

Guidelines for establishing an international postal rail transport service

UPU task force on the transportation of postal items by rail

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1 Background and general information

1.1 Objectives of the postal rail service

Work proposal 010 of the Universal Postal Union's Istanbul Business Plan (2017–2020) provided the following instructions for the UPU Postal Operations Council (POC):

- "Develop detailed procedures for exchanging international mail by rail, including:
- working with the relevant international rail organizations and with the World Customs Organization (WCO) to jointly study and develop relevant regulations related to the rail transportation of mail items;
- jointly organizing seminars or workshops with these organizations and the WCO with a view to developing and disseminating best practices".

The goal of this mandate is to improve the interoperability of the postal network through transport activities by:

- developing operational standards regarding rail transportation of postal items;
- developing rail transportation processes in cooperation with the WCO;
- submitting any proposals to supplement or amend the UPU Acts to the competent UPU bodies for approval, where appropriate.

In March 2017, in line with this mandate, the POC set up a task force for the transportation of postal items by rail.

The initiative involves the development of regulations, procedures and common standards for the new service. These tools, along with operational standards for the transportation of postal items, are being developed and will continue to be updated, based on the results of the pilots and once the transportation of postal items by rail starts on a regular basis at the international level.

To date, over 65 pilots for the transportation of postal items by rail have been carried out. The pilots were conducted along different routes and involving various transit countries, with distinct customs regimes. The present guidelines are based on the results of these pilots. The goal is to harmonize and simplify postal, customs and rail regulations, standards and formalities, to better support world trade facilitation efforts.

The guidelines have been developed by all stakeholders participating in the UPU task force for the transportation of postal items by rail: the UPU and WCO, as well as the designated operators, national customs administrations, and international rail organizations that took part in the pilots.

The guidelines are non-mandatory and neutral in nature and could serve as a model for designated operators and rail companies in other parts of the world. The UPU is an intergovernmental organization and caters to the needs of its 192 member countries, irrespective of geographical location.

The objective of the guidelines is to provide an information source for designated operators, customs administrations and railway companies dealing with the international transportation of postal items by rail. The guidelines comprise key elements and experiences learned from the pilots to facilitate the establishment of an international postal rail transport service and promote cooperation and discussion at the national and international levels among designated operators, customs administrations and railway companies.

The guidelines will be a living document that will be updated as necessary to reflect the results of new pilots and national experiences, and on the basis of updated customs procedures, including development of electronic data exchanges to further expedite and secure the transportation of international mail by rail.

The task force that developed the guidelines consisted of the following members:

- Designated operators: POC member countries: China (People's Rep.) (Chair), France, Germany,
 Poland and Russian Federation
 - Observers: Belarus, Kazakhstan and Lithuania
- National customs administrations: China, Germany and Poland

 External stakeholders: WCO, European Union, Intergovernmental Organization for International Carriage by Rail (OTIF), Organization for Cooperation of Railways (OSJD), International Rail Transport Committee (CIT), and Coordinating Council on Trans-Siberian Transportation (CCTT).

Annex 7 contains details about the functions of the various stakeholders that took part in drafting the guidelines.

It should be noted that the UPU has signed memoranda of understanding with four international organizations and one association: WCO, OTIF, OSJD, CIT, and CCTT.

For the purpose of this paper, the project will be referred to as the "postal rail project". The term "postal rail project" signifies that the project is led by the UPU – a global organization concerning postal matters, working in close cooperation with international rail organizations for the benefit of its 192 member countries.

1.2 Strategic importance of the postal rail service

For all stakeholders, the postal rail project provides unique opportunities to improve business processes and to facilitate and promote global trade, thus leveraging vast postal and rail networks and promoting regional integration and economic competitiveness.

In order to exploit opportunities available through this mode of transportation across continents, particularly in the thriving e-commerce environment, all stakeholders need to work together to (1) remove obstacles to seamless movement of postal items by rail, (2) improve exchange of electronic advance data (EDI), (3) simplify procedures and formalities (including transit and the acceptance of transport documents for customs formalities), and (4) enhance security and safety measures through effective risk management and robust seal integrity programmes.

The postal rail project seeks to help UPU designated operators establish a new mode of transportation for international mail, thus far largely confined to air and maritime transport. Through rail transportation, Posts can deliver e-commerce goods and further boost global e-commerce, which is currently growing at an annual rate of about 20%. The UPU wants to fully leverage the postal infrastructure – the world's largest physical network – to deliver mail and e-commerce goods at the lowest possible rate.

The postal rail project also provides a new source of business for international rail companies. Up to now, rail has been used as an active and frequent mode of transport only for domestic mail in some countries. With the transportation of international mail, railway transport has become more relevant, and traders and e-retailers stand to benefit.

For the WCO and customs administrations, though their instruments and tools are largely mode-neutral, this is an exciting opportunity to engage with railway organizations and postal operators to facilitate the transportation of postal items by rail, while ensuring compliance with all border regulatory requirements. Customs administrations will be examining the postal supply chain from the perspective of rail transportation for the first time and will need to continually discuss efficient and effective customs transit procedures for this new mode of international trade. The many related challenges may call for the adaptation of procedures and requirements in a harmonized manner. Taking into account the number of countries involved in railway transportation, efficient and effective customs management of this new mode of international trade will help expedite legitimate trade at reduced cost, curb illicit trade, secure the postal supply chain, and enhance connectivity and regional integration, thus contributing to the UN Sustainable Development Goals (SDGs).

1.3 Benefits of using rail to transport postal items

Promotion of e-commerce

- As the UN specialized agency for postal services, the UPU is well placed to facilitate international trade and cross-border e-commerce. The current UPU strategy, the Istanbul World Postal Strategy (IWPS), recognizes the importance of this area of activity. IWPS goal 2 (Ensure sustainable and modern products) includes a programme on "e-commerce and trade facilitation".
- Micro, small and medium-sized enterprises (MSMEs) will be able to export their e-commerce goods through this new postal channel.

- In terms of product performance, the major customers of certain designated operators would like to deliver their products end-to-end (E2E) within a reliable time frame (on-time target of 90%). In order to meet this reliable time frame, designated operators want to ensure that the rail transportation process becomes smooth and stable.
- Online retailers will be able to transport their merchandise at reasonable cost, resulting in increased traffic volumes.
- Posts will be able to send and return merchandise more economically (by rail rather than by air).

New mode of transport for international mail

- UPU designated operators will have a new mode of transport for international mail.
- The postal rail project will help develop universal processes for rail.
- Designated operators will be able to use multimodal transport rail, truck and air to expedite conveyance of international mail.

Operational viability

- Rail transport has potential to be faster and more reliable than other means of transport (e.g. sea transport).
- It will be possible to transport large volumes of postal items which are difficult or prohibited to transport by air service.
- Sending postal items by rail will reduce pressure on surface airlifted (S.A.L.) mail.
- The cost of operational procedures will be kept to a minimum to ensure viability.
- EDI and RFID will be applied E2E, for the benefit of all stakeholders.

Security

- Subject to security and safety controls, Posts may be able to send postal items containing lithium batteries by rail when such items cannot be sent by air.
- Affixing seals (electronic or mechanical) on mail containers or carriages at origin will increase security.

Economical and sustainable means of transportation

- Sending postal items by rail will be economical.
- In terms of fuel and carbon emissions, rail is more advantageous than air, including S.A.L. In the interests of environmental sustainability, rail could prove a viable alternative to S.A.L. for non-priority mail. This is in line with the UN SDGs and the UPU's IWPS ("sustainable development" is one of the programmes under IWPS goal 3).

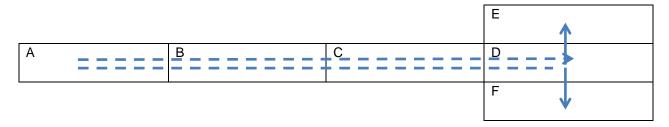
2 Workflow, handling procedures and customs formalities

2.1 Establishing a rail transport route

In the diagram below:

- The origin designated operator is in country A;
- The destination designated operator (of the mail consignment being transported by rail) is in country D.
 The consignment from country A contains dispatches destined for country D, and may also contain dispatches in closed transit or items in open transit to countries E and F (in transit via country D);
- Countries B and C are transit countries. In normal circumstances, the designated operators of B and C have no involvement with the consignment being transported through the country;

 Designated operators in countries E and F receive the dispatches in closed transit or items in open transit via the designated operator of country D, along with the originating mail from country D. The transport from D to E, and from D to F, has nothing to do with the rail transport from country A to D.



Based on the above diagram and on the results of the pilots, the following guidelines have been drawn up as recommendations for the various stakeholders: Posts, Customs, and origin, transit and destination railway companies, for establishing new routes for rail transport of postal items.

