

USAID Trade Project

Logistics Report for CAREC – Corridors 5 & 6

USAID Trade Project

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List of Acronyms and Initialisms

ADB	Asian Development Bank
BCP	Border Crossing Point
BOT	Build Operate and Transfer
CAA	Civil Aviation Authority
CAREC	Central Asia Regional Economic Cooperation
CBC	Customs Bonded Carriers
CAR	Central Asian Republic
CBTA	Cross Border Transport of Persons Vehicles and Goods Agreement
CLBC	Customs Licensed Bonded Carriers
CMR	Convention on the Contract for the International Carriage of Goods by Road
CNIC	Computerized National Identification Card
COTIF	Convention concerning International Carriage by Rail
CPMM	Corridor Performance Measurement and Monitoring
ECO	Economic Cooperation Organization
EDB	Engineering Development Board
GoP	Government of Pakistan
HPH	Hutchison Port Holdings
HTS	Harmonized Tariff System
HWL	Hutchison Whampoa Limited
IWT	Inland Waterways Transportation
KICT	Karachi International Container Terminal
KM	Kilometer
KPT	Karachi Port Trust
MGC	Metallurgical Group Corporation (China)
NHA	National Highway Authority
NJC	National Joint Transport and Trade Facilitation Committee
NLC	National Logistic Cell
NTCIP	National Trade Corridor Improvement Programme
OTIF	Intergovernmental Organisation for International Carriage by Rail (French: <i>L'Organisation intergouvernementale pour les transports internationaux ferroviaires</i>)
PBS	Pakistan Bureau of Statistics
PIA	Pakistan International Airlines
PICT	Pakistan International Container Terminal
PKR	Pakistani Rupee
PNSC	Pakistan National Shipping Corporation
PQA	Port Qasim Authority
PR	Pakistan Railways
QICT	Qasim International Container Terminal
SAARC	South Asian Association of Regional Cooperation
TEU	Twenty-foot Equivalent Unit (a 20' container is 1 TEU; a 40' container is 2 TEUs, etc.)
TFI	Trade Facilitation Indicators
TFS	Trans Freight Station
TICRV	Customs Convention on the Temporary Importation of Commercial Road Vehicles

TIR	<i>Transports Internationaux Routiers</i> (French) for Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention 1975)
TTFS	Transport and Trade Facilitation Strategy
USAID	United States Agency for International Development
USD	United States Dollars
UNECE	United Nations Economic Commission for Europe
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
XUAR	Xinjiang Uygur Autonomous Region, China

Executive Summary

The main objective of this report is to examine how Pakistan's logistic sector is best able to integrate and promote regional as well as global trade with the Central Asia Regional Economic Cooperation (CAREC) member states. During the last six decades the development of seaports and airports in Pakistan has kept pace with most other developing countries, but further improvements are necessary to cope with the expanding traffic. Pakistan can provide the landlocked CAREC member states located on Corridors 5 and 6 (Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) the shortest distance to access the sea via ports at Karachi, Port Qasim and Gwadar. Air links between Pakistani and Central Asian cities would facilitate the carriage of high value goods and promote intra-regional contact and communication, including greater interaction among the respective business communities. Some of the development plans for upgrading and expansion are already underway, spearheaded by the private sector.

Within the borders of Pakistan more than 96% of the total freight tonnage (domestic, international and transit trade) is currently handled by road transport. The long-haul trucking fleet (currently estimated at approximately 235,000 vehicles) consists of often overloaded, outdated, and underpowered vehicles with poor safety standards. The long-haul trucking industry is driven by the private sector with a large number of small owners operating one or several trucks each. The majority of business transactions are handled by a large number of small private brokers located at the main commercial centers. By and large, the trucking industry is working in an undocumented business environment. In 2007 Pakistan prepared an ambitious Trucking Policy that encouraged the corporatization of the industry through fleet modernization and recommended streamlining the registration process, a periodic vehicle examination mechanism, and enforcement of safety measures; however, the policy has not yet been implemented. Pakistan's road freight sector will require a major overhaul to meet regional and international standards and provide an efficient and cost effective connectivity to Central Asia through Afghanistan. It is important to note that in Pakistan the vehicles are "right-hand drive" while in regional countries other than India vehicles are "left-hand drive".

The Government of Pakistan (GoP) is now planning to revitalize Pakistan Railways (PR), which during the last several years has been progressively downsized with regard to the transportation of freight. Linking Afghanistan and beyond to Central Asia by rail is presently not feasible as PR only has the capacity to operate on certain key passenger routes and to cater to priority oil cargoes and bulk agricultural products. Afghanistan has already embarked on the development of a railway network, but so far it is limited to about 75 kilometers (km) in the north of the country, linking Mazar-e-Sharif to Hairatan on the Afghan-Uzbek border. In February 2014, the governments of Pakistan and Afghanistan agreed to extend the rail link from Peshawar to Jalalabad in the north, and from Chaman to Kandahar in the south. These developments will take a few years to materialize after the mobilization of necessary resources.

Inland Waterways Transportation (IWT) has not played a role in Pakistan's logistics sector until now. The provincial government of Punjab is currently planning to introduce a pilot project in the upper reaches of the River Indus and the main canal network. The project will initially haul agricultural products, construction materials, and other bulk freight that are not time-sensitive. The eventual objective is to extend the IWT navigable network to the country's seaports to cater to international trade. This mode of transportation has a substantial economic benefit compared with road and rail transit, and the cost savings from fuel consumption alone are significant.

It is estimated that at present over 95% of Pakistan's international trade is sea borne, including trade with India which is mainly routed by sea via Karachi and Port Qasim (the exception is 137 items, at 8 Harmonized Tariff System (HTS) level, from India that are currently allowed to be imported into Pakistan through the Wagah-Attari land border station). Bilateral trade with Afghanistan, Pakistan's fourth largest trading partner, is currently handled at Torkham, Chaman, and Ghulam Khan Qila.

Similarly, a significant proportion of trade with Iran is overland; and there is some traffic moving on the Karakoram Highway between Pakistan and China.

Reliable access for the Central Asian Republics (CARs) to Pakistan's seaports is impeded by physical and non-physical barriers. Difficult mountainous terrain with poorly maintained road networks, bridges and tunnels; lack of transport support facilities en route; and outdated infrastructure at border crossings constitute some of the main physical barriers that have made trade and transportation difficult.

The non-physical barriers are also significant, and include legal, regulatory, administrative, documentary, and organizational impediments. The varied regulatory procedures and practices enforced by each country at their border crossings result in extended delays, thus adding to the logistic costs. According to the CAREC Corridor Performance Measurement Monitoring (CPMM) report for 2012¹, the main time-consuming activities at border crossings were security control, customs clearance, waiting in queues, and shifting cargoes from one transport to another.

Under the CAREC transport strategy plan, connectivity includes the different modes of transportation by road, rail, and inland waterways. Corridors 5 and 6² most directly relate to Pakistan and presently provide road links to the seaports of Karachi, Port Qasim and Gwadar. The Asian Development Bank (ADB) has initiated an assessment of infrastructure development at Torkham and Chaman. It is reported that funds have already been earmarked for these projects. The Trade Project is assisting the ADB with these initiatives by sharing research studies conducted in 2010 and 2011.

¹ CPMM (Corridor Performance Monitoring and Measurement) Annual Report 2012: Compiled and analyzed by CAREC Trade Facilitation Team of Asian Development Bank. For more information log on to CAREC Federation of Carrier and Forwarder Association (CFCFA) Website: <http://cfca.net/> and visit the CPMM page on <http://cfca.net/cpmm/>
National CFCFA members provide their respective data to ADB to prepare quarterly and annual reports.

² Corridor 5 (consisting of three branch routes) connects the Pakistani seaports at Karachi, Port Qasim and Gwadar with Afghanistan, Tajikistan, Kyrgyzstan and Western China. Corridor 6 (consisting of four branch routes) links the Pakistani ports with the Russian Federation passing through Kazakhstan, Uzbekistan, and Afghanistan. One branch route passes through Turkmenistan and Iran before entering Pakistan at the Chaman border.

