tr>
<tr>
<td>Simultaneously with processes and procedures</td>
</tr>
<tr>
<td>Steps Nos. ____________</td>
</tr>
<tr>
<td>☐ None to other agencies (only entry in the records of the railways)</td>
</tr>
<tr>
<td>☐ Automated notification:</td>
</tr>
<tr>
<td>☐ from entries of automated electronic reader system,</td>
</tr>
<tr>
<td>☐ from entries of surveillance equipment (e.g. CCTV system).</td>
</tr>
<tr>
<td>☐ from entries of other automated system __________________________</td>
</tr>
<tr>
<td>☐ Electronic notification:</td>
</tr>
<tr>
<td>☐ automatically generated from Railways electronic system;</td>
</tr>
<tr>
<td>☐ specifically created for:</td>
</tr>
<tr>
<td>☐ Customs</td>
</tr>
<tr>
<td>☐ other agencies</td>
</tr>
<tr>
<td>☐ through Single Window facility</td>
</tr>
<tr>
<td>Information on electronic exchange system________________________</td>
</tr>
</tbody>
</table>

233
Subsequent submission of paper-based document is required:  ☐ No  ☐ Yes: ____________
☐ manual:
  ☐ phone; ☐ fax; ☐ paper-based document: ________________________________ (type of document)

The average time from arrival to notification of train arrival is: ____ min (inbound) / ____ min (outbound)
This information is provided on basis of:
☐ regular performance monitoring. Last results from

☐ estimation of the railways undertaking
☐ estimation of the ☐ Border Guards, ☐ Customs, ☐ Other

<table>
<thead>
<tr>
<th>D.2.2. - Handover of train/wagons/containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step No. ____________</td>
</tr>
<tr>
<td>Change of locomotive is required at border station:</td>
</tr>
<tr>
<td>Change of crew is required at border station:</td>
</tr>
<tr>
<td>Foreign wagons are admitted in international traffic:</td>
</tr>
<tr>
<td>Foreign container are admitted in international traffic:</td>
</tr>
<tr>
<td>Relevant bilateral and multilateral agreements</td>
</tr>
</tbody>
</table>

☐ Rules for inter-change station:
  ☐ at the station of receiving railways
  ☐ always at __________________________ station
  ☐ other
                                                                                     ________________________________
| Relevant bilateral and multilateral agreements |
|________________________________________________________________________________________|

- **Documents for handover of wagons/containers:**
  - ☐ list of wagons
  - ☐ other ______________________

- **Standards for type of inspection and time for inspection for handover of wagons/containers**
  - ________________________________  ____ min (inbound)/____ min (outbound)
  - ________________________________  ____ min (inbound)/____ min (outbound)

The average time for process of handover of train/wagons/containers is: ____ min (inbound)____ min (outbound)

This information is provided on basis of:
- ☐ regular performance monitoring. Last results from ______________________________________
- ☐ estimation of the railways undertaking

---

**D.2.3. - Technical & Transport Inspections**

| Competent authority (by type of inspection): |
|__________________________________________|
| ☐ railways for_______________________________ |
| ☐ other __________________________ for |

- ☐ automated readers for wagon numbers/container codes (checking without stopping the train)
- ☐ manual checking of wagon numbers/container codes
- ☐ automated optical dimensions scanners of wagons/loads (checking without stopping the train)
- ☐ manual checking of wagon/loads dimensions
  - percent of wagon/load dimensions manually checked in last year is _________ percent
<table>
<thead>
<tr>
<th>Technical &amp; Transport Inspections (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ dynamic weight scale (measuring without stopping the train)</td>
</tr>
<tr>
<td>☐ static weight scale (measuring selected wagons with stopping the train)</td>
</tr>
<tr>
<td>☐ condition of sealed rolling stock units/containers by use of electronic seals and electronic monitoring system</td>
</tr>
<tr>
<td>☐ visual checking of general condition of the rolling stock</td>
</tr>
<tr>
<td>☐ automated checking of certain conditions for transport of dangerous goods (e.g. leakages)</td>
</tr>
<tr>
<td>☐ inspections on technical standards for transport of dangerous goods ____________________________</td>
</tr>
<tr>
<td>☐ other inspections of technical standards for rolling stock ____________________________</td>
</tr>
<tr>
<td>☐ other inspections on transport regulation</td>
</tr>
</tbody>
</table>

Documents of documents required to be presented for technical and transport inspections: _____

☐ for regular transport conditions ___________________________________________________________

☐ for special transport conditions ________________________________

Main irregularities discovered: ______________________________________

_____________________________________________________________________________________

Standards for technical and transport regulation inspections time is: ___ min (inbound) / ___ min (outbound)  
The average time for process of technical and transport regulation inspections is: ___ min (in)/___min (out)  
This information is provided on basis of:  
☐ regular performance monitoring. Last results from ________________________________
### D.2.4. - Break of gauge:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

- **Gauge width:** ______(mm)
- **Gauge width at adjacent country:** __________(mm)
- **Step No. __________**

- Simultaneously with processes and procedures
- **Steps Nos. __________**

---

### Double gauge railroad is available between neighboring border crossing stations:

- ☐ Yes  ☐ No

### Arrangement with adjacent country instructs performing break of gauge operation at:

- ☐ receiving station;
- ☐ other ______________________________________________________________