Providing freedom of transit is a fundamental obligation of all UPU member countries, as reflected in article 1.1 of the Constitution of the Universal Postal Union.¹

2.2 UPU mail products involved

The main thrust of the pilots has been towards e-commerce items. However, any of the following UPU postal products can be subject to rail transport:

- Parcels;
- Letter-post items, including small packets up to 2 kg;
- EMS items;
- ECOMPRO parcels.

2.3 Origin procedures and stakeholder roles

Designated operators

- a The designated operator of the country of origin should liaise with the destination designated operator as regards:
 - logistical arrangements at the destination involving movement of the postal items from the railway terminal to the destination office of exchange:
 - EDI messaging between origin and destination designated operators for each potential message set (PREDES/RESDES, PRECON/RESCON, EMSEVT and ITMATT), in full compliance with the latest relevant UPU standards:
 - M10 PRECON V1.1
 - M12 RESCON V1.1
 - M13 RESDES V1.1
 - M33 ITMATT V1
 - M48 CARDIT V2.1
 - M49 RESDIT V1.1
 - M40 EMSEVT V3
 - M41 PREDES V2.1

¹ Article 1.1: the countries adopting this Constitution shall comprise, under the title of the Universal Postal Union, a single postal territory for the reciprocal exchange of letter-post items. Freedom of transit shall be guaranteed throughout the entire territory of the Union.

It may be noted that sending of both PREDES and RESDES messages has become obligatory for all UPU member countries with effect from 1 April 2018 (IB circular 167 of 18 December 2017); and

- physical forms used (CN 37, railway consignment form, etc.), and sealing techniques, if applicable.
- b The origin designated operator should liaise with the railway company regarding the basic feasibility of each new route based on railway schedules, schedules of passenger trains, origin handover processes, degree of containerization (use and type of container), use of a passenger or container train, estimated volumes, expected frequency of dispatch, estimated transport rates, expected time of arrival, billing arrangements, etc.
- The origin designated operator should liaise with the destination designated operator to bilaterally agree on the process and mail classes, including use of a passenger or a container train, to continually monitor the overall performance of the route (e.g. use QCS reports based on EMSEVT v3 data exchange, PREDES and RESDES messages to monitor quality). This liaison should include the designated operators involved in all planned dispatches, even those planned as closed transit via the designated operator to which the mail will be consigned.
- d As regards transit countries, for which there is no involvement on the part of the designated operator of the country being transited, the origin designated operator should liaise with the origin railway company to determine any processes that are required.
- e The origin designated operator should liaise with the railway company to determine whether CARDIT/RESDIT messages can be used for postal/carrier operations or accounting.
- The origin designated operator, in close cooperation with the rail company, should help complete rail documentation. The rail documentation for the transport of mail by rail varies from train to train (passenger or container train) and from territory to territory. There are different rail treaties that apply in different parts of the world. The designated operator should, in close cooperation with the rail company, make the necessary inquiries to find out the precise documentation to be used for rail transport. In the case of a container train transporting postal items from Asia to Europe for example, the origin designated operator should complete a CIM/SMGS consignment note. When transporting postal items by passenger train, the origin designated operator should complete a luggage ticket for passenger train/international passenger transport parcel shipment.
- g The origin designated operator will meet expenses incurred for transporting postal items from the office of exchange to the railway station.
- h Before handover of mail bags to the rail company, the origin designated operator should complete relevant postal forms in a clear and legible way: CN 31 letter bill/CP 87 parcel bill, CN 34/CP 83 receptacle labels and CN 37 delivery bill, ensuring that mail receptacles are labelled in line with UPU regulations.
- i Before handover of mail bags to the rail company, the origin designated operator should scan mailbags.
- j The origin designated operator should, where applicable, liaise with the transit designated operator to:
 - resolve any transit issues before sending shipments to the transit designated operator;
 - identify applicable customs legislation in the customs territories on the route of the transport;
 - identify other applicable legislation which may affect the transportation of postal consignments by rail.
- k The origin designated operator should inform the transit designated operator about the shipment in advance and make logistical arrangements.
- If specific customs requirements need to be met in the transiting country, the origin designated operator should obtain information about these requirements in advance from the transit designated operator.
- m The origin designated operator should document all logistical aspects of a new route and communicate this to all parties involved. Note that this excludes the negotiated transport rate, as this is typically commercially confidential information.

Customs

n In line with national customs law, the origin customs administration may carry out customs control based on risk assessment at the border.

- The origin customs administration should agree with the origin designated operator on modalities for submission of mail items to customs, as per the national legislation/customs regime.
- p Origin customs administration should:
 - inform customs administrations along the route about the mail schedules for necessary information if required by national law, and exchange information on customs-related matters;
 - affix electronic or mechanical seals on containers or carriages or mail-bags under customs control, in the presence of Posts, as deemed necessary;
 - check physical forms used (CN 37, railway documents, etc.) and sealing techniques, if applicable.

Rail

- q For a route involving multiple railway companies, the originating railway company should liaise with the other railway companies to determine logistical arrangements and inter-company billing arrangements.
- 2.4 Transit procedures and stakeholder roles

Designated operators

- a It was observed during the many pilots that postal items were being transported directly from origin to destination countries with no involvement of transit countries (concept of "through transit").
- An example of through transit is when an origin designated operator of country "A" consigns mail to a destination designated operator of country "C" on a train that operates from country A to B and on to C. In this case, country B is a "through transit" country. The designated operator of country B is not involved in any way, but the customs administration of country B may (or may not) have some involvement. An example of such potential involvement would be checking that seals are intact when entering and leaving the country. A lengthy train journey may involve not just one, but several "through transit" countries. "Through transit" does not exist in air or maritime postal transit. It may, however, exist in some multilateral postal road networks. Nevertheless, for the most part, postal transport by road involves only contiguous origin and destination countries.
- c Article 17-112.3 of the Regulations to the Universal Postal Convention states: "When the conveyance of mail in transit through a member country takes place without the participation of the designated operator of that member country, this form of transit shall not involve the liability of the designated operator of the transit member country."

Customs

- d The customs administration in the transit country may carry out a risk assessment if required by the national legislation and customs regime requirements, and check customs seals (electronic or mechanical seals) if applicable.
- e As per national customs law or in line with the requirements of the customs regime, the customs administration in the transit country may open the national or international guarantee.

Rail

- f The rail company should hand over the CN 37 delivery bill and railway CIM/SMGS or SMGS consignment or luggage ticket form to the transit customs administration and transit designated operator, and receive the luggage ticket for passenger train/international passenger transport parcel shipment.
- g As per agreement, the origin railway company should liaise with the rail company taking over the transportation work at transit to determine next processes.
- 2.5 Procedures adopted by different customs authorities

When establishing an international postal rail transport service, designated operators should be aware of the customs laws that may affect transportation of postal items by rail. As indicated in section 2.3 (i), it is therefore important that the designated operator liaise with the designated operators of each transit country.

In general, the customs procedures and rules which will be relevant to the transport of postal consignments by rail will relate to:

- export and exit at the country of origin;
- entry, transit and exit in each customs territory of transit;
- entry and release for free circulation (import) at the country of destination.

It should be noted that Specific Annex J.2 to the WCO Revised Kyoto Convention (RKC) sets out customs clearance procedures for postal traffic. The annex contains five definitions, 10 standards and one recommended practice. The guidelines for Specific Annex J.2 explain the underlying concepts and principles identified in Specific Annex J.2 and describe the obligations and responsibilities of Posts and Customs in day-to-day business.

In addition, it should be noted that the customs administration has the right to inspect all postal items. The right to open letters is subject to national legislation. The customs administration typically determines which items are subject to customs control, taking into consideration the national regulations pertaining to the customs administration. Customs control should be based on risk management using data and the latest technologies, such as non-intrusive inspections (X-rays, etc.), to avoid unnecessary inspections.

According to Specific Annex E/Chapter 1, Standard 8, to the WCO RKC customs administrations should take all necessary actions to ensure the integrity of the consignment during the transit operation. This is of particular importance in railway transportation owing to the number of countries involved in the transit process. A customs seal is one of the most effective means of ensuring the integrity of the consignment.

There is the possibility of using an electronic customs seal (e-Customs seal)/electronic cargo tracking system, which is a newly developed technology that enables electronic monitoring of the means of transport from the customs office of departure to the customs office of destination along the whole transit route. E-Customs seals are based on either radio frequency identification (RFID) or global positioning system (GPS) technology.

The use of a customs seal may have a positive influence on the quality of control and risk management, and may increase the transparency and predictability of transit procedures. Nevertheless, as stated in the WCO Transit Guidelines, customs administrations should not oblige railway operators to affix an electronic customs seal, except in cases in which ordinary customs seals are insufficient to ensure the integrity of the transit goods. If a customs administration obliges a transit operator to affix an electronic customs seal, Customs should not collect administrative/processing fees for the use of the seal, apart from the cost of the seal itself.