Introduction

CAREC regional connectivity, which links the ten member states and provides them with access to additional countries, is channelled through six key road and rail corridors.³ Six of the ten CAREC member states (Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) compose a landlocked yet resource-rich region. These countries depend heavily on each other to access global markets. In order to improve connectivity within and among member states, and with the outside world, CAREC developed a ten-year Transport and Trade Facilitation Strategy (TTFS) covering the period 2007 to 2017. The objective of this strategy is to assess the economic needs of the region by examining past developments and the existing situation to identify trade opportunities and future challenges.

At the 12th Ministerial Conference at Astana, Kazakhstan on October 23-24, 2013, CAREC members agreed to establish closer integration within the region. The time frame for the refined TTFS was extended and renamed TTFS 2020. It was agreed to:

- i. Realign and extend the six CAREC transport corridors
- ii. Develop safe and people-friendly transport systems, and
- iii. Ensure efficient movement of goods and passengers⁴

Priority areas identified in the refined strategy include continued infrastructure development along the corridors while shifting the focus toward improvement of logistic services. Emphasis is also directed toward development of a rail network especially for long haul freight movements. Another important outcome from the refined strategy is increased awareness that, while it is in the best interest of the member states to promote greater intra-regional trade, the dominant share of trade expansion lies outside the CAREC region. It is therefore considered imperative to promote efficient and cost effective connectivity to seaports located at the end of each of the six corridors.

The corridors were extended and realigned to officially include Pakistan's road and rail networks in Corridor 5 – which was subdivided into 5a entering at the Torkham border crossing point, 5b traversing the Karakoram Highway, and 5c entering Pakistan via Chaman. Corridor 6 was realigned into four sub-routes with 6a, 6b and 6d crossing the Pak-Afghan border at Chaman; 6c enters Pakistan at Torkham. Sub-corridor 6b branches off to Iran before re-entering Afghanistan and 6d also connects Turkmenistan and Iran before entering Afghanistan (see maps in **Annexes A and B**).

With a view to assessing the present performance of transportation on each of the six corridors, and to assist decision-makers in formulating policies by introducing corrective measures to address identified impediments, the CPMM report was started by CAREC in 2009. Since its inauguration, the CPMM has compiled monthly statistics relating to time and cost at different segments on each of the six corridors. In each of the CAREC member countries the national trade and transport associations provide the relevant information. The four high-level Trade Facilitation Indicators (TFI) used to monitor the impact on traffic are:

- Time taken to cross a Border Crossing Point (BCP)
- Cost incurred at BCPs (in USD)
- Cost incurred (in USD) for transporting 20 tons of cargo per 500 km
- Travel speed in kilometers per hour

According to the latest CPMM annual report (2012) the relevant features relating to Corridor 5 and 6 are highlighted below. These assessments relate to the consolidated performance for each of the two

³ The six Corridors are 1: Europe-East Asia 2: Mediterranean-East Asia 3: Russian Federation-Middle East & South Asia 4: Russian Federation-East Asia 5: East Asia-Middle East & South Asia 6: Europe-Middle East & South Asia (the latter two connect the seaports of Pakistan).

corridors but do not reflect the Pakistani segment of the road network due to the negligible volume of traffic with Central Asia.

Corridor 5 has been extended and realigned⁵ to provide access to East Asia (the western region of Xinjiang Uygur Autonomous Region, or XUAR, China) through Central Asia to the Arabian Sea. The earlier alignment of this Corridor terminated at Torkham BCP but has recently been extended to Karachi. In addition, it now has three sub-links, namely 5a (entering Pakistan at the Torkham BCP), 5b (direct from China through the Karakoram Highway via Sust BCP to Karachi) and 5c (entering at the Chaman BCP). This is primarily a road-only corridor because the Chinese railways terminate in the southern part of XUAR, and Afghanistan's rail network is in development. This route stretches over 3,700 km of roads originating in western China and passing through Kyrgyzstan, Tajikistan, and Afghanistan, finally ending at the Pakistani seaports. Within this corridor there are two disconnected rail networks totaling about 2,000 km. The first is within two Central Asian states and the second within Pakistan (see **Annex A**).

Corridor 5 has the potential to provide the shortest distance to the Arabian Sea for the CARs; however, current traffic does not use this route and is restricted within the landlocked region where the average time to cross borders increased from 6.8 hours in 2011 to 8.3 hours in 2012. This is the most expensive of the six corridors with regard to operating costs and expenses incurred at BCPs, although there was a marginal decrease in cost during 2012 compared to the previous year. The mountainous terrain, comparatively poor road connections, and inefficient processes at the border crossings (see **Table 1**) contribute to the high costs. The average travel speed with delays en route decreased from 19.4 km per hour to 17.3 km per hour during the same period.⁶

Corridor 6 was originally subdivided into three sub-corridors (6a, 6b and 6c) but with its extension and realignment in October 2013, a fourth sub-corridor (6d) was added to link Europe with the Middle East and South Asia. Certain sections are also linked with other corridors and compose a road network of 10,600 km and a rail network of 7,200 km. Corridors 6a, 6b, and 6d connect the Russian Federation with the deep water port at Gwadar via the Chaman BCP and 6c crosses through the Torkham BCP to link with Karachi / Port Qasim (see **Annex B**).



Kyrgyzstan - Road condition South of Naryn



Kyrgyzstan / Uzbekistan – Border Post

⁵ Confirmed at the 12th Ministerial Conference at Astana, Kazakhstan on October 23-24, 2013

⁶ Central Asia Regional Economic Cooperation Trade Facilitation. 2012. "CAREC – Corridor Performance Measurement and Monitoring Annual Report 2012." <http://www.carecprogram.org/uploads/docs/CAREC-CPMM-Reports/1-CAREC-CPMM-Annual-Report-2012.pdf> (accessed May 20, 2014)



Tajikistan - Most trucks on Pamir Highway are Chinese



Afghanistan - Containers moving from Jalalabad to Kabul



Pakistan – Khyber Pass en route to Torkham



Near Pak-China Border – Karakoram Highway

What's Holding Up the Traffic?

An Overview

- By international standards, the average time needed to clear BCPs along CAREC corridors is long
- By international standards, the average cost of clearing BCPs is also expensive
- These problems indicate that further transport facilitation is necessary
- Customs clearance, queuing, and transshipment are major wastes of time and money
- Implementation of agreements is hindered by the need for multilevel, inter-governmental cooperation involving many departments
- Border crossing procedures must be simplified and regulations harmonized
- Alternative business models should be explored and the development of the private sector supported
- A risk-based approach to customs clearance would save time
- The private sector should play an important role in transport facilitation by participating in national strategy plans and infrastructure development

Trade Project summary, based on information from CAREC – Transport & Trade Facilitation Strategy 2020

According to the CPMM, average time to cross BCPs along Corridor 6 increased from 5.6 hours in 2011 to 7.5 hours in 2012⁷, while the average costs incurred at the border crossings showed a substantial decrease of 40%. The time taken at BCPs overall for Corridor 6 is shorter and costs less when compared to the other corridors. During 2012 the average speed for trucks with delays was 28 km per hour. In the central region border crossings at Tazhen (Kazakhstan) and Dautota (Uzbekistan) time to cross was reported to be an average of 19.3 hours and 15.7 hours, respectively. One of the main reasons for these lengthy delays is the poor design of the BCPs wherein commercial freight trucks and passenger buses and vehicles use a common entry/exit facility.