### Break of gauge operation are organized in following way:

- ☐ trans-loading of goods to other wagons (Option 1, applicable in ____ percent of the operations)
- ☐ transfer of containers to other platform wagons (Option 2, applicable in ____ percent of the operations)
- ☐ bogie change (Option 3, applicable in ____ percent of the operations)
- ☐ use of wagons with ‘variable-gauge’ system (Option 4, applicable in ____ percent of the operations)
- ☐ provision of dual gauge (Option 5, applicable in ____ percent of the operations)
- ☐ other ______________________________________________ (Option 6, applicable in ____ percent of the operations)

### Among all possible options to deal with break-of-gauge options Nos.________ are considered as most efficient

---

- **Standards for break-of-gauge operations time is:** _______ min (inbound) / ____ min (outbound).
- **The average time for break-of-gauge operations is:** ________ min (inbound) / ____ min (outbound).

---

### This information is provided on basis of:

- ☐ regular performance monitoring. Last results from __________________________________________
- ☐ estimation of the railways undertaking  ☐ estimation of the ___________________________
<table>
<thead>
<tr>
<th>Step No. ____________</th>
<th>Foreign carrier can transport the goods without handover: ☐ No  ☐ Yes in average __________ percent of entries.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simultaneously with processes and procedures Steps Nos. ____________</td>
<td>Relevant bilateral and multilateral agreements ____________________________________________________________________________</td>
</tr>
</tbody>
</table>

### Documents for handover of goods for transport:

- ☐ new consignment note has to be issued for approximately ________ percent of consignments
- ☐ new wagon list has to be issued for approximately ________ percent of consignments
- ☐ new container list has to be issued for approximately ________ percent of consignments
- ☐ re-consignment CIM-SMGs or SMGS-CIM is required for ________ percent of consignment
- ☐ single consignment note CIM is used approximately for ________ percent of consignments
- ☐ single consignment note SMGS is used approximately for ________ percent of consignments
- ☐ single consignment note CIM/SMGS is used approximately for ________ percent of consignments
- ☐ single CIM wagon list is used approximately for ________ percent of consignments
- ☐ single SMGS wagon list is used approximately for ________ percent of consignments
- ☐ single CIM/SMGS wagon list is used approximately for ________ percent of consignments
- ☐ single CIM container list is used approximately for ________ percent of consignments
- ☐ single SMGS container list is used approximately for ________ percent of consignments
- ☐ single CIM/SMGS container list is used approximately for ________ percent of consignments
- ☐ other ____________________________________________________________________ is used approximately for ________ percent of consignments
- ☐ other ____________________________________________________________________ is used approximately for ________ percent of consignments

### Accompanied documents of consignment notes/wagon lists/container lists

- ☐ none  ☐ commercial invoice  ☐ packing list  ☐ bill of lading
- ☐ other ____________________________________________________________________

Total No. of accompanied documents ________
<table>
<thead>
<tr>
<th>Translation of particulars in accompanied documents is required</th>
<th>☐ No</th>
<th>☐ Yes</th>
<th>in average _______ percent of entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average costs for translation of accompanied documents ______ (USD equivalent)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Categorization of goods in consignment notes/wagon lists/container lists</th>
<th>☐ general description of goods only</th>
<th>☐ detailed description of goods only</th>
<th>☐ nomenclature code for sensitive goods and description for regular goods</th>
<th>☐ nomenclature code for all goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>The nomenclature code is based on:</td>
<td>☐ WCO HS code at __________ digits</td>
<td>☐ OSJD GNG HS code at __________ digits</td>
<td>☐ UIC NHM code at __________ digits</td>
<td>☐ national customs code at __________ digits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standards for handover of goods for transport time is: _____ min (inbound) / _____ min (outbound).</th>
<th>The average time for handover of goods for transport is. _____ min (inbound) / _____ min (outbound).</th>
</tr>
</thead>
<tbody>
<tr>
<td>This information is provided on basis of:</td>
<td>☐ regular performance monitoring. Last results from ____________________________________________</td>
</tr>
<tr>
<td></td>
<td>☐ estimation of the railways undertaking ☐ estimation of the ____________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relevant information is published</th>
<th>☐ No</th>
<th>☐ Yes; and _____ percent of information is publicly available at Web site(s):</th>
</tr>
</thead>
</table>

### D.2.6. – Configuration of train:

<table>
<thead>
<tr>
<th>Step No.</th>
<th>Simultaneously with processes and procedures Steps Nos.</th>
</tr>
</thead>
</table>

- □ automatic sequencing of wagons with use of RFID technology and information systems
- □ manual sequencing of wagons

Documents for configuration of train:_________________________________________________________
________________________________________________________________________________________

Standards for configuration of train operations time is: ______ min (inbound) / ____ min (outbound).
The average time for configuration of train operations is: _______ min (inbound) / ____ min (outbound).