2.6 Procedures at destination and stakeholder roles

Designated operators

- a The designated operator should transport the postal items to the office of exchange under supervision of the destination Customs and submit the postal items with the necessary documentation for customs procedures to the latter for postal customs clearance in accordance with the national legislation.
- b The destination designated operator will meet expenses incurred for transporting postal items from the destination railway station to the destination office of exchange.
- c If postal items are to be transported by the destination designated operator to other countries by means other than rail, the designated operator of destination should make prior arrangements to ensure that postal items are not stranded and are dispatched as quickly as possible.

Customs

- c The destination Customs should perform the following functions:
 - Receive customs declarations;
 - Check customs seals (electronic and mechanical seals), if applicable;
 - Carry out customs control based on risk assessment as per national legislation and customs regime;

- Assess duties on postal items. It should be noted that assessment of duties on postal items is the sovereign right of Customs. In the majority of UPU member countries, Customs carries out this assessment. However, some Posts could act on behalf of Customs for certain operations, for example:
 - The Post could perform the primary customs inspection process, based on procedural instructions and training from Customs.
 - The Post could determine the duty to be collected, with Customs validating the Post's process and helping the postal service with any difficulties in identifying the precise tariff applicable to the item.
 - The Post could also act as a customs clearing agent, directly or indirectly representing the declarant (typically the addressee). In such a scenario, the Post would pay the duty and taxes to Customs and in turn receive payment from the addressee.

Flexible approaches to the above-mentioned three types of involvement should be developed to meet local needs.

Rail

- d Subject to agreement between the rail company and the Post, the rail company should hand over the postal items at an agreed place to the destination designated operator along with the relevant documentation, comprising the CN 37 surface delivery bill, CIM/SMGS consignment form (or SMGS if applicable in the destination country or CIM if applicable in the destination country) or luggage ticket for passenger train/international passenger transport parcel shipment.
- e In response to a CARDIT message sent by the origin Post, the rail company should send a RESDIT, which is an electronic UPU message acknowledging receipt of mail by a carrier.

3 Future possibilities

3.1 Seamless procedures by using the same document and electronic data exchange

Risk assessment based on pre-arrival advance electronic information would efficiently facilitate railway transportation while adequately controlling trade. Therefore, use of pre-arrival advance electronic information as stipulated in the SAFE Framework of Standards can be considered as a future possibility to facilitate railway transportation while ensuring adequate risk management in advance.

The UPU and WCO have jointly developed Customs–Post EDI messages (CUSITM and CUSRSP) in line with the WCO Data Model for customs declaration purposes. In addition, the UPU Customs Declaration System (CDS), a software application provided by the UPU's Postal Technology Centre (PTC), was developed on the basis of the WCO–UPU Customs–Post EDI messages, and it can implement and support customs-related UPU–WCO standard EDI messaging (CUSITM/CUSRSP or local equivalent) and inter-postal standard messaging (ITMATT or local equivalent).

Based on national requirements, customs administrations and designated operators can exchange the CUSITM and CUSRSP (or local equivalent) messages via the electronic exchange of CN 22 / CN 23 data for customs declaration and customs transit declaration purposes in the railway transport of postal items.

The UPU and the WCO should consider the possibility of standardizing electronic data requirements for seamless customs procedures for all countries involved en route in the rail transportation of postal items.

3.2 Safety and security

Improving the accuracy of the information submitted by designated operators, as well as the possible exchange of electronic data and electronic advance data between customs administrations and designated operators, contributes to the effective risk management by customs administrations of the international transportation of mail and facilitates railway transportation.

Sharing information such as X-ray images among customs administrations and designated operators en route in railway transportation may increase safety and security while facilitating transportation.

Detailed description of documents and forms used for the transportation of postal items

1 UPU documents used for the postal rail pilots

Postal items transported by surface (i.e. by ship, road and rail) is handed over to the transport company using the UPU CN 37 delivery bill for surface mails and the CN 34 receptacle labels, when letter mail is involved. Parcels require the use of the CP 83 receptacle labels for surface mails.

The above forms/labels define the shipment as being mail not only to the Posts but also to shipping companies. This is very important for many reasons, including for the purpose of customs processes at borders and ports.

The CN 37 delivery bill for surface mails is the consignment document used in the transportation function, both for operational control and for accounting between the Post and the carrier. Operationally, the consignment moves the receptacles between an origin international mail processing centre (IMPC) and a destination IMPC, typically via a carrier such as an airline or shipping company. From an accounting perspective, the CN 37 is the basis for payment from the Post initiating the consignment to the carrier.

From a UPU point of view, when rail transport is involved, the CN 37 and the CN 34/CP 83 receptacle labels would enable the shipment to be recognized as surface mail and to be transported from origin to destination. They could also enable the mail to be moved from the destination rail port to the destination office of exchange for postal customs clearance based on national laws.

It should be noted that UPU receptacle labels are uniquely identified with a barcoded receptacle ID. EDI messaging between the origin and destination Posts, based on these barcodes, makes it possible to send confirmation of receipt of each receptacle at destination to the origin Post and to monitor the time taken (in air transport, some, but not all, airlines also use the barcoded receptacle IDs).

2 Common CIM/SMGS consignment note (CIT and OSJD)

This is an alternative to the classic system of consignment, with re-transcription of an SMGS consignment note to a CIM consignment note or from a CIM consignment note to an SMGS consignment note at the reconsignment point.

General regulations on paper/electronic consignment notes

Legal basis

The CIM/SMGS consignment note is based on CIM article 6 \S 8 and SMGS article 13.

Terms of use

Under the provisions of the CIM/SMGS Consignment Note Manual (Annex 6 to SMGS), the common CIM/SMGS consignment note may be used as a CIM consignment note in the area in which the CIM applies and as an SMGS consignment note in the area in which the SMGS applies.

Descriptions of the boxes of the printed consignment note and on the printout of the electronic consignment note

Descriptions of the boxes are to be printed in two (or as appropriate three) languages, one of which must be Russian and another either English, French or German.

For consignments to or from China, descriptions of the boxes are also to be printed in Chinese.

Filling out a consignment note

Consignment note to be filled out in the following languages:

- a Fields relating to both the CIM conveyance contract and the SMGS: Russian plus English, French or German.² For transport to China, the consignment note can additionally be made out in Chinese;
- b Fields relating only to the CIM conveyance contract: English, French or German;1
- c Fields relating only to the SMGS conveyance contract: Russian. For transport to China, the consignment note can additionally be made out in Chinese.

Paper consignment note

Sample of the common CIM/SMGS consignment note consisting of six numbered A4 sheets:

Sheet No.	Description	Retention of the sheet
1	Original of the consignment note	Consignee
2	Road list	Carrier that delivers the goods to the consignee
CIM 5 SMGS 3	Duplicate of the consignment note	Consignor
4	Delivery note	CIM → SMGS traffic: destination railway
		SMGS → CIM traffic: not used
CIM 3 SMGS 5	Arrival note/Customs	CIM → SMGS traffic: consignee/Customs
		SMGS → CIM traffic: destination carrier/Customs
6	Sheet of notification of cargo shipment	CIM → SMGS traffic: forwarding carrier
		$SMGS \rightarrow CIM$ traffic: not used

Electronic consignment note (where applicable)

The principle of functional equivalence in the CIM (CIM article 6 § 9)

The consignment note and its duplicate may be created in the form of an electronic data record which can be transformed into legible written symbols. The procedures used for data storage and processing must be functionally equivalent to those for the paper system particularly in so far as the evidential value of the consignment note represented by that data is concerned.

The principle of agreement between carriers, consignors and recipients using SMGS

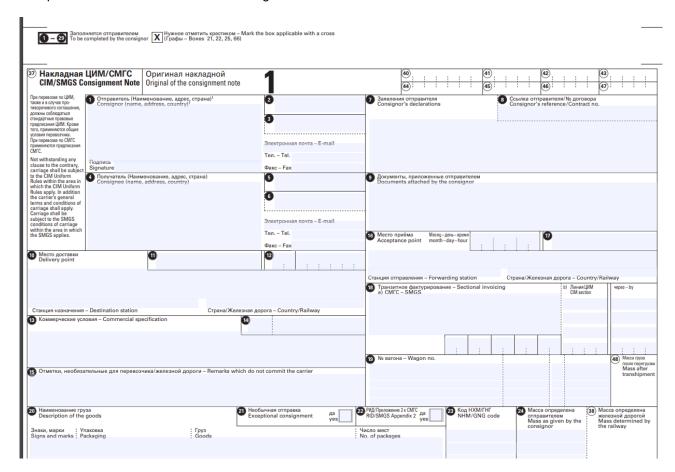
The contract of carriage can be executed through an electronic consignment note. An e-consignment note functions as a paper consignment note and is a set of data in electronic form, identical to the data set of the paper consignment note. If necessary, the electronic consignment note and its additional sheets can be printed on paper in the form of Appendix 5 to the CIM/SMGS Consignment Note Manual (Annex 6 to SMGS). If changes are made to the electronic consignment note in accordance with the SMGS regulations, the original data is retained.