⁷ Central Asia Regional Economic Cooperation Trade Facilitation. 2012. "CAREC – Corridor Performance Measurement and Monitoring Annual Report 2012." <http://www.carecprogram.org/uploads/docs/CAREC-CPMM-Reports/1-CAREC-CPMM-Annual-Report-2012.pdf> (accessed May 20, 2014)

The CPMM data compiled over a period of four years (2009-2012) for all six corridors has identified certain trends that are relevant to this report. Even though some performance indicators have shown improvements compared to previous years, they remain high when compared with international benchmarks.⁸ It has been established that the longest delays occur at BCPs, and these have been classified under time and cost, which are recorded in **Table 1**:

Table 1 – Main Time and Cost Activities at BCPs

Time-Related Activities		Cost-Related Activities	
Frequency of Procedural/Operational Activity Encountered	Time-Consuming Activities Encountered	Frequency of Procedural/Operational Activity Encountered	Costly Activities Encountered
Border Security/Control	Waiting in queue	Border Security/Control	Customs clearance
Customs clearance	Loading/unloading	Customs clearance	Escort/convoy
Waiting in queue	Customs clearance	Health/phytosanitary	Emergency repair
Phytosanitary inspection	Emergency repair	Vehicle registration	
Health/quarantine	Escort/convoy	Transport inspection	

Trade Project Summary, based on information from CAREC – CPMM 2012 Annual Report

While non-physical barriers have a major role in determining the performance of logistics services in CAREC trade corridors, it is important to realize that physical barriers also have an adverse effect on the movement of passengers and freight, dependent on the geographical terrain. This is especially true in the Central Asian region, where Corridors 5 and 6 (and their sub-links) traverse mountainous terrain and winding stretches of road that are narrow, unpaved, and in disrepair.

The revised TTFS 2020 has assessed the performance during initial years of the program and has identified certain trends that are relevant for decision-makers of each member state. These trends include⁹:

- a) Physical infrastructure projects are easier to implement than “soft” facilitation measures, especially relating to border management and regulatory controls.
- b) While legal, procedural, institutional, and technological improvements have been initiated throughout the region, their impact is still limited. Greater coordination between Customs Authorities and other border control agencies within each country as well as with their counterparts across the border is imperative.
- c) Trade facilitation measures are multidimensional and complex. Stakeholders must be persistent in efforts to implement policy, systems, and institutional changes.
- d) A long-term commitment is required at the national level to bring about positive institutional changes. National joint transport and trade facilitation committees (NJC) are critical for effective coordination and implementation.
- e) Trade outside the CAREC region has not yet reached full potential mainly due to a lack of commitment to develop long distance freight movements. Rail freight has been identified as a

⁸ Corridor-Based Transport Facilitation Arrangements in the CAREC region (2012), Edited by Ronald Antonio, Q. Butiong & Muriel Ordonez

⁹ Asian Development Bank. 2014. “CAREC – Transport and Trade Facilitation Strategy 2020.” *12th Ministerial Conference on Central Asia Regional Economic Cooperation (23–24 October 2013, Astana, Kazakhstan)*
<http://www.carecprogram.org/uploads/docs/CAREC-Publications/CAREC-Transport-TradeFacilitation-Strategy.pdf>
 (accessed May 20, 2014)

more efficient competitive transportation method, therefore, focus is being directed on upgrading and developing rail services.

- f) There has been greater focus on the development of physical infrastructure (e.g., road, rail, bridges, terminals, border posts) while heightened attention should also be paid to improving associated logistics services.
- g) Attention is needed to maintain a sustainable road network with each country prioritizing, selecting, and scheduling construction and maintenance while ensuring that adequate funding is provided to undertake these projects in a timely manner.
- h) A systematic human resource program to develop relevant skills should be in place to effectively implement the different projects.
- i) The monitoring mechanism has shortcomings related to objective assessment, including absence of accurate and timely data, particularly on trade and traffic; absence of baseline data; and no proper linkages to assess impact from changes achieved under the TTFS outputs.
- j) The private sector played an insignificant role in implementing TTFS. This was mainly due to the inexperience of public sector entities and insufficient risk assessment by the private sector. For the long term success of the CAREC program it is important that the private sector participate in the development of projects and managing services.

Two other problems have emerged: (i) visas for certain nationals (e.g., Afghan drivers are not readily issued visas to transit Kyrgyzstan), and (ii) the subject of unofficial payments is often raised in CAREC meetings but has not been effectively addressed due to its sensitive and secretive nature.

Overview of the Logistics System

This section examines the movement of surface freight using road and rail transport within Pakistan, as well as the port sector that could provide CAREC member states access to the seaports of Pakistan. A brief summary of air links between Pakistani and Central Asian cities is also included. The TTFS also addresses IWT wherever these are available to supplement logistics. Despite having a network of rivers and canals, IWT has so far not played a significant role in Pakistan's transport sector. The provincial government of the Punjab is planning to start a pilot program to develop IWT for the domestic movement of commodities involving large tonnages (agricultural products including grains and fertilizer, cement, and others including gravel and crush) that are not time-sensitive.

The main objective of this study is to examine how Pakistan's logistic services can best integrate and promote regional as well as global trade. Recommendations that follow will also be relevant for improving trade links with Pakistan's other neighbors in the South Asian Association of Regional Cooperation (SAARC) and the Economic Cooperation Organization (ECO).

The pace of change in Pakistan's transport environment has been slow compared to its key trading partners. The trend in a number of successful trading economies has been to consolidate the complex multimodal transport industry under a single policy entity, such as a Ministry of Transport. This entity implements policy changes to support different modes of transport, which complement one another through a seamless interchange process.

An important strategy to ensure the success of this integrated approach has been to encourage the private sector to invest in the transportation industry. With focused initiatives introduced by the government, the private sector has stepped in to provide the varied services that compose the logistic

sector. This, in turn, has streamlined management and operational capacity in the wide range of sub-sectors by improving the quality of their respective services. In Pakistan the quality of service in the transport industry is varied. The port sector is a good example of promoting private investment to take the lead in implementing projects on a 'build, operate and transfer' (BOT) basis, producing positive results. During the last two decades the ports in Pakistan have become comparable to any modern port of equivalent size. The road and rail sectors have not fared as well, nor has the aviation industry facilitated connectivity with the Central Asian region.

In September 2013, the GoP announced a strategic policy shift to de-nationalize 31 major state owned entities. All seven of the leading public sector organizations in the transport and logistic sector are included: 1) Pakistan Railways (PR), 2) Pakistan International Airlines (PIA), 3) Pakistan National Shipping Corporation (PNSC), 4) Karachi Port Trust (KPT), 5) Port Qasim Authority (PQA), 6) National Highway Authority (NHA) and 7) Civil Aviation Authority (CAA). By selling 26% shares of each of these state-owned entities, thereby introducing private sector management, it is envisaged that these organizations will once again play a positive role in revitalizing Pakistan's economic structure. An 18-month timeframe has been indicated to complete the first phase of de-nationalization.

Road Sector

Long haul road freight operations in Pakistan are predominately handled by the private sector; a large number of owners have a single vehicle and a small percentage have several units. There are no large fleet owners other than the state-owned National Logistic Cell (NLC). The long-haul trucking sector is mainly composed of old and underpowered two and three axle rigid trucks with newer, but also underpowered, tractor trailers (articulated vehicles) being added. These units have engine technology that is over 40 years old and does not meet current fuel efficiency and environmental standards.

In 2012 Pakistan's registered long-haul fleet was estimated to be approximately 235,000¹⁰ rigid and articulated vehicles. According to data compiled by the Pakistan Bureau of Statistics (PBS) the annual addition to this freight fleet from domestic assembly plants and from imports has been on the decline during the last six years (see **Table 2**). From July 2012 to March 2013 Pakistan's trucking fleet of 235,000 added less than one percent (0.85%) new vehicles (2,005), with about two-thirds (1,380) produced domestically and about one-third (625) imported. By comparison, during 2007-2008 new vehicles (7,402) were 3.15% of the fleet. New domestically produced trucks (4,993) accounted for 2.12% of the fleet and new imported trucks (2,409) made up 1% of the fleet.