This information is provided on basis of:
- □ regular performance monitoring. Last results from ____________________________________________
- □ estimation of the railways undertaking
- □ estimation of the ____________________________________

### D.2.7. - Overall time for railway processes at the border crossing (D.2.1 + D.2.2 + D.2.3 + D.2.4. + D.2.5. +D.2.6)

Standards for overall time for railway processes is: _____ min (inbound) / ____ min (outbound)
The average overall time for railway processes is: ____ min (inbound) / ____ min (outbound)

This information is provided on basis of:
- □ regular performance monitoring. Last results from ____________________________________________
- □ estimation of the railways undertaking
- □ estimation of the ____________________________________

### D.2.8. - Costs for railway services at the border crossing

Types of costs for railway processes at the border crossing _______________________________________
_____________________________________________________________________________________

Overall costs for railway processes: ______________________ (USD equivalent)

### D.2.9. – Railways Human resources

Total number of railway officers serving at border station ________
<table>
<thead>
<tr>
<th>Topic</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of railways staff serving at border station (railway officers + supporting staff)</td>
<td>________</td>
</tr>
<tr>
<td>Training for railway officers is considered:</td>
<td></td>
</tr>
<tr>
<td>☐ adequate and sufficient ☐ adequate and partly sufficient ☐ partly adequate and partly sufficient ☐ not adequate and insufficient</td>
<td></td>
</tr>
<tr>
<td>Number of training activities for railways officers (last year)</td>
<td>________</td>
</tr>
<tr>
<td>Regular training for update of services usually every _____ years</td>
<td></td>
</tr>
<tr>
<td>Regulation on service conditions and facilities for railway officers serving on cross-border routes</td>
<td></td>
</tr>
<tr>
<td>☐ adequate and sufficient ☐ adequate and partly sufficient ☐ partly adequate and partly sufficient ☐ not adequate and insufficient</td>
<td></td>
</tr>
<tr>
<td>Adopted in implemented Code of Conduct ☐ No ☐ Yes</td>
<td></td>
</tr>
<tr>
<td>Perception of Corruption</td>
<td></td>
</tr>
<tr>
<td>Estimated amount of informal payments</td>
<td></td>
</tr>
</tbody>
</table>

**D.3. Customs procedures**

<table>
<thead>
<tr>
<th>D.3.1. – Processing of entry in the Customs territory:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Step No. ____________</td>
<td></td>
</tr>
<tr>
<td>Simultaneously with processes and procedures</td>
<td></td>
</tr>
<tr>
<td>Steps Nos. ____________</td>
<td></td>
</tr>
<tr>
<td>☐ fully automated processing of cargo declaration (entry manifest) - based on pre-arrival information (entry manifest) and automated notification of arrival (e.g. from entries of automated electronic reader system for wagon numbers and container codes) (NO additional submission of paper-based cargo declaration (entry manifest));</td>
<td></td>
</tr>
<tr>
<td>☐ automated processing of cargo declaration (entry manifest) - based on pre-arrival information and electronic notification of arrival (entry manifest); (NO additional submission of paper-based cargo declaration (entry manifest));</td>
<td></td>
</tr>
<tr>
<td>☐ dual processing of cargo declaration (entry manifest) - based on pre-arrival information and electronic notification of arrival (entry manifest); (With additional submission of paper-based cargo declaration (entry manifest));</td>
<td></td>
</tr>
<tr>
<td>☐ electronic processing of cargo declaration (entry manifest) - Electronic submission of entry manifest after</td>
<td></td>
</tr>
</tbody>
</table>
arrival; (NO additional submission of paper-based cargo declaration (entry manifest));
☐ dual processing of cargo declaration (entry manifest) - Electronic submission of entry manifest after arrival; (With additional submission of paper-based cargo declaration (entry manifest));
☐ manual processing of cargo declaration (entry manifest) - Submission of paper based entry manifest after arrival;

<table>
<thead>
<tr>
<th>Form of the cargo declaration (entry manifest):</th>
<th>☐ specific electronic form only</th>
<th>☐ specific electronic and paper form</th>
<th>☐ specific paper-based form only</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ in form of transit declaration (separate submission of entry manifest is not required):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(regardless if transit declaration is in regular/simplified form – electronic/paper-based)</td>
<td>☐ in other form of</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Categorization of goods in the cargo declaration (entry manifest): | ☐ general description of goods only | ☐ detailed description of goods only | ☐ nomenclature code for sensitive goods and description for regular goods | ☐ nomenclature code for all goods |

The codes of the national customs nomenclature harmonized with on:
☐ WCO HS code at _________ digits
☐ OSJD GNG HS code at _________ digits
☐ UIC NHM code at _________ digits