² Parties to the contract of carriage may agree on a language other than English, French or German. Such a deviation from the content of the consignment note for the shipment of dangerous goods under the RID can be agreed only by the countries concerned in this CIM contract of carriage. This footnote applies only to CIM contracts of carriage.

Agreement on Electronic Data Interchange in International Railway Freight Communication (EDI Agreement)

On a contractual basis, carriers and customers (senders/receivers) determine the messages which must be exchanged, as well as the type and method of data exchange for the electronic consignment note.

Sample of the common CIM/SMGS consignment note:



Groups of wagons and groups of containers consigned with a single CIM/SMGS consignment note

Groups of wagons and groups of containers may be consigned with a single CIM/SMGS consignment note and a CIM/SMGS wagon list/container list provided there has been prior agreement between the consignor and the carriers taking part and provided the following conditions are satisfied:

- Same consignor and consignee;
- Same acceptance point/forwarding station;
- Same delivery point/destination station;
- Same commodity (unless agreed otherwise).

Samples of the CIM/SMGS wagon sheets and container sheets and explanations on their completion are contained in Attachments 7.1 to 7.4 to the CIM/SMGS Consignment Note Manual (Annex 6 to SMGS).

With the CIM/SMGS consignment note, the necessary CIM and SMGS conveyance contracts are condensed into a single document. This enables non-stop rail freight transport with a single consignment document between Europe, Russia and Asia. It applies as a national customs (transit) document in each instance in the area of the SMGS regime and it can be used both in wagon and container loading and in combined traffic.

A common CIM/SMGS consignment note has several advantages, in particular the fact that export formalities/commercial verification can be dealt with as soon as the consignment has been dispatched in the EU/EFTA. There are no amendments to the documents at the place of re-consignment between two legal areas, thus guaranteeing minimal wagon/container stoppage times. A common CIM/SMGS consignment note is used voluntarily, when agreed between the sender and the carrier.

Customs clearance

Obligations regarding customs security procedures and other customs procedures

Before a shipment enters the territory of the European Union, it is necessary to ensure the implementation of the EU customs provisions and customs regulations in force.

If in the territory of the European Union or of the parties to the EU/EFTA convention on a common transit procedure for shipments, a simplified customs procedure for railway consignments should be implemented, then for shipments from states using the SMGS, the contractual SMGS carrier needs – prior to the shipment's arrival in the territory of the European Union – to indicate on the CIM/SMGS consignment note the contractual CIM carrier and main person responsible (principal). For this purpose, the CIM carrier at the re-consignment point informs the contractual SMGS carrier of the details to be entered in box 66 of the consignment note, as well as the authorization number, in accordance with section 14.3.1 of the CIM/SMGS Consignment Note Manual (Annex 6 to SMGS).

3 Rail document used for a pilot conducted on a passenger train

The main document used during the pilots for the transportation of international main items via international passenger train is CN 37. The railway company also completed railway transportation document "Luggage ticket for passenger train/international passenger transport shipment" in accordance with p.29 of SMPS as sampled in Annex 1 to instruction of SMPS. "Luggage ticket for passenger train/international passenger transport shipment" contains a reference to attached CN 37 along with its number and date.

The transportation of international main items via passenger railway transportation is performed by carriage load in accordance with schedules and rates of the rail companies involved (advisable not to exceed UPU rates).

A rail document entitled "Luggage ticket for passenger train/international passenger transport shipment" was used during a pilot conducted on a passenger train. The pilot was conducted from Beijing to Moscow via Harbin and Manzhouli on 10 April 2016. An image of the document is provided further on.

Luggage ticket for passenger train/international passenger transport shipment

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CN 37 - Delivery bill. Surface mails

	l operator of origin	he bill				ERY B		Serial No	
	estination of the bill							By tra	ain
Priority	Non-pri	ority						Date of d	
Train No./V	ehicle No.				Route			Seal No.	
Name of sh	nip				Port of di	sembarkati	on	Company	/
If a contai	ner is used				No. of co	ntainer		No. of se	al
Entry			Numbe	rof		Gross we	eight of rece	ptacles, etc.	
Mail No.	Office of origin	Office of destination	letter- post recep- tacles ¹	CP recepta- cles and loose parcels ¹	sacks of empty bags ²	Letter	CP	Empty recep- tacles	Observations
1	2	3	4	5	6	7	8	9	10
						kg³	kg³	kg ³	

Size 210 x 297 mm

CN 34 - Receptacle label for surface letter mail

			Surface	CN 34
	From		То	Format -
	Disp. type Date	Disp. No.		
Posts	Rec. type Seal	Rec. No.	Receptacle ID	
_ <u>_</u>	Rec. subcl. Gross kg	No. of items		
	79		Date Transport	Unload
	I		1	

Size 130 x 90 mm

CP 83 - Receptacle label for surface parcel mail

	PARCELS		Surface	CP 83		
	From		То			
	Disp. type Date	Disp. No.				
Posts	Rec. type Seal	Rec. No.	Receptacle ID			
<u> </u>	Rec. subcl. Gross kg	No. of items	Date Transport	Unload		
		'	Date iransport	Oncod		

Size 130 x 90 mm

Glossary of terms

Postal terms

Carrier: the contractual rail carrier with whom the principal has concluded the contract of carriage pursuant to an agreement. The origin or destination designated operator may also be a carrier provided they possess a proper fleet and transportation capabilities.

Designated operator (DO): any governmental or non-governmental entity officially designated by the UPU member country to operate postal services and to fulfil the related obligations arising out of the UPU Acts on its territory.

Acceptance: point of time at which the carrier formally agrees to provide the service in accordance with an agreement, confirmed by the proof of acceptance provided by the carrier to the principal or the DO of origin/transit.

Representative of the carrier: the party (successive carrier) that performs a duty on behalf of the carrier at the origin, transit or destination railway stations and that is liable on the basis of that contract.

Representative of the principal: the party that performs a duty on behalf of the principal at the destination railway station, as indicated by the principal to the carrier.

Surface mail: any postal item conveyed in principle by train, ship or motor vehicle.

CN 37 (Delivery Bill. Surface mails): the basic UPU form providing consignment information. A consignment is defined by a delivery bill. The delivery bill is used in the transportation function, both for operational control and for accounting between the Post and the carrier. This form defines the shipment as mail and therefore subject to postal customs clearance based on national laws. Typically, it is the presence of UPU consignment information (paper-based or electronic) that enables the receptacles to be moved from the custody of the rail carrier to that of the destination designated operator for postal customs clearance based on national laws.

Receptacle label: label affixed to the mail receptacle, indicating the contents of the receptacle, the gross weight, etc. The receptacle label for surface letter mail is the CN 34 form. The CP 83 form is the receptacle label for surface parcel mail.

Receptacle: a unit of a dispatch and of a consignment. The receptacle is typically a bag or a tray containing postal items. Receptacles are a physical entity handled by carriers. Each receptacle has a standard 29-character barcoded receptacle ID. The receptacle ID is used by carriers, as well as by Posts. The UPU standard for the postal receptacle identifier is standard S9.

CN 22/CN 23 (Customs declaration): special customs declaration forms for postal items as described in the UPU Acts.

Electronic data interchange (EDI) messages:

- ITMATT is an electronic item-level message sent from an origin DO to a destination DO. It relates to UPU forms CN 22 and CN 23, and includes information about the contents of postal items. ITMATT is primarily used to provide customs-related data to the destination designated operator. The data can be used for both customs clearance and risk assessment.
- PREDES is the electronic equivalent of the letter/parcel bill, the receptacle labels and the list of trackable items. RESDES is the electronic confirmation of processing of the receptacle at destination.
- PRECON provides the destination mail unit with pre-advice of receptacles in transit to it. RESCON provides the origin mail unit with positive confirmation, including date/time, of arrival of receptacles, as well as other attributes.

CARDIT is sent from a DO originating a consignment to any carrier that is going to transport that consignment. It is a consignment- and receptacle-level message. CARDIT defines receptacles allocated to a consignment, for carrier operations and billing purposes, and provides pre-advice of mail to the carrier. RESDIT is sent by a carrier of a consignment to the DO. A RESDIT message is normally sent in response to a CARDIT. There can be several RESDIT messages for a single CARDIT as the receptacles in a consignment are transported along the supply chain from origin to destination.

Routeings: all routes and schedules for the transportation of mail by the carrier. The carrier may change these routes and schedules depending upon factors such as the weather or train cancellations.

Consignment: a set of one or more receptacles of a particular mail category, using a common transport on a particular occasion, from a specific place of loading to a specific final destination.

Contracted volumes: the volume of mail in a consignment handed over by the principal in accordance with the estimated volumes and/or the volume accepted by the carrier for the service.

Handover: transfer of custody of the mail from the principal or DO of transit to the carrier, which accepts the mail for transportation.

Delivery: handover of mail at the destination, confirmed by the proof of delivery; delivery of the mail transported by the carrier to the DO of transit or of destination.

Days: full calendar days, including legal rest days and public holidays.