Table 2 – Annual Addition to Pakistan's Freight Truck Fleet

	FY 2007-2008	FY 2008-2009	FY 2009-2010	FY 2010-2011	FY 2011-2012	2012-2013 (July-Mar)
Production (by domestic assembly plants)	4,993	3,135	3,425	2,810	2,597	1,380
Imports – (trucks and prime movers / tractors for hauling trailers)	2,409	2,149	2,154	1,345	767	625
Total	7,402	5,284	5,579	4,155	3,364	2,005
<i>Source: Pakistan Bureau of Statistics</i>						

With a majority of the truck fleet owned by single owners the operational aspects for the business are by and large left to the driver (who in some cases may also be the owner). Securing cargo and carrying out regular maintenance, as well as collecting money for each trip, is also undertaken by the driver, who normally settles accounts with the owner after each round trip. A large number of small,

¹⁰Pakistan Bureau of Statistics (PBS). 2013. "Economic Survey of Pakistan 2013." http://finance.gov.pk/survey_1213.html (accessed May 18, 2014)

independent freight brokers operating at commercial centers provide the link between the customer and the trucker. They negotiate the rates with the customers -- who may be clearing and freight forwarding agents, shipping lines, government-owned corporations, or private traders/manufacturers. The independent freight broker usually operates with a number of associates who are also independent freight brokers in their respective commercial centers. Within this system there are a few road freight companies with a self-owned fleet of trucks that are operated within the network of branch offices at strategic locations. Invariably, these owned fleets are unable to meet demand, and additional vehicles available at the truck "addas" (stations/terminals) located at commercial centers are hired on a daily basis to supplement the fleet.

There are two types of road freight within Pakistan: "bonded" and "non-bonded". Transportation of goods under "bond" represents all movements under the control of customs and requires further clearance at designated customs stations throughout Pakistan, including seaports, airports, dry-ports or land border crossings. Goods moving within the country as domestic trade are termed "non-bonded" traffic, and freight charges are less than for "bonded" goods.

Customs Licensed Bonded Carriers (CLBC) must meet certain basic requirements before they are allowed by Pakistan Customs to carry "bonded" goods. Besides meeting basic criteria for a registered Pakistani business entity, the private CLBCs are required to own or control (under a long-term lease agreement) a minimum of 25 vehicles that are registered as "bonded" carriers. In addition, a security deposit of Pakistani Rupee (PKR) 5 million must be furnished to customs authorities before these CLBCs are permitted to transport goods between the seaports/airports and the network of dry-ports located throughout Pakistan.

Until 2011 the NLC - a government-controlled logistics company - was the only entity allowed to carry Afghan transit trade through Pakistan by road. On March 17, 2011 the GoP allowed other logistics companies licensed as Customs Bonded Carriers to service Afghanistan transit trade. A security deposit of PKR 15 million, in addition to the initial PKR 5 million paid to customs for becoming a national "bonded" carrier, is required for a CLBC to be eligible to service Afghan transit trade.

Key Issues

The Engineering Development Board (EDB), a department under the Ministry of Industries and Production, was tasked to develop the "Trucking Policy" for the modernization of the industry under the National Trade Corridor Improvement Programme (NTCIP). The objective of NTCIP is to develop the transport industry covering all modes of carriage – road, rail, sea, and air – with a view to increasing Pakistan's competitiveness through greater logistic links within national boundaries, the region, and beyond.

In consultation with the public and private sectors a comprehensive report on the road freight industry was prepared by the EDB in November 2007; implementation of the study was kept on hold due to the change in Pakistan's government in 2008. Recommendations in the report clearly indicate that while the Pakistani transportation sector has been allowed to grow mainly through private investment, there has been no sustainable policy to keep pace with global changes in logistics. Global advancements include the use of more fuel-efficient, environmentally-friendly technology and additional safety features, as rigid chassis vehicles were replaced with more powerful articulated tractor-trailers capable of carrying 20' and 40' standard containers. The absence of a dedicated policy to implement these changes has now placed additional competitive pressure on Pakistan's long-haul road freight industry.

A coordinated and collective approach is required to address key issues relating to Pakistan's long-haul road freight industry. This strategy will require a combined effort within the various federal and provincial government departments, and private sector technical and regulatory support for these

departments. Ownership and management of the trucking business should remain in private sector hands, but with focused government regulations and incentives.

The concept of combining public and private sector activities has been successfully adopted in a number of developed countries, including the European Union and the United States. It is imperative to revitalize rail service with a parallel urgent need to address key issues related to long distance road freight, which are identified in the “Trucking Policy for the Modernization of the Trucking Sector in Pakistan, under the National Trade Corridor Improvement Programme” finalized in 2007.

The Trucking Policy highlights the following basic needs:

- **Harmonizing Vehicle Registration** – Registration of vehicles is the responsibility of each province and they have developed their own automated systems. It is essential that these systems and procedures be harmonized and related documents standardized.
- **Developing a Central Motor Vehicle Repository** – In order to perform effective administrative control of traffic management, traffic violations, and to address security concerns it is imperative that provincial databases be available in a central repository that is readily accessible to relevant government regulatory departments, including police and security agencies.
- **Enforcing Periodic Motor Vehicle Examination** – Periodic vehicle examination is a mandatory requirement, especially for commercial motor transport, but is not being enforced due to inadequate capacity of relevant provincial departments. Authorized private auto workshops could be licensed, as is the case in many countries, to undertake this activity through a regulated process. Proper implementation of this system would address the issue of unauthorized vehicle modification that undermines performance and safety features.
- **Streamlining Driver Training and Licensing** – Similar to vehicle registration, the training of commercial drivers and their licensing should be enforced in a more effective manner. Linking the Computerized National Identity Card (CNIC) data and provincial driver licensing department data would enhance the capacity to control and trace traffic violators.
- **Regulating Unauthorized Vehicle Modification and Trailer Manufacturing** – The widespread practice of modifying commercial freight vehicles at unauthorized auto workshops is a major issue in the trucking industry and directly affects performance and safety. Two types of modification are routinely undertaken as soon as a vehicle is earmarked for the hauling of freight -- strengthening the chassis and strengthening the suspension. These modifications allow vehicles to carry loads in excess of the permissible capacity. At times a ridge truck is also modified by affixing a fifth wheel that allows an articulated long trailer to be attached to the towing unit. These vehicle modifications lead to overloading, which in turn causes damage to the network of roads. Modifications by unlicensed workshops also undermine safety features of the vehicle. To address this widespread problem the following changes need to be implemented:
 - Establish national standards and specifications for trucks and trailers
 - Streamline trailer manufacturing and registration process
 - Establish industrial estates for fabricating trucks and bus body makers to meet safety specifications
- **Addressing the Issue of Outdated Vehicle Technology** – The availability of long haul articulated vehicles capable of carrying 40-foot containers is limited. The fleet may be increased either by the addition of new units assembled at local plants or by importing trucks

that meet the standard specifications. The present truck assembly plants are still producing units with outdated technology over 40 years old. These units are underpowered to carry heavy containers. On the other hand, the tariffs and taxes¹¹ (totaling 84.3%) for imported vehicles are not conducive to attract private sector investment. Importing vehicles for the carriage of freight is permissible only if the importer is an “industrial concern”. To provide an incentive for truck operators to modernize and increase the fleet the current import tariff must be reduced or eliminated and the “industrial” restriction withdrawn. Simultaneously, domestic truck assembly plants must begin to import and market modern articulated long-haul vehicles (with trailers) that are fuel efficient and meet the basic safety and environmental standards of neighboring countries.