<table>
<thead>
<tr>
<th>Accompanied documents to cargo declaration (entry manifest):</th>
<th>☐ none</th>
<th>☐ commercial invoice</th>
<th>☐ packing list</th>
<th>☐ bill of lading</th>
<th>☐ consignment note</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ other __________________________________________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Accompanied documents to customs transit declaration could be presented electronically ☐ No ☐ Yes
Total No. of accompanied documents ________
<p>| Processing of exit from the Customs territory: | Translation of particulars in accompanied documents is required □ No □ Yes in average ______ percent of entries |
| | Number of documents required to be stamped ______ |
| | Inspection of processing of entry in the Customs territory (before customs procedure inspection): |
| | □ none |
| | □ only if required based on information from surveillance systems (e.g. CCTV, electronic tracking et.) |
| | □ only if required based on information from railways / border security officers |
| | □ random control on conditions of seals attached and sealing conditions of wagons/containers |
| | □ regular control on conditions of seals attached and sealing conditions of wagons/containers |
| | Situations where exit manifest is required ________________________________________________________ (when exit is not covered with transit or export declaration; e.g. simplified procedure with entry into record) |
| | Standards for processing of the entry in the Customs territory time is: ______ min (inbound regular) / ____ min (inbound container transit train). |
| | The average time for processing of the entry in the Customs territory is: ______ min (inbound) regular / ____ min (inbound container transit train). |
| | This information is provided on basis of: |
| | □ regular performance monitoring. Last results from ________________________________ |
| | □ estimation of the Customs □ estimation of the ________________________________ |
| | Relevant information is published □ No □ Yes; and ____ percent of information is publicly available at Web site(s): |</p>
<table>
<thead>
<tr>
<th>D.3.2. – Customs Procedures – Transit/Transshipment</th>
<th>Transshipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail to Rail</td>
<td>☐ authorization for transshipment is required</td>
</tr>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ only notification is required without any authorization</td>
</tr>
<tr>
<td>Rail to/form Road</td>
<td>☐ railways are allowed for transshipment with entry in their records without any notification and authorization</td>
</tr>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ transport documents (e.g. consignment note) represents goods declaration for transshipment</td>
</tr>
<tr>
<td>Rail to/from Inland waterway</td>
<td>☐ commercial documents represent goods declaration for transshipment</td>
</tr>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ goods declaration for transshipment in specific form has to be submitted</td>
</tr>
<tr>
<td>Step No. ____________</td>
<td>☐ Customs have to physically supervise transshipment</td>
</tr>
<tr>
<td>Simultaneously with processes and procedures</td>
<td>☐ Supervision of transshipment is provided with surveillance systems (e.g. CCTV)</td>
</tr>
<tr>
<td>Steps Nos. ____________</td>
<td>☐ railways are allows for transshipment without supervision of customs</td>
</tr>
<tr>
<td></td>
<td><strong>Transit procedure (inbound)</strong></td>
</tr>
<tr>
<td>☐ regular customs transit declaration in electronic form - NO additional submission of paper-based customs transit declaration is required;</td>
<td>☐ regular customs transit declaration in electronic form - With additional submission of regular customs transit declaration in paper-based form (dual processing);</td>
</tr>
<tr>
<td>☐ customs transit declaration in electronic form - With additional submission of simplified customs transit declaration in paper-based form (e.g. Consignment Note);</td>
<td>☐ regular customs transit declaration in paper based form</td>
</tr>
<tr>
<td>☐ regular customs transit declaration in paper based form</td>
<td></td>
</tr>
<tr>
<td>Categorization of goods in the customs transit declaration:</td>
<td></td>
</tr>
<tr>
<td>☐ detailed description of goods only</td>
<td></td>
</tr>
<tr>
<td>☐ nomenclature code for sensitive goods and description for regular goods</td>
<td></td>
</tr>
<tr>
<td>☐ nomenclature code for all goods</td>
<td></td>
</tr>
</tbody>
</table>
The codes of the national customs nomenclature harmonized with on:
- ☐ WCO HS code at _________ digits
- ☐ OSJD GNG HS code at _________ digits
- ☐ UIC NHM code at _________ digits

Accompanied documents to customs transit declaration:
- ☐ none
- ☐ commercial invoice
- ☐ packing list
- ☐ bill of lading
- ☐ consignment note
- ☐ other

Accompanied documents to customs transit declaration could be presented electronically ☐ No ☐ Yes

Total No. of accompanied documents ________

Translation of particulars in accompanied documents is required ☐ No ☐ Yes in average _______ percent of entries

Number of documents required to be stamped ________

Security for transit of goods by railways is required ☐ No ☐ Yes in average _______ percent of entries

Inspection on inbound transit operations at border station
- ☐ Selective control based on risk management:
  - ☐ without control (green channel)
  - ☐ documentary control (yellow channel)
  - ☐ physical control (red channel)

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentary Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

☐ if required based on information from surveillance systems (e.g. CCTV, electronic tracking et.)
☐ if required based on information from railways / border security officers
☐ random control on conditions of seals attached and sealing conditions of wagons/containers
☐ regular sealing with national customs seals
☐ use of electronic seals in average ______ percent of customs transit operations
☐ dynamic X-ray scanning (control without stopping the train) on selected wagons based on risk management
  Average percent of wagons selected for dynamic X-ray control based on risk management ______ percent
☐ dynamic X-ray scanning (control without stopping the train) on randomly selected wagons
  Average percent of randomly wagons selected for X-ray control ______ percent
☐ static X-ray scanning (control with stopping the train)
  Average percent of wagons selected for static X-ray control ______ percent
☐ other inspections and controls of transit designated to customs authorities
  ☐ radiation control  ☐ other security controls

__________________________________________________________
☐ transport regulation controls __________________________________________________________

Temporary admission of rolling stock / containers
☐ separate temporary admission declaration for rolling stock / containers is NOT required
  *(rolling stock/containers are identified in transit declaration regardless if it is in regular/simplified form – electronic/paper-based)*
☐ separate temporary admission declaration for rolling stock / containers is NOT required
☐ accompanied documents for temporary admission is required  ☐ No  ☐ Yes in average ______
☐ security for temporary admission of rolling stock / containers is required  ☐ No  ☐ Yes in average ______
### Transit procedure (outbound)