Destination: location as stated in CN 37. Usually, it would be the railway station, where the mail is handed over to the DO of destination by the carrier.

Mail: all postal items, as defined in the Universal Postal Convention, to be conveyed via aircraft, truck, rail or ship, or subject to other services as agreed.

Non-priority item: item for which the sender has chosen a lower rate, implying a longer delivery time.

Origin: the place of dispatch of the mail, where the carrier accepts the mail from the principal to provide the services.

Postal item: generic term referring to any item dispatched by one DO to another (e.g. letter-post item, parcelpost item, money order).

Priority item: item conveyed by the quickest route (air or surface) with priority.

Proof of acceptance (POA): a positive check of all mail received by the carrier by positive data capturing of mail receptacle identifiers enclosed in the proper EDI messages generated by the carrier, and/or by the signature of the documents, or by other agreed data exchange. Proof of acceptance is subject to the critical handover time specified by the carrier for a specified volume of mail.

Proof of delivery (POD): a positive check of all mail received by the DO at destination or by its agent by positive data capturing of mail receptacle identifiers enclosed in the proper EDI messages generated by the carrier, and/or by the signature of the documents, or by other agreed data exchange. Proof of delivery is subject to the critical handover time specified by the carrier for a specified volume of mail, and to the local DO's availability to sign or exchange a POD.

Routeing plan: list of rail routeings to be used for the service as agreed between the carrier, the principal and the destination designated operator.

Special drawing right (SDR): an international reserve asset created by the International Monetary Fund in 1969 as a supplement to existing reserve assets. Its value is based on a basket of currencies whose weight is adjusted at regular intervals. The SDR is used by the UPU and several other international organizations as an accounting unit.

Services: all services related to the transportation of mail, such as loading, unloading, ground handling, security, transportation, distribution and documentation.

Transportation: the actual transport and physical movement by rail and road, as the case may be.

Universal Postal Union (UPU): specialized agency of the United Nations, with the aim of securing the organization and improvement of the postal services and promoting the development of international collaboration in this sphere.

Universal Postal Convention: international treaty containing the rules applicable to international postal services.

Office of exchange (OE): office established by a DO for international mail, from which all outbound mail is dispatched and at which all inbound mail is received. International mail exchanged between countries thus actually moves between OEs. A DO may have only one OE or it may have several.

Mail category: UPU standards code list 115 defines the mail categories as follows:

- A Airmail or priority mail
- B S.A.L. mail/non-priority mail
- C Surface mail/non-priority mail
- D Priority mail sent by surface transportation (optional code)

Transit charges: remuneration for services rendered by an operator in the country crossed (designated operator, other service or both) in respect of the land, sea or air transit of mail.

Transit à découvert: open transit through an intermediate country of items whose number or weight does not justify the make-up of closed mails for the destination country.

Closed transit: when receptacles are consigned to a transit designated operator to be forwarded onwards to the destination, along with the transit operator's own originating receptacles. The transit DO includes the receptacles on its delivery bill (CN 37 for surface). In the case of transport by surface, the applicable transport rate is the land rate. In accordance with the UPU Regulations, accounting for the closed transit of surface parcels is based on UPU form CP 88, which is sent from the origin DO to the destination DO. This applies only to surface parcels.

Dangerous goods: articles covered by the UN Recommendations on the Transport of Dangerous Goods, in addition to certain dangerous goods provided for in the UPU Regulations, the Technical Instructions of the International Civil Aviation Organization, and the International Air Transport Association's Dangerous Goods Regulations.

- **N.B.** Subject to security and safety controls, Posts could send postal items containing lithium batteries by rail when such items cannot be sent by air.
 - The UPU Convention currently specifies limits for postal items containing lithium batteries (must be installed in equipment; maximum two batteries/four cells; maximum 100 watt-hour rating). The countries involved could bilaterally agree to specifications outside these limits. This would require agreement of the origin, transit and destination countries. The postal items would need to display a lithium battery label to ensure they are not inadvertently loaded onto aircraft in the case of misdirection, forwarding, return-to-sender, or other scenarios.



Customs terms

Customs seal: an assembly consisting of a seal and a fastening, which are joined together in a secure manner. Customs seals are affixed in connection with certain customs procedures (customs transit, in particular), generally to prevent or to draw attention to any unauthorized interference with the sealed items.

Electronic seal: a customs seal equipped with a mechanism for online tracking of the means of transport to which the electronic seal is affixed.

Customs transit operation: the transport of goods from an office of departure to an office of destination under customs transit.

- National customs transit: when the transit procedure applies to one country or customs territory only, and the office of departure and the office of destination are in the same territory. Any security required relates only to the transit movements in the customs territory concerned.
- International customs transit: when the transit movements are part of a single customs transit operation during which one or more customs frontiers are crossed in accordance with a bilateral or multilateral agreement. This agreement generally sets out the form of the goods declaration for customs transit and, if required, security controls acceptable in each of the administrations which are parties to the agreement.

Guarantee: an undertaking which ensures to the satisfaction of Customs that obligations towards Customs will be fulfilled.

- Individual guarantee: a customs guarantee furnished for only one transit transaction in a predefined customs territory or territories.
- Comprehensive guarantee: a customs guarantee covering a number of transit transactions through a predefined customs territory or territories.
- National guarantee: a customs guarantee legally applicable only within one country according to national legislation of that country.
- Regional guarantee: a customs guarantee legally applicable within the customs territory of several countries and legally binding pursuant to any regional agreement between the respective countries.
- International guarantee: a customs guarantee legally applicable in several customs territories and legally binding pursuant to international agreements or conventions.

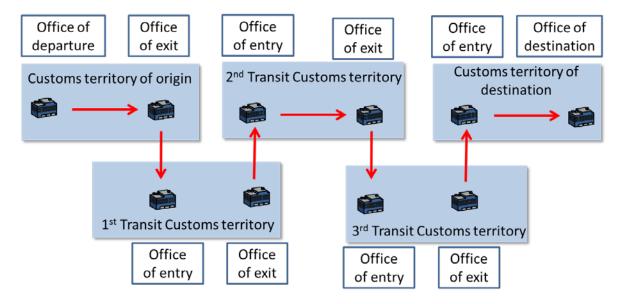
Office of departure: any customs office at which a customs transit operation commences.

Office of destination: any customs office at which a customs transit operation is terminated.

Office en route/office of transit: any customs office located on the route of customs transit operations.

Office of entry: any office en route where transit goods enter a customs territory.

Office of exit: any office en route where transit goods leave a customs territory.



Railway terms

Uniform Rules Concerning the Contract of International Carriage of Goods by Rail (CIM) – Appendix B to COTIF (see Article 3)

For purposes of CIM

- a "carrier" means the contractual carrier with whom the consignor has concluded the contract of carriage pursuant to these Uniform Rules, or a successive carrier who is liable on the basis of this contract;
- b "substitute carrier" means a carrier who has not concluded the contract of carriage with the consignor, but to whom the carrier referred to in letter a) has entrusted, in whole or in part, the performance of the carriage by rail;
- c "General Conditions of Carriage" means the conditions of the carrier in the form of general conditions or tariffs legally in force in each member state and which have become, by the conclusion of the contract of carriage, an integral part of it;
- d "intermodal transport unit" means a container, swap body, semi-trailer or other comparable loading unit used in intermodal transport.

Case study: Transport of parcels between China (People's Rep.) and Europe: integrating rail transport into the postal network

The post-by-rail project is a complex one in the sense that it is governed by four different areas of regulation:

- sale-of-goods regulations;
- postal regulations (Universal Postal Union);
- customs regimes (World Customs Organization, European Union);
- rail regulations (Intergovernmental Organization for International Carriage by Rail, Organization for Cooperation of Railways).

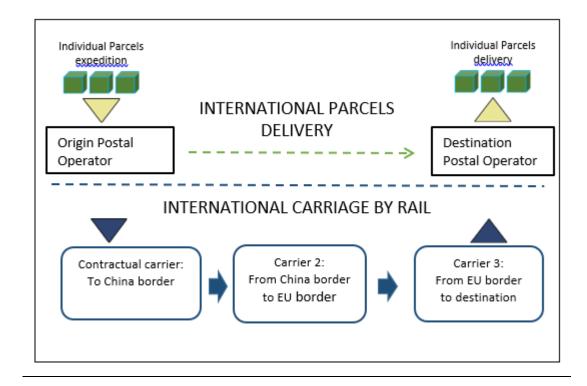
This annex describes how such a project should be organized from an operational and legal perspective at the customs level (1), and then proposes a method for mapping out the various regulatory interfaces (2).

Throughout the document, the envisaged service is based on the use of containers or postal carriages transported on the international freight rail network using the common CIM/SMGS consignment note.

1 Organizing customs transit without breaking load

For postal regulation, international transport can be thought of as a "black box" linking the origin designated operator with the destination designated operator, as shown in figure 1, in which rail can also be replaced by air, sea or road.