- **Corporatization of the Industry** – Corporatization has been encouraged by the Pakistani government since transportation was declared an industry in January 2008. Similar to other industries, financial support for the trucking sector is now available from financial institutions; however, the trucking sector is currently operated predominantly by the informal private sector that operates under a sole proprietorship model. This sector is often averse to leverage as lack of managerial systems tend to render these organizations “high-risk” from a lending perspective, and thus increase the cost of debt. Funding from the formal financial sector would become available to corporate trucking companies at competitive rates -- for capital investment to modernize the fleet and as working capital for fleet operation. Further benefits derived from corporatization would include the following: insurance companies would be encouraged to provide suitable coverage to the trucking sector, tax incentives for the sector would become easier to achieve, utilities would be made available at industrial rates instead of commercial rates, and foreign operators would be encouraged to invest in formal fleet operations.
- **Axle Load Management** – This is an important policy element to limit a major cause of damage to the road surface. The need to enforce axle load limits is also necessary for transportation of goods across borders because axle loads are strictly enforced in regional countries, including Afghanistan.
- **Trans Freight Stations and Modern Cargo Handling Facilities** – Construction of cargo distribution hubs at key commercial centers can provide an important link in an efficient supply chain. These cargo hubs must have adequate warehousing facilities as well as temperature-controlled storage. Other support facilities would add value to these Trans Freight Stations (TFS) including auto part outlets, maintenance and repair workshops, boarding and lodging facilities, and medical provisions.

For Pakistan’s trucking industry to become a regional player it must conform to international commercial practices and accede to international road conventions. The international road agreements and conventions recommended by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) Resolution 48/11 for the road freight sector appear under **Annex E**.

Railways

In the foreseeable future connectivity between landlocked CAREC member states to the seaports in Pakistan will rely primarily on the road sector while a railway network continues to evolve in Afghanistan and be revived in Pakistan. Afghanistan currently has a very limited rail service in the

¹¹ The current tariff rate (2013-2014) for imported vehicle chassis for carrying freight is: Import duty 50% + Sales Tax 17% + Withholding Income Tax (WIT) 5% -- the accumulative percentage works out to 84.3% (i.e., Sales Tax is calculated on the duty paid value while WIT is based on duty and Sales Tax paid value). A further restriction in the Customs tariff states that only industrial concerns are allowed to import freight carrying vehicles.

north of the country - between Mazar-i-Sharif in Afghanistan and Uzbekistan. The Afghan government expects to have the line extended to Kabul and then to the eastern border town of Torkham, connecting with Pakistan Railways. The survey for the feasibility of this project is carried out by the China Metallurgical Group Corporation (MGC) and is expected to be completed during 2014. Another 330 km railway project between Mazar-i-Sharif and Turkmenistan was launched in June 2013, and India is finalizing a plan to support construction of a 900 km railway line connecting the Chabahar port in Iran to the mineral-rich Hajigak region of central Afghanistan.

In recent years, the rail service in Pakistan has been relegated to an insignificant position, especially for the carriage of freight. This decline in the performance of Pakistan Railways has affected domestic, international, and transit trade. The GoP has indicated a strong commitment to revitalizing rail services with greater emphasis on transportation of freight, as it has a better rate of return compared to passenger services. Improvements in the rail network, however, are expected to take several years. In addition to bringing new locomotives to the depleted fleet the restructuring program will include deregulation of certain operations to allow independent private investors to market, manage, and operate rolling stock, including privately-owned locomotives. Under these arrangements private operators will pay “track access charges” to use the state-owned and maintained infrastructure. It is reported that revenue generated from the “Track Access Policy” (announced in 2011) would be used for further development and maintenance of the rail network (e.g., track, signalling, communication, etc.). As of May 2014, negotiations are taking place with three organizations -- two private investors and the state-owned NLC -- to operate trains in addition to the truck fleet.

Linking CAREC member states within Corridors 5 and 6 by rail will take longer, as this is heavily dependent on how soon Afghanistan will be able to develop a railway network. The first railway track covering a distance of 75 km between Mazar-e Sharif and the Uzbek border crossing at Hairatan was completed in 2010. Extensions to this initial railway network are expected in the future. Pakistan Railways has undertaken the survey for the extension of the rail link from the Pakistani border crossing at Chaman to Kandahar, but due to shortage of funds and lack of political initiative within both countries, this project has remained on hold. A similar extension of the railway link from Landi Kotal near the Torkham border crossing to Jalalabad was also under consideration, and mutually agreed to by both countries in February 2014. In addition, China has indicated an interest in financing and constructing a rail link connecting the western province of Xinjiang with the new deep water port at Gwadar. This port was contracted by the GoP in February 2013 to the state-owned China Overseas Port Holding Company to manage and operate. Even if these strategic policy decisions are duly implemented it will still take several years for the rail sector to have a positive impact on Pakistan's economy.

An efficient rail service supplemented by an effective road freight operation within Pakistan is an ideal combination to facilitate domestic, international, and transit trade. Both of these logistics industry sub-sectors would complement each other to further the concepts of “door to door” and “just in time” deliveries.

The need for a uniform legal regime that applies to the movement of passengers and freight in an international scenario was initially developed in Europe, where traffic by rail was considered necessary to facilitate trade. The international movement of trains across multiple borders made it necessary to have a seamless system of common rules and operational protocols. The Intergovernmental Organisation for International Carriage by Rail (OTIF) was established May 1, 1985 in Europe. Prior to OTIF the Central Office for International Carriage by Rail, adopted in 1893, was the guiding entity for the carriage of passengers and freight within Europe. The Convention concerning International Carriage by Rail (COTIF), a treaty under the European Union, was signed in 1980 with its Protocol (Vilnius Protocol) for the modification of COTIF signed on June 3, 1999 -- and coming into

force in 2006. The objective of the governmental organization OTIF is to develop a uniform system of laws that apply to international rail transport of passengers and freight.

Pakistan acceded to the Convention concerning International Carriage by Rail (COTIF) on September 1, 2013. The supplemental protocols and uniform rules of COTIF dealing with specific aspects of transportation by rail are listed below:

- Protocol on the Privileges and Immunities of the Intergovernmental Organization for International Carriage by Rail
- Uniform Rules concerning the Contract of International Carriage of Passengers by Rail
- Uniform Rules Concerning the Contract of International Carriage of Goods by Rail
- Regulation concerning the International Carriage of Dangerous Goods by Rail
- Uniform Rules concerning Contracts of Use of Vehicles in International Rail Traffic
- Uniform Rules concerning the Contract of Use of Infrastructure in International Rail Traffic
- Uniform Rules concerning the Validation of Technical Standards and the Adoption of Uniform Technical Prescriptions applicable to Railway Material intended to be used in International Traffic
- Uniform Rules concerning the Technical Admission of Railway Material used in International Traffic

Pakistan will therefore have to implement these international conventions and their protocols covering the carriage of passengers, freight, and special cargoes. Pakistan currently is not operating regular train services outside the country, other than the Gul Train through Iran to Istanbul, Turkey, which averages one or two trains per year. The Pak-India rail service is under a separate bilateral agreement. It is therefore important that by the time Pakistan Railways is revitalized and the rail link with Afghanistan and beyond to Central Asia is established, rail protocols should be operational. The movement of Pakistan Railways rolling stock will, however, be restricted to operate within the broad gauge (1,676 mm) network, which extends to the Indian railway system and to Zahidan in Iran. The Iranian and Turkish rail network runs on the standard gauge (1,435 mm). In 2010 Afghanistan adopted the standard gauge and constructed the 75km Hairatan to Mazar-e-Sharif link. It is therefore assumed that further expansion of the rail network in Afghanistan will also be standard gauge. Another impediment to regional railway network connectivity will be the Russian gauge (1,520 mm), which is operational in Central Asia. The transfer of passengers/goods/containers from any of the three rail gauges will be an issue that will have to be addressed and resolved in the future.

Air Service

Soon after the Central Asian states gained independence from the Union of Soviet Socialist Republics in 1991, direct passenger flights from Pakistan to Uzbekistan, Tajikistan, Azerbaijan, Turkmenistan and Kyrgyzstan were introduced by PIA. These flights carried a limited volume of air freight as well. Chartered flights were also arranged periodically by certain commercial enterprises to bring passengers from the CARs to Pakistan for shopping and to return with consumer products from Pakistan.