- ☐ customs transit declaration in electronic form is automatically pushed from customs office of departure (at the entry border station for inbound transit or from inland customs office) - NO additional resubmission of customs transit declaration is required at the exit border station
- ☐ customs transit declaration in electronic form has to be resubmitted in the customs of departure (exit border station)
- ☐ additional submission of regular customs transit declaration in paper-based form (dual processing);
- ☐ use of simplified customs transit declaration in paper-based form (e.g. Consignment Note);
- ☐ regular customs transit declaration in paper based form

Standards for processing of transit time is: _______ min (inbound transit) / ____ min (inbound container transit train); _______ min (outbound transit) / ____ min (outbound container transit train).

The average time for processing of transit is: _______ min (inbound transit) / ____ min (inbound container transit train); _______ min (outbound transit) / ____ min (outbound container transit train).

This information is provided on basis of:
- ☐ regular performance monitoring. Last results from __________________________________________
- ☐ estimation of the Customs ____________________________

Relevant information is published ☐ No ☐ Yes; and ____ percent of information is publicly available at Web site(s):

### D.3.3. – Customs Procedures

**Import**

- ☐ Yes ☐ No  

- ☐ regular import/export declaration in electronic form - NO additional submission of paper-based customs import/export declaration is required;
- ☐ customs import/export declaration in electronic form - With additional submission of regular customs import/export declaration in paper-based form (dual processing);
- ☐ regular customs transit declaration in paper based form
Categorization of goods in the customs import/export declaration:

The codes of the national customs nomenclature are harmonized with:

- ☐ WCO HS code at ________ digits
- ☐ OSJD GNG HS code at ________ digits
- ☐ UIC NHM code at ________ digits

Accompanied documents to import/export declaration:

- ☐ none  ☐ commercial invoice  ☐ packing list  ☐ bill of lading  ☐ consignment note
- ☐ other ____________________________________________________________

Accompanied documents to the import/export declaration could be presented electronically ☐ No  ☐ Yes

Total No. of accompanied documents ________

Translation of particulars in accompanied documents is required ☐ No  ☐ Yes in average ________ percent of entries

Number of documents required to be stamped ________

Import / Export inspections at border station

- ☐ Selective control based on risk management:
  - ☐ without control (green channel)  ☐ documentary control (yellow channel)  ☐ physical control (red channel)

  percent of selected Customs Documents/Wagons for:

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Documentary Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Export</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td><strong>Physical Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Export</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>
- dynamic X-ray scanning (control without stopping the train) on selected wagons based on risk management
  Average percent of wagons selected for dynamic X-ray control based on risk management ______ percent
- dynamic X-ray scanning (control without stopping the train) on randomly selected wagons
  Average percent of randomly wagons selected for X-ray control ______ percent
- static X-ray scanning (control with stopping the train)
  Average percent of wagons selected for static X-ray control ______ percent
- other inspections and controls of transit designated to customs authorities
  - trade regulation controls
  - other

Standards for processing of the import/export time is: ______ min (import) / _____ min (import container train);
______ min (export) / ____ min (export container train).
The average time for processing of import/export is:________ min (import) / ___ min (import container train);
______ min (export) / ____ min (export container train).

This information is provided on basis of:
- regular performance monitoring. Last results from ________________________________
- estimation of the Customs

Relevant information is published No Yes; and ___ percent of information is publicly available at Web site(s):
### D.3.4. Efficiency of customs control

Number of irregularities discovered / percent of discovery successes (under control procedures)

<table>
<thead>
<tr>
<th>Control Type</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Documentary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Export</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Transit</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Export</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

### D.3.5. Overall time for customs procedures at the border crossings

Standards for overall time for customs procedures is: ____ min (inbound transit) / ____ min (import)
____ min (outbound transit) / ____ min (export)

The average overall time for customs procedures is: ____ min (inbound transit) / ____ min (import)
____ min (inbound transit) / ____ min (import)

This information is provided on basis of:
- ☐ regular performance monitoring. Last results from ____________________________
- ☐ estimation of the customs authorities
- ☐ estimation of the ____________________________

### D.3.6. Costs for customs services at the border crossing

250
### Types of costs for customs services at the border crossing

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (USD equivalent)</th>
</tr>
</thead>
</table>

Overall costs for customs services: ________________ (USD equivalent)

### D.3.7. – Customs human resources

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of customs officers serving at border station</td>
<td>______</td>
</tr>
<tr>
<td>Total number of customs staff serving at border station (customs officers + supporting staff)</td>
<td>______</td>
</tr>
</tbody>
</table>

Training for customs officers is considered:
- ☐ adequate and sufficient
- ☐ adequate and partly sufficient
- ☐ partly adequate and partly sufficient
- ☐ not adequate and insufficient

Number of training activities for customs officers (last year): __________

Regular training for update of services usually every ______ years

Regulation on service conditions and facilities for customs officers serving on cross-border routes
- ☐ adequate and sufficient
- ☐ adequate and partly sufficient
- ☐ partly adequate and partly sufficient
- ☐ not adequate and insufficient

