

# CAREC Corridors Performance Measurement and Monitoring 2017 Report

## Executive Summary

Corridor Performance Measurement and Monitoring (CPMM) continues to serve as an empirical tool designed by the Central Asia Regional Economic Cooperation (CAREC) to assess the performance of its corridors. The primary data collected are analyzed and used as inputs for initiatives towards a seamless transport and trade facilitation within the region.

Central to CPMM's **success and sustainability** are (i) private sector participation, (ii) fact-based and data-driven conclusions, and (iii) adoptability to landlocked countries.

The 2017 report shows that while targeted projects and cooperation among countries continue to improve the performance of transport and trade facilitation corridors, challenges remain and persist.

### *Road Transport*

Road border-crossing time deteriorated; trucks took 16.7 hours, on average, to complete border crossing procedures in 2017 (an increase of 48% from 11.3 hours in 2016). This is largely attributed to the delays encountered at the Peshawar and Chaman BCPs that drove higher the average crossing time along Corridors 5 and 6. Abrupt border closure of the border in early 2017, stricter border control upon its reopening, and inefficient layout and procedures all contributed to various extent to longer delays at the Afghanistan and Pakistan borders.

Average border-crossing cost remained relatively the same. Fees incurred for customs formalities, loading and unloading, and waiting in queue remained to be major contributors to total cost. Unofficial payments (sum paid on top of an amount officially recognized by law) persists during transport; more so at high-traffic BCPs which result in longer queues and are likely encountered during (i) phytosanitary inspections, (ii) vehicle registration, (iii) customs formalities, (iv) weight standard inspection, and (v) visa/immigration.

Improvements were observed in total transport cost averaging at \$947, down from \$1,173 in 2016 (-19%) to ship a 20-ton cargo per 500 km. There is general improvement across the region, except in Afghanistan, Mongolia and Tajikistan where transport cost remains above average and may be linked to less developed infrastructure in these countries.

In 2017, SWOD<sup>1</sup> increased but SWD remained flat. This result suggests that road infrastructure improved, but border crossing problems remain barriers to efficient movement of goods in the region. Trucks registered an average SWOD of 45 kph, which is 8% higher compared to 41.7 kph attained in 2016. However, the progress achieved in higher SWOD did not translate into gains for the SWD, which remained relatively unchanged at 22.2 kph.

### *Rail Transport<sup>2</sup>*

Trains experience longer delays than trucks at the BCPs. Average border-crossing time increased to an average of 26.8 hours in 2017. Causes of substantial delays include unavailability of wagons (average of 25.8 hours), restriction on entry (21.8 hours), waiting for priority trains to pass (18.8 hours), marshalling (12.1 hours) and gauge change operation (8.8 hours). Delays due to these activities are generally longer compared to the time necessary to undergo standard customs and inspection operations at rail terminals. Capacity factors such as shortage of wagons continue to plague delays of rail shipments.

Rail shipment cost slightly dropped to \$209 in 2017. Common cost drivers include change of railway gauge and customs inspection. Meanwhile, transport cost remained steady at an average of \$975 per 20-ton cargo per 500 km.

In 2017, trains registered an average SWOD and SWD of 37.6 kph and 14.8 kph, respectively. These indicators remained relatively unchanged compared to 2016 estimates. Trains tend to move faster at 49.1 kph along subcorridor 1a and 55.2 kph along 1b. Meanwhile, trains along 4b moved at half the speeds, reaching only an SWOD of 20.6 kph and SWD of 10.0 kph. Trains along Corridor 6 also tend to move more slowly with estimated SWOD/SWD of 12.5/11.2 kph (6b) and 29.9/13.7 kph (6d).

### *Country Results*

**Afghanistan** remains severely restricted and does not reach its full potential in transit trade, despite its strategic location at the heart of four major trading blocs: Central Asia, East Asia, South Asia and Middle East. Among the challenges the country faces include (i) difficulty to obtain road passes for trucks and drivers' visa, (ii) lengthy delays at Torkham-Peshawar (AFG-PAK) and Spin Buldak-Chaman (PAK-AFG), (iii) resorting to development of air corridors

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<sup>1</sup> CPMM measures and monitors two metrics for speed: (i) Speed Without Delay (SWOD), or the average speed of vehicles while in transit, and (ii) Speed With Delay (SWD), which accounts for time spent on stopovers and border crossing activities. Intuitively, the quality of transport infrastructure, terrain, altitude and seasonal patterns affect SWOD, while simplified border crossing tend to result in higher SWD.

<sup>2</sup> CPMM rail samples cover shipments along Corridors 1, 4 and 6. The samples traversed railroads in Kazakhstan, Mongolia, PRC, Turkmenistan and Uzbekistan.

Corridor 1: China-Kazakhstan, China-Kazakhstan-Uzbekistan-Turkmenistan, China-Europe (container express train).

Corridor 4: Russia-Mongolia-China, Mongolia-China (covering import, transit and export)

Corridor 6: Transit road-rail shipment Pakistan-Afghanistan-Turkmenistan (the train section started at the Afghanistan-Turkmenistan border).

(Kabul-New Delhi and Kabul-Dubai) despite its unattractive rates, and (iv) low TIR utilization rate.