These flights continued until a restrictive visa regime imposed at both ends caused a decline in the volume of passengers traveling on business or as tourists. The services were gradually reduced until PIA stopped Central Asian operations altogether in 1998. For a number of years Uzbekistan Airlines was the only operator with a direct flight between Pakistan and Central Asia - a weekly flight between Tashkent and Lahore - but this service was discontinued in early 2014. Presently, flights to Central Asian destinations are routed via the Gulf, resulting in extended travel and waiting time at airports as well as higher airfares.

To integrate CAREC member states into a closer-knit community it will be necessary to introduce a rational visa regime to facilitate the movement of businessmen as well as tourists between Pakistan and the Central Asian region.

Seaports

About 95% of Pakistan’s international trade is sea borne with most handled at the Karachi Port and Port Qasim. During 2012-2013 Karachi Port handled approximately 26 million tons of cargo, which included 14 million tons of liquid, 12 million tons of dry cargo, and 1.25 million TEUs (twenty-foot equivalent units). Karachi International Container Terminal (KICT) and Pakistan International Container Terminal (PICT), owned by ICTSI Mauritius Limited (the terminals were owned by the Pakistani Marine Group of Companies prior to April 2012) are two private dedicated modern facilities at KPT.

During 2012-2013, Port Qasim, which is located about 50 km south of Karachi, handled approximately 25 million tons that included 8 million of liquid bulk and 17 million tons of dry cargo, and 722,000 TEUs.¹² Qasim International Container Terminal (QICT) owned by Dubai World Port is a private facility located at PQA. QICT’s second terminal came into operation in November 2010.

The terminals at Karachi and Port Qasim were established on a BOT basis and their ship-to-shore performance is comparable to any efficient port in this region. Both ports are, however, restricted to a draft of 11 meters although there are plans for extensive dredging to increase it to 14 meters. This will allow third generation container vessels (“mother vessels”) currently operating on the main ocean routes to directly dock at Pakistani ports. This transport step is presently being served by smaller feeder vessels moving cargo from the ships anchored in deeper water to the docks, and adds at least an additional week to the transit time. Containers to and from Pakistan are currently transferred to “mother vessels” at the regional deep water transshipment hubs at Shalala (Oman), Khorfakkan (Sharjah), or Dubai.

The KICT owned by Hutchison Port Holdings (HPH), a subsidiary of the multinational conglomerate Hutchison Whampoa Limited (HWL) of Hong Kong, is building a new container terminal at the entrance of Karachi harbor with a 1,500 meter berth that will be able to handle 1.5 million TEUs per annum. This new terminal is expected to become operational by early 2015 and will have a draft of 14 meters that will be increased in stages to 16 meters.



Terminal 1 & 2 of QICT at Port Qasim



PICT at Karachi (East Wharf)

The new deep sea port at Gwadar can presently accommodate larger vessels drawing a draft of up to 14 meters, with plans under consideration to increase the draft to 16 meters. Gwadar is now operated by the state-owned China Overseas Port Holding Company and is currently handling a small volume

¹² Declared port statistics (obtained by the Trade Project)

of public sector bulk cargo. Gwadar has not yet reached full potential due to the absence of inland road and rail links. The coastal highway between Gwadar and Karachi is presently operational but the more important connection to the country's inland road network may take another few years to complete. Construction of the Gwadar to Quetta rail link is planned, but so far there are no indications as to when this work will begin. As mentioned earlier in this report, China has also committed to construct a rail link from western China to Gwadar. Gwadar has the potential to become a major gateway for Western China, Afghanistan and the Central Asian region as it will provide these regions with the shortest access to the sea once the road and rail links are built.

Global trade has been shifting to containerization with more cargoes transported in standard 20' and 40' units, resulting in the logistic industry's growth in the multimodal handling of containers. **Table 3** summarizes the number of containers handled at Pakistani terminals covering imports and exports, as well as the movement of empty units.

Table 3 – Pakistan's Container Traffic (TEUs)

Year 2012 (Jan – Dec)	KICT	PICT	KPT	QICT	Total (All Terminals)
Import Full	424,785	272,202	3,933	303,725	1,004,645
Import Empty	8,560	29,333	9,798	52,024	99,715
Export Full	251,044	200,591	11,502	315,548	778,685
Export Empty	170,968	81,867	1,099	33,793	287,727
Total	855,357	583,993	26,332	705,090	2,170,772
Percentage	39%	27%	1%	32%	

Source: Port figures obtained by the Trade Project

In addition to dedicated container berths the private sector has also been allowed to construct, on a BOT basis, other specialized berths to handle dry bulk and liquid bulk cargoes. These private facilities supplement similar facilities still operated by state-owned port authorities.

The success stories at Karachi Port and Port Qasim are mainly due to investment from the private sector (national and international). The government's "landlord" policy of withdrawing from operational activities and allowing private investors to establish specialized terminals on a BOT basis to handle containers and dry and liquid bulk cargoes has resulted in positive dividends to Pakistan's trade environment, and should also be encouraged in the rail and road sectors.

Conclusion

To enhance regional connectivity with CAREC member countries, Pakistan must improve its infrastructure and regulatory framework. Since almost all freight is currently carried by road through long-haul trucks, the immediate requirement is to modernize and improve the trucking fleet to international specifications. Implementing the Trucking Policy that was finalized in 2007 and is pending implementation would go a long way toward achieving this objective.

At the same time acceding to the Customs Convention on the International Transport of Goods Under Cover of TIR Carnets (TIR Convention 1975) would be a major boost for facilitating movement of trucks and containers. TIR accession would eliminate frequent inspection of goods at each border crossing and would also provide a secure means for transporting goods.

Full accession to the Cross Border Transport of Persons, Vehicles and Goods (CBTA) Agreement, a transit facilitation accord among Kyrgyzstan, Tajikistan, and Afghanistan to facilitate movement of people, goods, and vehicles, would support Pakistan's connectivity with these countries. Pakistan has joined the CBTA as an observer.

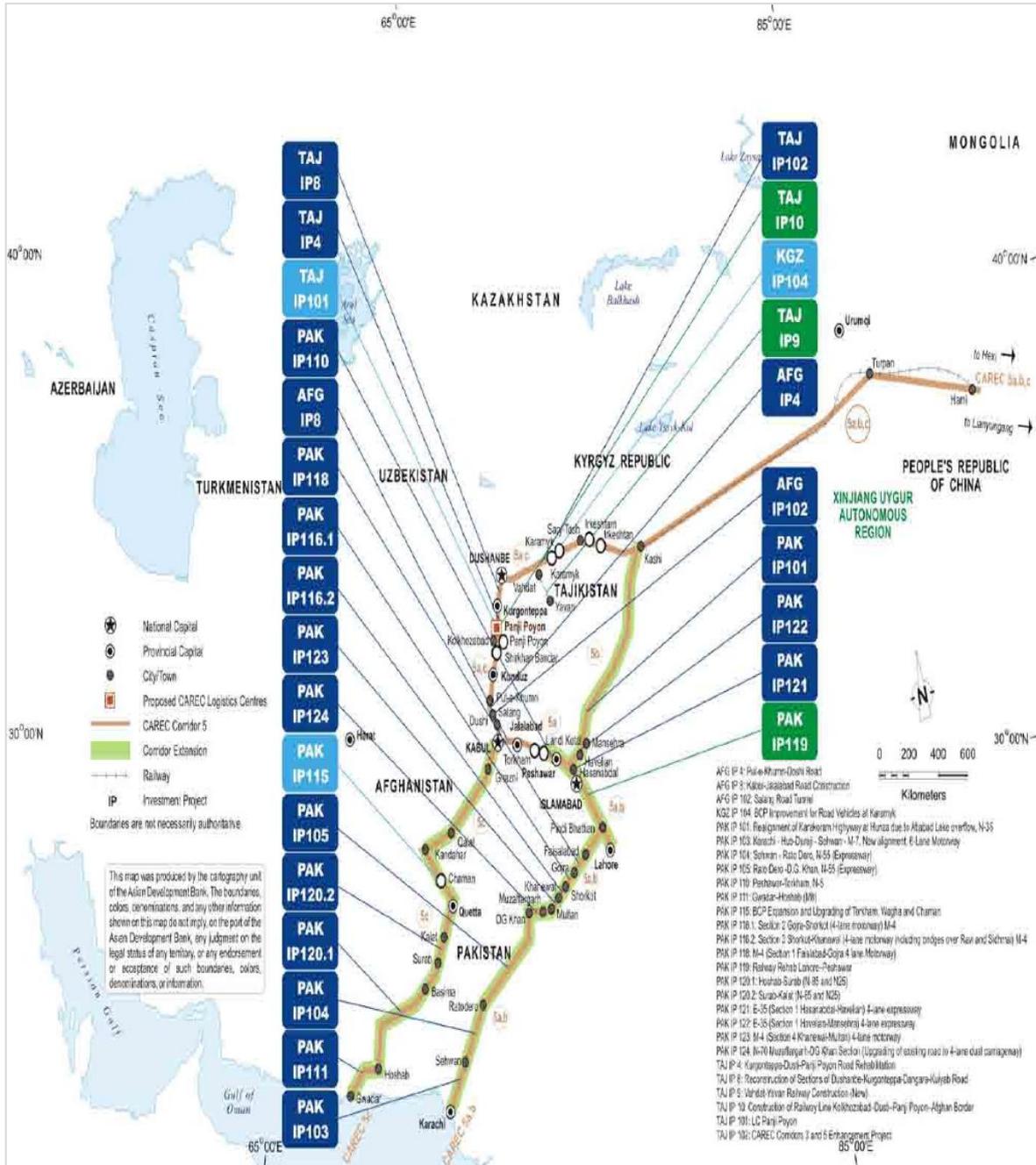
Air links between Pakistani and Central Asian cities would facilitate the carriage of high-value goods and promote intra-regional contact and communication, including greater interaction among the respective business communities.