Adopted in implemented Code of Conduct
- ☐ No
- ☐ Yes

Perception of Corruption

Estimated amount of informal payments

### D.4. Other security and regulatory procedures

<table>
<thead>
<tr>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border guards – security control agency</td>
<td>☐ No</td>
</tr>
<tr>
<td>Stop of the train for control required at border line before entry at the main border station</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Use of electronic risk management system</td>
<td>☐ No</td>
</tr>
<tr>
<td></td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Step No. ____________</td>
<td>Escort of the train required from border line to the main border station</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Simultaneously with processes and procedures Steps Nos. ____________</td>
<td>Number of documents required to be presented ____ ; Number of documents required to be stamped ____</td>
</tr>
<tr>
<td></td>
<td>Number and type of goods subject to control ____________________________</td>
</tr>
<tr>
<td></td>
<td>Type of physical controls _____________________________________________</td>
</tr>
<tr>
<td></td>
<td>Use of control equipment: _____________________________________________</td>
</tr>
<tr>
<td></td>
<td>Average time for control _________ Costs for services_________ (USD equivalent)</td>
</tr>
<tr>
<td><strong>Veterinary inspection agency</strong></td>
<td>Control at separate sideline required ☐ No  ☐ Yes in average ___________ percent of entries</td>
</tr>
<tr>
<td></td>
<td>Use of electronic risk management system ☐ No  ☐ Yes</td>
</tr>
<tr>
<td></td>
<td>Number of documents required to be presented ____ ; Number of documents required to be stamped ____</td>
</tr>
<tr>
<td></td>
<td>Number and type of goods subject to control ____________________________</td>
</tr>
<tr>
<td></td>
<td>Type of physical controls _____________________________________________</td>
</tr>
<tr>
<td></td>
<td>Use of control equipment: _____________________________________________</td>
</tr>
<tr>
<td></td>
<td>Average time for control _________ Costs for services_________ (USD equivalent)</td>
</tr>
<tr>
<td><strong>Phytosanitary inspection agency</strong></td>
<td>Control at separate sideline required ☐ No  ☐ Yes in average ___________ percent of entries</td>
</tr>
<tr>
<td></td>
<td>Use of electronic risk management system ☐ No  ☐ Yes</td>
</tr>
<tr>
<td></td>
<td>Number of documents required to be presented ____ ; Number of documents required to be stamped ____</td>
</tr>
<tr>
<td></td>
<td>Number and type of goods subject to control ____________________________</td>
</tr>
<tr>
<td></td>
<td>Type of physical controls _____________________________________________</td>
</tr>
<tr>
<td></td>
<td>Use of control equipment: _____________________________________________</td>
</tr>
<tr>
<td></td>
<td>Average time for control _________ Costs for services_________ (USD equivalent)</td>
</tr>
</tbody>
</table>
### Technical standards of goods agency

<table>
<thead>
<tr>
<th>Control at separate sideline required</th>
<th>☐ No</th>
<th>☐ Yes in average _________ percent of entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of electronic risk management system</td>
<td>☐ No</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Number of documents required to be presented</td>
<td>____</td>
<td>Number of documents required to be stamped</td>
</tr>
</tbody>
</table>

Number and type of goods subject to control:________________________________________________________

Type of physical controls:________________________________________________________

Use of control equipment:________________________________________________________

Average time for control _________ Costs for services _________ (USD equivalent)

### Quality control of the goods agency

<table>
<thead>
<tr>
<th>Control at separate sideline required</th>
<th>☐ No</th>
<th>☐ Yes in average _________ percent of entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of electronic risk management system</td>
<td>☐ No</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Number of documents required to be presented</td>
<td>____</td>
<td>Number of documents required to be stamped</td>
</tr>
</tbody>
</table>

Number and type of goods subject to control:________________________________________________________

Type of physical controls:________________________________________________________

Use of control equipment:________________________________________________________

Average time for control _________ Costs for services _________ (USD equivalent)

### Other agency

<table>
<thead>
<tr>
<th>Control at separate sideline required</th>
<th>☐ No</th>
<th>☐ Yes in average _________ percent of entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of electronic risk management system</td>
<td>☐ No</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Number of documents required to be presented</td>
<td>____</td>
<td>Number of documents required to be stamped</td>
</tr>
</tbody>
</table>

Number and type of goods subject to control:________________________________________________________

Type of physical controls:________________________________________________________
<table>
<thead>
<tr>
<th>Use of control equipment:</th>
<th>___________________________________________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time for control</td>
<td>________ Costs for services_________ (USD equivalent)</td>
</tr>
<tr>
<td>Relevant information is</td>
<td>published ☐ No ☐ Yes; and ____ percent of information is publicly</td>
</tr>
<tr>
<td>published at Web site(s):</td>
<td>available at Web site(s):</td>
</tr>
</tbody>
</table>