CPMM faces difficulty in obtaining data from transport operators in **Azerbaijan** as majority of its market lies to the west and beyond the CAREC region. The few trade shipments samples of the country's trade with Georgia reveal that (i) border crossing at Korpu could be time-consuming (waiting at queues takes 5 to 7 hours), and (ii) river-crossing at Baku seaport proves to be a major bottleneck, taking 36 hours in one record, to wait for ferries.

**Georgia's** location and modernized customs and trade facilitation practices stand to connect Central Asia to European markets. Innovations such as integration of border services, establishment of customs clearance zones, adoption of risk-based management, modernization of customs information systems, and adoption of a simplified transit regime prove beneficial in facilitating trade with its neighboring countries.

Accession to EAEU, Belt and Road Initiative, as well as the rapid modernization of Khorgos BCP provide much opportunity for **Kazakhstan's** transport industry. However, high railway cost continues to be a serious concern. The shortage of rolling stocks is also highlighted as a major cause of delay.

The roads of **Kyrgyz Republic** face rapid surface deterioration and contribute to low SWOD estimates due to under-maintenance, coupled with adverse weather conditions in winter and the mountainous terrain. Traders also experience volatile transport prices due to demand-supply imbalance during export season. Difficulty to export in EAEU due to restrictions in sanitary and phytosanitary measures is also prevalent.

Potential increase in trade volume may likely adversely affect time and cost performance of rail BCPs in **Mongolia**. In 2017, CPMM reveals that inbound traffic at Zamiin Uud (coming from Tianjin) takes more than a day to cross the border. Waiting due to shortage of wagons (averaged 18 hours), marshalling (10 hours), transfer of materials (7 hours), and technical inspection (5 hours) contribute to the delay at the border. The government recognizes the importance of Zamiin Uud and steps are taken to review its capacity and diversify to other routes such as subcorridor 4c (Bichigt-Zuun Khatavch).

**Pakistan's** BCPs with Afghanistan prove to be very time-consuming. Recorded delays at Chaman have reached 82 hours per truck in 2017 attributed mainly to delays in completing customs formalities and waiting in queues. The Torkham-Peshawar border faces several challenges as well, such as lack of cooperation mechanism, visa restrictions for drivers, and limited parking space for trucks at the Pakistan side. To resolve these issues would require bilateral cooperation from both border agencies.

Khorgos border between **PRC** and Kazakhstan serves as the trade channel between of PRC to Central Asia. The gateway serves a unique form of 'border trade' or 'tourist' trade', which is characterized by small volume, high frequency shipments and moves typically originates at Urumqi and ends in Almaty. Hence, the volume of traffic easily translated to relatively long Kazakhstan-bound border crossing duration with an average of 8.8 hours. Such delay, however,

is not due to capacity or equipment constraints but rather a regulatory and documentary problem.

Transit trade accounted for only 3.23% of traffic in **Tajikistan**. Its favorable location in Central Asia to facilitate transit goods from PRC and Central Asia to South Asia and Middle East is limited by the transport infrastructure and mountainous terrain. Moreover, the high volume of trade between the country and Afghanistan (via Nizhni Pianj) is expected to increase rapidly and benefits of trade could be magnified if bilateral border cooperation can be achieved. Customs Administrations of both countries agreed to discuss and implement TIR Green Lanes at the Nizhni Pianj-Shir Khan Bandar (TAJ-AFG) BCP to support efficient border crossing of goods from Kazakhstan and the Kyrgyz Republic bound for Kabul which operates under the TIR system.

**Turkmenistan** serves as an important transit country for Uzbekistan operators to move goods to and from Bandar Abbas seaport in Iran. Facilities along the border of its neighboring countries are well equipped to efficiently facilitate shipment of goods. At Farap BCP, CPMM estimates outbound border crossing average of 5.8 hours and 7.9 hours inbound. Half of these estimates are spent waiting in queues.

**Uzbekistan** is a double landlocked country which relies heavily on Kazakhstan and Turkmenistan to serve as transit countries to facilitate trade and access overseas markets. The country is also investing heavily in developing transport and logistic centers. Angren Logistics Center is one of the largest in Uzbekistan that is also designed to facilitate multimodal shipments to and from the Fergana Valley.

### Trade Facilitation Indicators

	Road Transport				Rail Transport			
	2015	2016	2017	2016-17 change	2015	2016	2017	2016-17 change
<b>TFI1</b> Time to Clear a BCP, in hours	9.3	11.3	16.7	48%	27.4	25.9	26.8	4%
<i>Without AFG and PAK borders</i>	4.3	4.5	4.5	0%				
<b>TFI2</b> Cost Incurred at BCP, in US\$	149	160	158	-2%	208	215	209	-3%
<b>TFI3</b> Cost Incurred to Travel a Corridor Section, in US\$, per 500km per 20 ton	1,341	1,174	947	-19%	1,250	966	975	1%
<b>TFI4</b> Speed to Travel on CAREC Corridors (SWD), in kph	23.2	22.3	22.2	-1%	14.0	14.3	14.8	3%
Speed without Delay (SWOD), in kph	40.2	41.7	45.0	8%	38.3	38.6	37.6	-3%