Revitalizing rail service and building new rail connections will require several years; however, revitalization would be expedited if the private sector is also allowed to invest and manage some rail operations. The “Track Access Policy” to allow private train operators to manage and operate services with their own rolling stock by paying fees for the use of state-maintained tracks has worked successfully in many countries, including India. This system could ease the financial burden on the Pakistani budget and be more efficient than the current system of public sector operation of railways.

The deepening of the draft at the three ports is important to increase Pakistan’s future competitiveness. Deeper drafts will reduce the transit time to and from global markets by allowing “mother vessels” to make direct call at the three ports in Pakistan.

Gwadar Port’s full potential will be realized when it is linked to Pakistan’s land border crossings by internal road and rail networks. As of May 2014, the construction of the link to Pakistan’s road network is in progress but it is expected to take several years to complete. Under the Pak-China agreement, Gwadar is to be linked to Western China by rail, but this activity is currently on hold. It will likely be several years before the rail system becomes operational to connect the port at Gwadar to Pakistan’s rail network and to regional rail networks beyond.

Annex A – CAREC Corridor 5



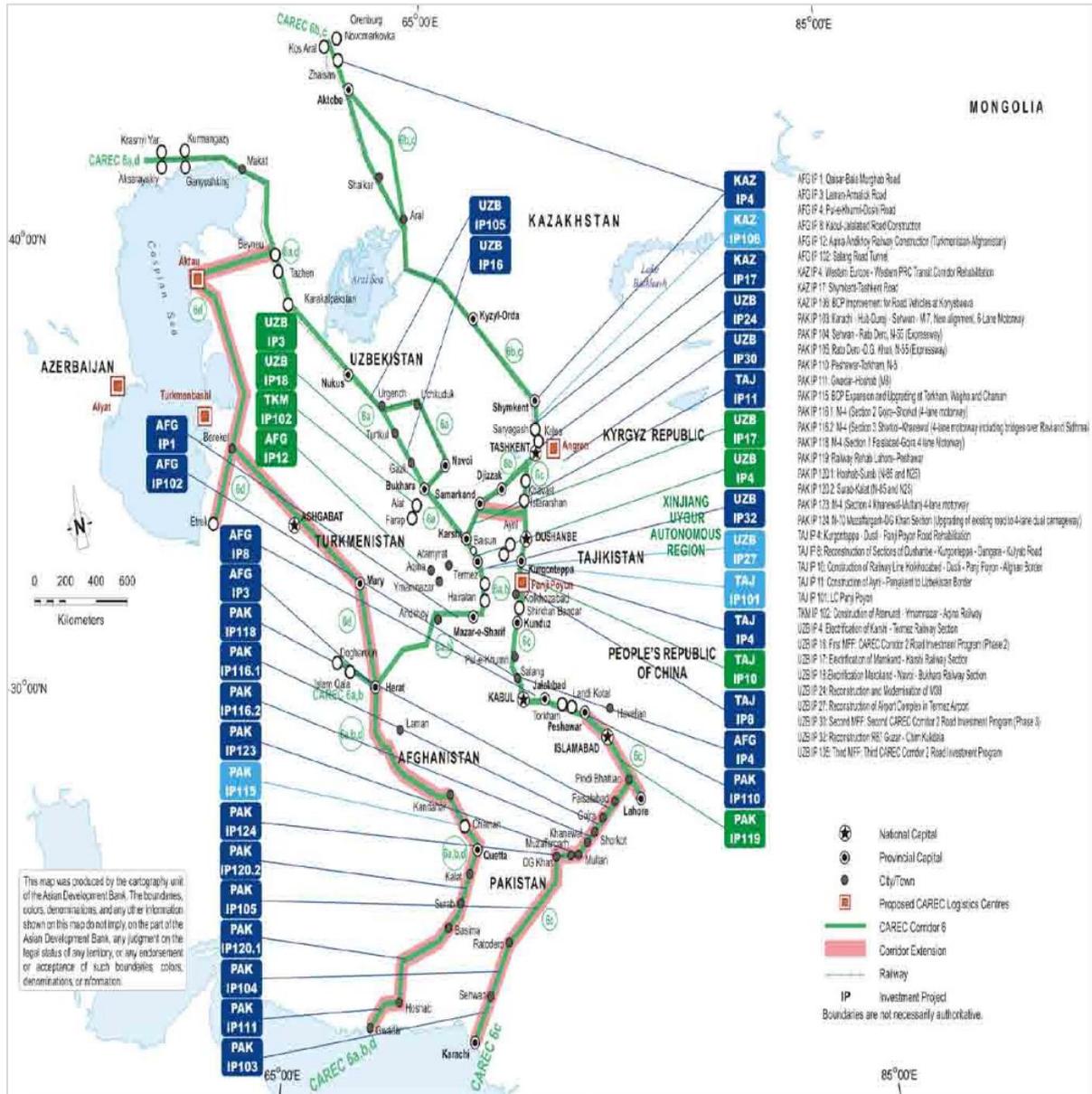
Corridor 5 - Major Commercial Centres En Route

Corridor 5a		Corridor 5b		Corridor 5c	
Country / Route		Country / Route		Country / Route	
PRC	Hami/Hexi	PRC	Hami/Hexi	PRC	Hami/Hexi
	Turpan		Turpan		Turpan
	Kashi		Kashi		Kashi
	Yierkeshitan – BCP		-		Yierkeshitan (BCP)
KGZ	Irkeshtam (road) BCP	KGZ	Mansehra	KGZ	Irkeshtam (road) BCP
	Sary-Tash		Havelian		Sary-Tash
	Karamyk (road) – BCP		Hasanabdal		Karamyk (road) - BCP
TAJ	Karamyk (road) – BCP	PAK	Islamabad	TAJ	Karamyk (road) - BCP
	Dushanbe		Lahore (Extension)		Dushanbe
	Kurgonteppa		Pindi Bathian		Kurgonteppa
	Panji Poyon - LC/BCP		Faisalabad		Panji Poyon - LC/BCP
AFG	Shirkhan Bandar (road) - BCP	PAK	Gojra	AFG	Shirkhan Bandar (road) - BCP
	Kunduz		Shorkot		Kunduz
	Kabul		Khanewal		Kabul
	Jalalabad		Multan		Ghazni
	Torkham (road) – BCP		Muzaffargarh		Qalat
PAK	Torkham (road) – BCP	PAK	DG Khan	PAK	Kandahar
	Landi Kotal		Ratodero		Chaman
	Peshawar		Sehwan		Quetta
	Islamabad		Karachi		Kalat
	Lahore (Extension)				Surab
	Pindi Bathian				Basima
	Faisalabad				Hoshab
	Gojra				Gwadar
	Shorkot				
	Khanewal				
	Multan				
	Muzaffargarh				
	DG Khan				
	Ratodero				
	Sehwan				
Karachi					

Source: CAREC – TTFS 2020

AFG = Afghanistan, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, KGZ = Kyrgyz Republic, LC = Logistics Centre, PAK = Pakistan, PRC = People's Republic of China, TAJ = Tajikistan.