**D.4.2. Overall time for other regulatory procedures at the border crossings ()**

<table>
<thead>
<tr>
<th>Standards for overall time for other regulatory procedures is:</th>
<th>____ min (inbound transit) / ____ min (import)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>____ min (outbound transit) / ____ min (export)</td>
</tr>
</tbody>
</table>

| The average overall time for other regulatory procedures is:  | ____ min (inbound transit) / ____ min (import)                      |
|                                                             | ____ min (outbound transit) / ____ min (export)                     |
| This information is provided on basis of:                   |                                                                     |
| ☐ regular performance monitoring. Last results from         |                                                                     |
| ☐ estimation of the customs authorities ☐ estimation of the  |                                                                     |
|                                                                 |                                                                     |

**D.4.3. - Costs for other security and regulatory services at the border crossing ()**

<table>
<thead>
<tr>
<th>Types of costs for other security and regulatory procedures at the border crossing</th>
<th>___________________________________________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>___________________________________________________________________</td>
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<tr>
<td></td>
<td>___________________________________________________________________</td>
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<tr>
<td></td>
<td>___________________________________________________________________</td>
</tr>
</tbody>
</table>

| Overall costs for other regulatory procedures: | _____________________ (USD equivalent) |
## D.4.4. – Other security and regulatory human resources

Total number of other security and regulatory officers serving at border station ________
Total number of other security and regulatory staff serving at border station (officers + supporting staff) ________

**Training for other security and regulatory officers is considered:**

<table>
<thead>
<tr>
<th>□ adequate and sufficient</th>
<th>□ adequate and partly sufficient</th>
<th>□ partly adequate and partly sufficient</th>
<th>□ not adequate and insufficient</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

For ____________________________________________________________________________

For ____________________________________________________________________________

For ____________________________________________________________________________

For ____________________________________________________________________________

For ____________________________________________________________________________

For ____________________________________________________________________________

Number of training activities for other security and regulatory officers (*last year*)

<table>
<thead>
<tr>
<th>□ adequate and sufficient</th>
<th>□ adequate and partly sufficient</th>
<th>□ partly adequate and partly sufficient</th>
<th>□ not adequate and insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Regulation on service conditions and facilities for other security and regulatory officers serving on cross-border routes

<table>
<thead>
<tr>
<th>□ adequate and sufficient</th>
<th>□ adequate and partly sufficient</th>
<th>□ partly adequate and partly sufficient</th>
<th>□ not adequate and insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

For ____________________________________________________________________________

For ____________________________________________________________________________

For ____________________________________________________________________________

For ____________________________________________________________________________
For ______________________________________________

☐ adequate and sufficient ☐ adequate and partly sufficient ☐ partly adequate and partly sufficient ☐ not adequate and insufficient

Adopted in implemented Code of Conduct

For _____________________________ ☐ No ☐ Yes

Perception of Corruption

For _____________________________ ☐ No ☐ Yes

Estimated amount of informal payments

For _____________________________ ☐ No ☐ Yes

D.5. Coordination among railways and control agencies (national and cross border)

<table>
<thead>
<tr>
<th>D.5.1. – National Coordination</th>
<th>☐ informal coordination only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step No. ___________</td>
<td>☐ informal and formal coordination under ________________________________</td>
</tr>
<tr>
<td>Simultaneously with</td>
<td>Lead agency ________________________________</td>
</tr>
<tr>
<td>processes and procedures</td>
<td>Relevant agreement / MoUs ________________________________</td>
</tr>
<tr>
<td>Steps Nos. ___________</td>
<td>☐ interconnected electronic information systems (agencies involved)</td>
</tr>
<tr>
<td>☐ use of Single Window facility (agencies involved and processes covered)</td>
<td></td>
</tr>
<tr>
<td>☐ electronic information sharing (type of information and agencies involved)</td>
<td></td>
</tr>
<tr>
<td>☐ joint risk management (agencies involved)</td>
<td></td>
</tr>
<tr>
<td>☐ mutual sharing of control results (agencies involved)</td>
<td></td>
</tr>
<tr>
<td>☐ joint inspections (agencies involved)</td>
<td></td>
</tr>
<tr>
<td>☐ transfer of responsibility for control (agencies involved and processes covered)</td>
<td></td>
</tr>
</tbody>
</table>

Relevant information is published ☐ No ☐ Yes; and ____ percent of information is publicly available at Web site(s):

<p>| D.5.2. – Cross-border Coordination | ☐ informal coordination only |
| ☐ informal and formal coordination under ____________________________ |</p>
<table>
<thead>
<tr>
<th>Step No. ____________</th>
<th>Simultaneously with processes and procedures Steps Nos. ____________</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agencies involved</strong></td>
<td><strong>☐ interconnected electronic information systems (agencies involved)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>☐ use of cross border Single Window facility (agencies involved and processes covered)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>☐ electronic information sharing (type of information and agencies involved)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>☐ joint risk management (agencies involved)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>☐ mutual sharing of control results (agencies involved)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>☐ joint cross border inspections (agencies involved, type of inspections covered)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>☐ transfer of responsibility for control (agencies involved and processes covered)</strong></td>
</tr>
<tr>
<td>Relevant information is published ☐ No ☐ Yes; and ____ percent of information is publicly available at Web site(s):</td>
<td></td>
</tr>
</tbody>
</table>

**D.6.1 Overall time for processing a train at the border crossings ()**

Standards for overall time for processing a train is: ____ min (inbound) / ____ min (outbound)