Figure 1: Operation of postal rail project



For such a system to work, there must be no breaking of load between the country of dispatch, in this instance China, and the destination country where the container arrives, e.g. Spain. This is the case for air transport: postal parcel containers on the air transport network remain sealed and are exchanged between the different transport nodes on the basis of CN 37 forms. It is important that this way of working be replicated for the rail transport project.

Until the destination DO is reached, the container should not be opened except for necessary customs control, in particular upon arrival at the EU customs border. It is up to the first transit DO to open the container and to affix the yellow labels required for the postal parcels' entry into the EU. Any other solution would involve breaking the load, which would jeopardize the viability of the project for the following two reasons:

- From a legal standpoint, there is no overall transit procedure for railways that could be used in place of the UPU procedure, such as the International Road Transport Convention for roads. Therefore, until a container reaches its destination country, it is more efficient to use the postal procedure from end to end.
- From an operational standpoint, if upon entry into the EU all postal containers were opened prior to their transport within the EU, it would not be possible to use the European rail network to reach all destination countries. This is because, once containers have left the rail-based logistics chain, the transport distances in Europe are so short that returning containers to the rail network would be economically unviable. Such a procedure also goes directly against EU commitments regarding the priority use of rail.

2 Mapping out regulatory interfaces

The Open Systems Interconnection (OSI) model currently serves as a theoretical benchmark for data transmission networks, not least the Internet. It is composed of the various protocols needed for data transmission at multiple layers. Within a given stack of protocols, each layer resolves certain data transmission issues and provides well-defined services to the layers above. The upper layers are closer to the user and deal with more abstract data based on the services of the layers below, which format the data so that it can be transmitted to a physical medium.

The OSI hierarchy can be used to more clearly distinguish the interfaces between the different areas of regulation applicable to the project, as follows:

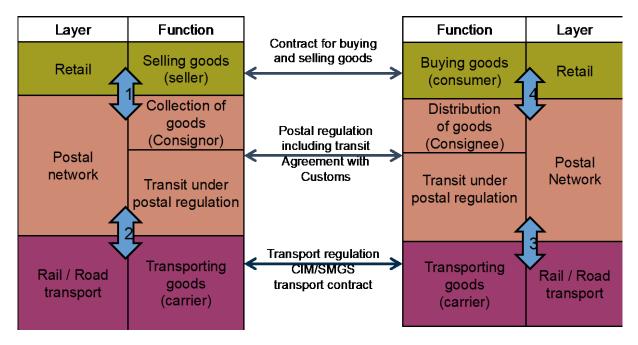
- Start from a position of respect for the autonomy of each set of regulations. As far as possible, each layer required to provide the corresponding service (mail order regulations, postal regulations, customs regulations, transport regulations) should be based on its own procedures from end to end.
- Between each layer, accurately define which services need to be exchanged for the relevant services to be provided at the next layer.
- Determine the changes, if any, to be made to the method of application of the various regulations to accommodate the necessary exchanges.

Lastly, the different layers need to be arranged into a hierarchy. The following arrangement would seem sensible:

- The transport component is the lowest layer and covers the international transport of postal parcels between two DOs, one in China (People's Rep.) and one in Europe.
- The next layer is postal regulation, which also serves as a basis for customs issues (given that the transit
 of postal items is regulated at the international level). This layer covers the collection of parcels in the
 origin country and their delivery to the recipient in the destination country.
- The service itself, i.e. mail order, represents the uppermost layer.

The hierarchy is illustrated in the diagram below. Between the postal component and the rail transport component (arrow No. 2 in figure 2), an effort must be made to accurately define the data exchanges required for the organization of transport and the establishment of relations between the origin DO and the destination DO.

Figure 2: Conceptual model for seamless international parcel delivery by train



This model can be used to accurately define how the various regulations (postal, customs and rail) interrelate to enable the data transmission required for the international post-by-rail service.

Case study: EU customs law

EU customs law was discussed many times during the postal rail project in connection with ongoing pilots from China to Europe. The provisions of EU customs law are presented below. It is important to note that this text is not legally binding and is of an explanatory nature. The legal provisions of customs legislation take precedence over the contents of this document and should always be consulted. The authentic texts of EU legal instruments are those published in the Official Journal of the European Union. There may also exist national instructions or explanatory notes that need to be considered in addition to this document.

All goods entering the customs territory of the Union are subject to customs control and remain under customs supervision until their status has been determined.

It is the actual customs office of first entry that will perform the customs control pertinent to safety and security based on the Entry Summary Declaration (ENS) data. Supply of the ENS data is waived for postal items of correspondence (Delegated Act (DA) article 104(1)(c)). For goods in postal consignments, supply of ENS data is waived until the relevant IT system has been updated, and it is waived until 2020 if the goods do not exceed 250 grammes (DA article 104(2)(3)).

Whether ENS data has been provided or not, all goods must be presented at the actual customs office of first entry. From that point onwards, non-Union goods will remain under customs supervision and can move in accordance with the Acts of the UPU. The yellow labels are required to identify the non-Union postal items in customs transit. This means that the yellow labels must be affixed by the "intermediate" designated operator to receptacles containing postal items and all related documents when presenting the goods to the customs office of first entry/departure, regardless of the means of transport.

Transit of postal items: Union Customs Code articles 226(3)(f) and 227(2)(f) define the transit of postal items through the customs territory of the Union. A transit movement may take place:

"(f) under the postal system in accordance with the acts of the Universal Postal Union, when the goods are carried by or for holders of rights and obligations under such acts."

This means that these provisions are limited to the holders of rights and obligations under the UPU Acts and are applicable when the goods are moved in accordance with the UPU Acts.

Under the Acts, a right holder is defined as the designated operator appointed by the member country. A designated operator is any governmental or non-governmental entity officially designated by the UPU member country to operate postal services and to fulfil the related obligations arising out of the UPU Acts on its territory.

It is the designated operator appointed by the member country through which the postal items enter the customs territory who has to present these items to the customs office of first entry for moving them further under the postal system to the customs office of destination.

Multimodal transportation of postal items

Designated operators may also use multimodal means – rail, air, sea and truck – to transport international postal items.

With respect to the use of multimodal means to transport postal items, the designated operator of the Russian Federation provided the information below to the UPU International Bureau.

The Russian Post carried out five pilots and sent 14 shipments.

The pilots took place in 2017 on the following dates: 18 August, 1 September, 15 September and 19 September, and in 2018 on the following dates: 17 March.

The pilots using multimodal means took place on the following routes:

- Mongolia–Russia–Slovenia.
- China-Russia
- Japan–Russia–Latvia.
- Japan–Russia–Lithuania.
- Japan–Russia–Poland.
- Japan–Russia–Finland.

The following means of transport were used:

- Mongolia–Russia–Slovenia: rail and truck.
- China–Russia: rail and truck.
- Japan–Russia–Latvia: sea, rail and truck.
- Japan–Russia–Lithuania: sea, rail and truck.
- Japan–Russia–Poland: sea, rail and truck.
- Japan–Russia–Finland: sea, rail and truck or air.

Passenger train was the means used for the multimodal pilots.

The Russian Post did not face any transit or security problems during the five pilots.

The Russian Post exchanged UPU messages (PREDES, ITMATT) with other designated operators when sending postal items using multimodal means.

The Russian Post did not face any "critical" customs-related problems when transporting postal items by rail.

The documents/forms used for the transportation of postal items were as follows:

- CN 37 Delivery bill. Surface mails.
- CN 38 Delivery bill. Airmails.
- Applicable rail document: Luggage ticket/Mail transportation ticket.

During multimodal transportation of international mail items, the carrier is to notify customs authorities about reloading operations being performed from vehicle to vehicle with further delivery to IMPC stated in CN 37. Customs authorities may wish to facilitate the procedure, while taking necessary customs control measures.

Case study: Seal integrity programmes and compliance with ISO's 17712 Standards for High Security Seals

1 Seal integrity programmes

Customs should apply a seal integrity programme as detailed in the Revised Guidelines to Chapter 6 of the General Annex to the WCO RKC.

Such seal integrity programmes should be based on the use of a high-security mechanical seal as prescribed in ISO 17712 at the point of stuffing, and should include procedures for recording the affixing and changing of seals and the verification of seal integrity at key points, such as modal change, as suggested in the SAFE Framework of Standards (FoS).

Consistent application and enforcement of such seal integrity programme among the parties in the movement of secure containerized goods is important since it will provide multiple benefits to all of those parties. Such benefits would be, in particular, improved security against acts of terrorism and illegal transport of narcotics and weapons that exploit global trade in goods, reduced risk of economic hardship caused by disruptions to or closures of trade in response to terrorist acts and improved security against theft and diversion of cargo, with consequent reductions in direct losses and indirect costs, such as insurance.