____ min (container train inbound) / ____ min (container trains outbound)
The average overall time for customs operation is. ____ min (inbound) / ____ min (outbound)  
____ min (container train inbound) / ____ min (container trains outbound)  

This information is provided on basis of:
☐ regular performance monitoring. Last results from ________________
☐ estimation of the customs authorities  ☐ estimation of the ________________

<table>
<thead>
<tr>
<th>D.6.2. – Overall Costs for services of processing a train at the border crossing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other types of costs for services of processing a train at the border crossing</td>
</tr>
<tr>
<td>___________________________________________________________________________</td>
</tr>
<tr>
<td>___________________________________________________________________________</td>
</tr>
<tr>
<td>Overall costs for services of processing a train at the border crossing: __________ (USD equivalent)</td>
</tr>
</tbody>
</table>
Reference Materials


B&S Europe, 2012; and HTSPE Limited, 2013; Study on Common Border Crossings Points Management between Schengen Area and Russia/Belarus


D.Jigjidnyamaa – Deputy chairman of UBTZ in charge of transportation; 2015, Ulaanbaatar; Presentation “How to Improve Inter Change in Cross Border Traffic”

Dewan Md Zahurul Islam, Thomas H Zunder, Ross Jackson, Nina Nesterova, Arnaud Burgess; 2013; The Potential of Alternative Rail Freight Transport Corridors Between Central Europe and China (Transport Problems Volume 8 Issue 4). Available at: http://www.ncl.ac.uk/newrail/research/publication/196763


ECE, Ministers of Transport Meeting, 2013, Joint Declaration on the Promotion of Euro-Asian Rail Transport and Activities towards Unified Railway Law, Text of the Joint Declaration and list of the signatories are available at: http://www.unece.org/trans/main/sc2/sc2_geurl_itc_declaration.html


ESCAP (TID & SRO ENEA); December 2011, Study Report on Sub Regional Trade and Transit Cooperation in Mongolian Trade Corridors; http://unnext.unescap.org/pub/mongtc.pdf


ESCAP, 2016 (unpublished), Development of seamless rail-based intermodal transport services in Northeast and Central Asia: Report on Transport Facilitation procedures and documentation in Kazakhstan (Author: P.J. Hodgkinson)


ESCAP, February 2014, Update on the implementation of Commission resolution 68/3, accessible at: http://www.unescap.org/sites/default/files/Update_percent20on_percent20the_percent20implementation_English.pdf


ESCAP, RESOLUTION 68/3, Enabling Paperless Trade and the Cross-Border Recognition of Electronic Data and Documents for Inclusive and Sustainable IntraRegional Trade Facilitation, accessible at: http://www.unescap.org/sites/default/files/9_percent20percent20Annex_percent20Full_percent20text_percent20of_percent20ESCAP_percent20resolution_percent2068_3.pdf


Eurasian Economic Commission; 2015; Transport (Report); Available at: http://www.eurasiancommission.org/ru/Documents/transport_eng.pdf


International Rail Transport Committee (CIT), Recommendations to undertakings intending to use an electronic version of the CIM/SMGS consignment note: Technical Specifications for the Electronic CIM/SMGS Consignment Note. Available at: http://www.citrust-rail.org/en/freight-traffic/manuals/?id=639


Mongolian Customs: SEW and BCP; presentation at Workshop of CAREC National Joint Transport and Trade Facilitation Committees Bangkok, 27-28 January 2011

Mongolian Ministry of Roads and Transportation; Railway Transport Facilitation in Mongolia; Presentation at ESCAP Regional meeting on Cooperation for Facilitation of International Railway Transport” Bangkok, 13-15 October 2014; http://www.unescap.org/sites/default/files/Mongolia_2.pdf


Nepal Transit and Warehousing Company Limited, July 2010, Treaty of Trade, Treaty of Transit and Trade Related Agreements Between Government of Nepal and Neighbouring
Countries (India, People’s Republic of China & Bangladesh) (amended and updated up to July 2010). Available at: http://www.tepc.gov.np/tradeagreement/Treaty percent20of percent20Trade percent20and percent20Transit percent20Final.pdf


SAARC Secretariat, June 2006, SAARC Regional Multimodal Transport Study (SRMTS); Available at: https://kumarage.files.wordpress.com/2015/03/2006-ramathulla-kumarage-et-al-saarcregional-multimodal-transport-study-189pp.pdf


USAID; 2008; Pre-Feasibility Analysis to Establish Logistics Facilities in Zamiin Uud, Mongolia; http://pdf.usaid.gov/pdf_docs/Pnadw472.pdf

USAID; Mongolia Time Release Study; March 2013; http://pdf.usaid.gov/pdf_docs/PA00KQ95.pdf

World Bank (Rastogi, Cordula, and Jean-François Arvis); 2014; The Eurasian Connection: Supply-Chain Efficiency along the Modern Silk Route through Central Asia. Available at: https://openknowledge.worldbank.org/bitstream/handle/10986/18779/888910PUB0Box300EPI199120June122014.pdf?sequence=1


World Bank, 2015, Rail Electronic Data Interchange in a Border Crossing Point in South East Europe: An Assessment of Options. Available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/ECA/2015/05/14/090224b082e80fc8/4_0/Rendered/PDF/Final0Report.pdf