In addition, the WCO AEO Validator Guide lists examples of security measures to be satisfied by economic operators to be granted as Authorized Economic Operator (AEO). Security measures should be in place to ensure the integrity of cargo and to prevent irregular practices relevant to the flow of goods (transportation, handling, and storage of cargo) in the international supply chain. Those security measures include using the adequate high-security seals, such as ISO 17712 and/or any other customs approved securing mechanism or procedure, and allowing only authorized and well trained employees to have access to such high-security seals.

Note: An AEO is a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national customs administration as complying with WCO or equivalent supply chain security standards. AEO status is granted to an economic operator that satisfies criteria such as customs compliance, management of commercial records, financial solvency and appropriate security and safety standards.

2 High security seals in ISO 17712

ISO (International Organization for Standardization) is the world's largest developer of voluntary International Standards. A standard is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose. ISO International Standards ensure that products and services are safe, reliable, and of good quality. The ISO 17712 establishes 'uniform procedures for the classification, acceptance, and withdrawal of mechanical freight container seals. It provides a single source of information on mechanical seals which are acceptable for securing freight containers in international commerce.'

The current ISO 17712 standard requires independent confirmation in three areas:

A. Testing to determine a seal's physical strength (as barriers to entry)

ISO 17712 defines three types of classes of seal strength or barrier capacity: 'I' for Indicative; 'S' for Security; and 'H' for High Security. Security and high security seals shall be strong and durable so as to prevent accidental breakage and early deterioration due to weather conditions, chemical action, etc. Seals must made by the specified materials and meet the appropriate physical parameters for each class, as explained in ISO 17712.

Suppliers must use independent third party test laboratories to validate a seal's classification. Labs must be accredited according to ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories) to perform testing specific to ISO 17712.

Types of seal	Materials
High-security seal	Material such as metal or metal cable with the intent to delay intrusion
Security seal	Material that provides limited resistance to intrusion and requires lightweight tools for removal
Indicative seal	Material that can easily be broken by hand or by using a simple snipping tool or shear

Source: ISO/PAS 17712 (Para3. terms and definitions)

B. Auditing of manufacturer's security-related business processes.

Poor security-related practices can undercut the effectiveness of a high-quality security seal. ISO 17712's Annex A defines over two dozen required practices, such as facility risk assessments and access controls to production and storage areas. Suppliers' conformance with Annex A should also be demonstrated through an independent certification provider that is accredited to audit compliance with the ISO standards.

3 Responsibilities along the chain of custody

There are responsibilities and principles along the chain of custody that apply throughout the life cycle of a containerized shipment of goods. Each party in possession of the container has security responsibilities while cargo is entrusted to them, whether at rest at a node or while moving between nodes. Security seals are an integral part of the chain of custody and the SAFE FoS describe the responsibilities of each party in the supply chain, as below.

A. Responsibilities of shipper/consignor

- The shipper/consignor is responsible for securely stuffing the container and for the accurate and complete description of the cargo.
- The shipper is also responsible for affixing the cargo security seal immediately upon conclusion of the stuffing process, and for preparing documentation for the shipment, including the seal number.

B. Responsibilities of receiving party at each change of custody

- Security seals should be inspected by the receiving party at each change of custody for a cargo-laden container.
- Inspecting a seal requires a visual check for signs of tampering, comparison of the seal's identification number with the cargo documentation, and noting the inspection in the appropriate documentation.
- If the seal is missing, or shows signs of tampering, or shows a different identification number than the cargo documentation, then a number of actions are necessary.
- The receiving party must bring the discrepancy to the attention of the party tendering the container and the shipper.
- The receiving party must note the discrepancy on the cargo documentation.
- The receiving party should notify Customs or law enforcement agencies, in accordance with national legislation.
- Once discrepancies have been resolved, the receiving party shall affix a security seal to the container and note the particulars, including the new seal number, on all pertinent cargo documentation.

Stakeholders involved

a United Nations

Universal Postal Union

Established in 1874, the Universal Postal Union (UPU), with its headquarters in the Swiss capital of Berne, is the second oldest international organization in the world. It is the United Nations specialized agency for postal matters.

With its 192 member countries, the UPU is the primary forum for cooperation between postal sector players. It helps to ensure a truly universal network of up-to-date products and services.

The organization fulfils an advisory, mediating and liaison role, and provides technical assistance where needed. It sets the rules for international mail exchanges and makes recommendations to stimulate growth in mail, parcel and financial service volumes and to improve quality of service for customers.

The Doha Postal Strategy underlined the postal network's three dimensions (physical, electronic and financial) as well as interconnection, governance and development as key axes to strengthen postal services worldwide. The strategy's goals were to be achieved through programmes aimed at strengthening the postal sector through better connected networks and quality of service, innovation, and responding more effectively to market changes.

The following UPU international treaties and regulatory frameworks and instruments are relevant to the postal rail project:

- Universal Postal Convention and Regulations to the Convention;
- Memoranda of understanding signed with the other stakeholders taking an active part in the postal rail project.
- b Other intergovernmental or international organizations

World Customs Organization

The WCO, established in 1952 as the Customs Co-operation Council, is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of customs administrations.

Today, the WCO represents 182 customs administrations across the globe that collectively process approximately 98% of world trade. As the global centre of customs expertise, the WCO is the only international organization with competence in customs matters and can rightly call itself the voice of the international customs community.

As a forum for dialogue and the exchange of experiences between national customs delegates, the WCO offers its members a range of conventions and other international instruments, as well as technical assistance and training services provided either directly by the Secretariat or with its participation. The Secretariat also actively supports its members in their endeavours to modernize and build capacity within their national customs administrations.

Besides the vital role played by the WCO in stimulating the growth of legitimate international trade, its efforts to combat fraudulent activities are also recognized internationally. The partnership approach championed by the WCO is one of the keys to building bridges between customs administrations and their partners. By promoting the emergence of an honest, transparent and predictable customs environment, the WCO directly contributes to the economic and social well-being of its members.

Lastly, in an international environment characterized by instability and the ever-present threat of terrorist activity, the WCO's mission to enhance the protection of society and the national territory, and to secure and facilitate international trade, takes on its full meaning.

The following WCO treaties and regulatory frameworks and instruments are relevant to the postal rail project:

- Revised Kyoto Convention
- WCO SAFE Framework of Standards to Secure and Facilitate Global Trade
- WCO Transit Guidelines (non-binding)
- WCO Customs Risk Management Compendium (non-binding)
- Guidelines for the immediate release of consignments by customs (non-binding)
- Memorandum of Understanding signed with the UPU

Intergovernmental Organization for International Carriage by Rail

The mission of the Intergovernmental Organization for International Carriage by Rail is to promote, improve and facilitate international traffic by rail. It provides its 50 member states with the legal means to facilitate international traffic by rail, to develop this traffic on their territory, and to connect to the railway networks of other member states.

OTIF has three major areas of activity: technical interoperability, dangerous goods, and railway contract law. It develops uniform legal regimes for contracts of carriage of passengers and goods; ancillaries to the contract of carriage, such as the contract of use of wagons or infrastructure; rules for the transport of dangerous goods; and procedures and technical provisions for the approval of rolling stock.

COTIF is the basic text used by OTIF. It governs the running of the organization, its objectives and attributions, its relations with member states, and its activities in general. It contains seven appendices.

The following COTIF appendices are of primary relevance to the postal rail project:

- Appendix B Uniform Rules concerning the Contract of International Carriage of Goods by Rail (CIM). The CIM is applicable in any case where the place of taking over the goods and the place designated for delivery are located in two different OTIF member states. It governs the relationship between the parties to the contract of carriage (consignor and carrier) and sets out the rules relating to the liability of the carrier.
- Appendix C Regulation concerning the International Carriage of Dangerous Goods by Rail (RID). The RID applies to international traffic and, via Directive 2008/68/EC, to national traffic within the EU member states. The dangerous goods provisions are the result of close cooperation with the UN Economic Commission for Europe (UNECE), and apply to carriage by road and inland waterways as well.

Organization for Cooperation of Railways

The Organization for Cooperation of Railways, established in 1956 and headquartered in Warsaw, Poland, is an international organization operating in accordance with the 1969 Vienna Convention.

The main activities of the OSJD are:

- development and improvement of international rail transport, including combined transport, between Europe and Asia;
- formulation of the coordinated transport policy and strategy for development of international railway communication;
- improvement of documents making up international rail transport law;
- improvement of international railway tariffs for freight and passenger transportation;
- cooperation on operational, technical, financial and environmental issues;
- development of measures to improve the competitiveness of rail transport in relation to other modes of transport;
- cooperation with international organizations dealing with railway transport issues.

The OSJD brings together transport ministers, general directors of railway companies and infrastructure managers from 28 countries in Asia and Europe, providing a forum at the intergovernmental level and at the level of economic entities.

In terms of geographical scope, the OSJD covers the railway lines of 28 countries, from Central Europe to the Asian coast of the Pacific Ocean, and from the Arctic Circle to the Persian Gulf. In total, it covers 286,000 km of railway lines, on which 4 billion passengers and about 5 billion tonnes of cargo are transported annually.

The highest governing body of the OSJD is the OSJD Ministers Conference, which takes decisions at the governmental level on all issues related to the direction of OSJD activities, taking into account the proposals of the Conference of Directors General of the OSJD Railways – the governing body at the level of railway enterprises. The Conference of Directors General (plenipotentiary representatives) organizes the work and takes decisions on issues related to the activities of the OSJD within the competence of the railways. The OSJD Committee is the executive body of the OSJD, acting as the depositary of the OSJD Statute, as well as international agreements and contracts concluded in the context of the OSJD. It ensures implementation of OSJD activities between sessions of the Ministerial Conference and the meetings of the Conference of Directors General.

The OSJD Committee consists of the following working bodies:

- OSJD Commission on Transport Policy and Development Strategy;
- OSJD Commission on Transport Law;
- OSJD Cargo Transportation Commission;
- OSJD Commission for Passenger Transportation;
- OSJD Commission for Infrastructure and Rolling Stock;
- Permanent OSJD Working Group on Coding and Informatics;
- Permanent OSJD Working Group on Financial and Settlement Issues.

Under the OSJD, a stable international legal framework has been created and put in place to regulate the range of issues related to the carriage of passengers and cargo by rail, as well as in combined transport operations.

There exist the following international agreements and OSJD regulations related to the postal rail transport project:

- Agreement on International Railway Cargo Transport (SMGS) (of 1951) with annexes:
 - Annex 1 Rules for the transport of goods;
 - Annex 2 Rules for the transport of dangerous goods;
 - Annex 3 Technical conditions for locating and securing of cargos;
 - Annex 4 Rules for the carriage of a wagon that does not belong to the carrier as a means of transport;
 - Annex 5 Informational guide;
 - Annex 6 Manual on the CIM/SMGS consignment note;
- Agreement on International Railway Passenger Traffic (SMPS) (of 1951);
- Agreement on the Organizational and Operational Aspects of Combined Transport in the Europe–Asia Communication (of 1997).

These normative documents adopted at the state level:

- determine the legal relationship between the passenger/client and the railway, as well as between the railways when entering into and executing the contract of carriage;
- regulate transport technology, the basic requirements for infrastructure and the use of technical means of combined transport.

In addition, under the OSJD, there are other international treaties and documents applied at the level of economic entities:

- International Passenger Tariff Agreement;
- Agreement on the Single Transit Tariff for Freight Transport;
- Agreement on the International Railway Transit Tariff for the Carriage of Cargos;
- Agreement on the Rules for the Use of Freight Wagons in International Transport;
- Agreement on the Rules for the Use of Passenger Wagons in International Transport;
- Agreement on the Rules of Payment in International Passenger and Freight Transport;
- Harmonized Nomenclature of Cargos (HNC), developed on the basis of the Harmonized Commodity Description and Coding System (HS) of the World Customs Organization and the Harmonized Commodity Code (NHM) of the International Union of Railways (UIC), used by European railways.

The above-mentioned agreements and documents adopted at the railway level determine the nominal (basic) level of the tariff, the technology of transportation, the operation and use of wagons, the economic and financial relations between railways for transportation, and the use of a unified system for the description and coding of cargo in international traffic.

The OSJD has extensive practical experience in the planning and organization of transit container trains in international traffic, including from China to European countries.

The OSJD conducts its activities with a view to expanding cooperation and partnership relations in railway transport and improving competitiveness; it cooperates with all interested states, railway companies and international organizations.

The OSJD has signed agreements and memoranda of cooperation with:

- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP);
- Organization for Economic Cooperation (OEC);
- World Customs Organization (WCO);
- Intergovernmental Organization for International Carriage by Rail (OTIF);
- Eurasian Economic Commission (EEC);
- European Commission Directorate General for Mobility and Transport (DG Move);
- European Union Agency for Railways (ERA);
- International Rail Transport Committee (CIT);
- International Union of Railways (UIC);
- Coordinating Council on Trans-Siberian Transportation (CCTT);
- International Federation of Freight Forwarders Associations (FIATA).

International Rail Transport Committee

The International Rail Transport Committee is an association of more than 216 railway undertakings and shipping companies which provide international passenger and/or freight transport services. The CIT includes 136 organizations that are members in their own right and 80 organizations that are linked indirectly by being members of CIT associate members. The CIT is an association under Swiss law and is based in Berne. The CIT helps railways implement international rail transport law. To achieve that, it draws up and maintains legal publications and boilerplate documents for international traffic by rail; standardizes the contractual relationships between customers, carriers and infrastructure managers; and represents the interest of rail carriers.

COTIF and the EU legislation need to be implemented consistently by railways. The task of implementing COTIF on behalf of the railway community has been undertaken for many years by the CIT. Implementation includes the creation of standard documents of carriage (tickets and consignment notes) which are universally recognized, and the standardization of a number of legal relationships between customers, carriers, infrastructure managers and wagon keepers by means of general terms and conditions and systems for allocating the costs of claims for loss and damage between railway undertakings quickly and simply.

In order to share these costs fairly, the CIT relies on having every railway undertaking with international traffic join the association. Up to now, the CIT has been successful in recruiting the great majority of undertakings with significant international traffic as members, with the result that it has been possible to avoid licensing the use of CIT documentation (the international ticket design is subject to copyright). With membership, a cumbersome licensing system can be avoided.

Coordinating Council on Trans-Siberian Transportation

The Coordinating Council on Trans-Siberian Transportation (CCTT) is a non-commercial transport association with an open-ended duration, registered in the Main Register of the canton of St. Gallen, Switzerland, on 21 February 1997 (the declaration of founding the CCTT was signed on 23 November 1993 in Moscow by the main participants of Euro-Asian freight transportation).

Currently, the CCTT has over 80 members from 23 countries, including railways in Europe, Asia and the CIS states; major shipping companies; operators and forwarders; ports and stevedoring companies; state organizations, administrations and municipalities; telecom and marketing companies; security services; and mass media.

The main activities of the CCTT are as follows:

- Development of measures to increase the efficiency and competitiveness of the transportation of containerized cargo by rail on the Trans-Siberian route (TSR) for international service;
- Coordination of the interaction of railways and seaports in the organization of intermodal transport chains;
- Introduction of electronic legal documentation using EDS in TSR freight transportation;
- Development and implementation of innovative technologies for international container transportation;
- Contribution to the improvement of rolling stock management and of innovative rolling stock management models:
- Analysis of the cargo base of Trans-Siberian transportation;
- Promotion of the Trans-Siberian service:
 - Expansion of existing transport and logistics products in Europe and the APR,
 - Expansion and strengthening of contacts with freight forwarders and cargo owners in Europe, China (People's Rep.), the Republic of Korea, Japan and other countries;
- Cooperation with intergovernmental and non-governmental international transport organizations on the development of Euro-Asian transport links.

In 1997, within the framework of CCTT activities, the Ministry of Transport of the Russian Federation, in cooperation with federal authority stakeholders, developed the "Concept of the State Policy of Supporting Transit Transportation via the Transsib", which was approved and ratified by the Government of the Russian Federation.

As part of CCTT activities, the following working groups were established, led by the CCTT Secretariat:

- Information Technology Development
- Increasing Competitiveness of the TSR
- Harmonization of International Transport Law
- Subgroup on Mongolian Transit Development
- CCTT RZD MAV Joint Working Group
- Railway Corridor Security subgroup (within the framework of the UIC Security Border Crossing, International Railway Corridors working group)

In its 20-year history, the CCTT has achieved a high international standing and has become an efficient international forum for networking and real cooperation between all parties involved in Trans-Siberian freight transportation.

The CCTT contributes to introducing advanced technologies which increase the capacities of border crossing points and international freight volumes.

The CCTT participates in the efforts of the Organization for Cooperation between Railways (OSJD), the International Union of Railways (UIC), the UNECE Inland Transport Committee, the International Rail Transport Committee (CIT), the Eurasian Economic Community (EurAsEC), the UN Economic and Social Commission for Asia and the Pacific (ESCAP), the Intergovernmental Organization for International Carriage by Rail (OTIF), the World Customs Organization (WCO) and the Universal Postal Union (UPU) to establish new technological regulations and harmonize transport law aimed at reducing barriers for freight transportation between Asia and Europe.

The following CCTT agreements, regulatory frameworks and instruments are relevant to the postal rail project:

- Cooperation agreement between the OSJD and the CCTT, signed on 2 November 2007 in the canton of St. Gallen, Switzerland
- Memoranda of cooperation between the UIC and the CCTT, signed on 6 December 2007 and 28 March 2012 in Paris, France
- Memorandum of cooperation between the CIT and the CCTT, signed on 10 May 2011
- Memorandum of understanding between the UPU, the CIT and the CCTT, signed on 18 March 2016 in Berne, Switzerland
- Memorandum of understanding between the CCTT and the Eurasian Economic Commission, signed on 18 January 2017 in Moscow, Russian Federation