Annex B – CAREC Corridor 6



Corridor 6 – Major Commercial Centres En Route

Corridor 6a		Corridor 6b		Corridor 6c		Corridor 6d	
Country / Route		Country / Route		Country / Route		Country / Route	
RUS	Krasnyi Yar (road)/ Aksaraskaya (rail) - BCP	RUS	Orenburg	RUS	Orenburg	RUS	Krasnyi Yar (road) / Aksaraskaya (rail) - BCP
	Kurmangazy (road)/Ganyushking (rail) - BCP		Novomarkovka (road)/Kos Aral (rail) - BCP		Novomarkovka (road) / Kos Aral (rail) - BCP		Kurmangazy (road) / Ganyushking (rail) - BCP
KAZ	Makat	KAZ	Zhaisan (road-rail) - BCP	KAZ	Zhaisan (road-rail) – BCP	KAZ	Aktobe
	Beyneu (rail)/Tazhen (road) - BCP		Aktobe		Aktobe		Makat
UZB	Karapalkastan (road/rail) - BCP	KAZ	Shalkar	KAZ	Shalkar	TKM (to Iran)	Beyneu
	Nukusww		Aral		Aral		Aktau
	Urgench (split)		Kyzyl - Orda		Kyzyl		Bereket
	Turtkul		Shymkent		Shymkent		Ashgabat
	Gazli		Saryagash/Yallama (rail) and Zhibek Zholy (road) - BCP		Saryagash/Yallama (rail) & Zhibek Zholy (road) - BCP		Mary
	Bukhara (converge)		Keles (rail) and Gisht Kuprik (road) - BCP		Keles (rail) and Gisht Kuprik (road) - BCP		Islam Qila – (extension) - BCP
	Uchkuduk		Tashkent (split)		Tashkent		Herat
Navoi	Djizzak	Khavast - BCP	Dogharoun - (extension) BCP				
Bukhara (converge)	Ayni	Istaravshan - BCP	Kandahr				
Karshi	Samarkand(converge)	Ayni	Chaman - BCP				
Boysun/Baisun	Karshi	Dushanbe	Quetta				
Termez (Airatom)	Baisun	Kurgonteppa	Kalat				
AFG	Hairatan	Termez/Airatom (rail/road) - BCP	Panji Poyon (road) - LC/BCP Surab	PAK	Surab		
	Mazar-e-Sharif	Hairatan (rail/road) - BCP	Shirkan Bandar – BCP		Basima		
	Andkhoy	Mazar-e-Sharif	Kunduz		Hoshab		
	Herat	Andkhoy	Pul-e-Khumri		Gwadar		
	Kandahar	Herat	Salang				
Chaman - BCP	Islam Qala - BCP	Kabul					
Quetta	IRN	Dogharoun - BCP	Jalalabad				
Kalat	AFG	Kandahar	Torkham (road) -BCP				
Surab	PAK	Chaman - BCP	Landi Kotal (road) – BCP	PAK			
Basima		Quetta	Peshawar				
Hoshab		Kalat	Islamabad				
Gwadar		Surab	Pindi Bhattian				
		Basima	Lahore (Extended)				
		Hoshab	Faisalabad				
		Gwadar	Gojra				

			Shorko	
			Khanewal	
			Multan	
			Muzaffargarh	
			DG Khan	
			Ratodero	
			Sehwan	
			Karachi	
Source: CAREC Secretariat.				

AFG = Afghanistan, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, IRN = Iran, KAZ = Kazakhstan, LC = Logistics Center, PAK = Pakistan, PRC = People's Republic of China, RUS = Russian Federation, TAJ = Tajikistan, TKM = Turkmenistan, UZB = Uzbekistan.

Annex D – ADB-Funded Projects in Pakistan

Road Project	Cost (USD millions)	Planned Implementation Period
1) Peshawar – Torkham, N-5 (Up-gradation, 58 Km), including Peshawar Northern Bypass	150	2012-2015
2) Gwadar – Turbat – Hoshab, M-8 (242 Km)	120	2012-2014
3) Khuzdar – Ratodero, M-8 (60 Km)	30	2012-2014
4) Realignment of KKH at Hunza due to Attabad Lake, N-35 (17 Km)	281	2012-2014
5) Basima – Khuzdar, N-30 (110 Km)	78	2012-2015
6) Sarai Gambila – Karapa Chowk (Peshawar), N-55 (Expressway, 95 Km)	224	2013-2016
7) D.I. Khan-Sarai Gambilla, N-55 (Expressway, 119 Km)	280	2013-2016
8) Karachi – Hub-Dureji - Sehwan - M-7 (250 Km), New alignment	1,029	2013-2017
9) Sehwan – Ratodero, N-55 (Expressway, 199 Km)	351	2012-2016
10) Ratodero-D.G. Khan, N-55 (Expressway, 200)	588	2013-2016
11) D.G. Khan – D.I. Khan, N-55 (Expressway, 208 Km)	818	2013-2016
12) Karapa Chowk – Peshawar Section, N-55 (142 Km)	251	2013-2016
13) Hoshab-Awaran-Khuzadar, M-8 (410 Km)	476	2013-2016
14) Khanewatl – Lodhran – Sukkur Section, E-5 (485 Km)	750	2013-2017
Total	5,426	

Annex E – International Road Conventions

A key element in the integration of regional economic blocks is the facilitation of goods and transport across international borders. Within continental Europe, for example, the United Nations Economic Commission for Europe (UNECE) initiated trade facilitation conventions to integrate logistics. As a result the Convention on the Contract for the International Carriage of Goods by Road (CMR Convention) and Customs Convention on the Temporary Importation of Commercial Road Vehicles (TICRV) were introduced in 1956 and came into force in 1961 and 1959, respectively. The TIR Convention, initiated in 1949, evolved over many years to reach its present form.

Another trade facilitation initiative supporting the seamless movement of freight focuses on the streamlining of clearance process at border crossings. This objective is achieved through implementation of the International Convention on the Harmonization of Frontier Controls of Goods, which was introduced in 1982 and came into force in 1985. CAREC Corridor 5 and 6 member states have acceded to at least some of these six key conventions and Table 3 shows the signatories to each. Pakistan has not signed any of these conventions except the Istanbul Convention.

**Table 4 – CAREC Corridor 5 & 6 Member States
Signatories to Key International Conventions**

Agreements and Conventions Recommended by UNESCAP Resolution 48/11	Afghanistan	China	Kazakhstan	Kyrgyzstan	Pakistan	Tajikistan	Uzbekistan
1) Customs Convention on the Temporary Importation of Commercial Road Vehicles (1956)	1977	-	-	1998	-	-	1999
2) Convention on the Contract for the International Carriage of Goods by Road (CMR, 1956)	-	-	-	1998	-	-	1996
3) Customs Convention on Containers (1972)	-	1986	2005	2007	-	-	1996
4) Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention, 1975)	1982	-	1995	1998	-	1996	1995
5) Convention relating to temporary admission (Istanbul Convention, 1990)	-	1998*	-	-	2004	Year N/A	-
6) International Convention on the Harmonization of Frontier Controls of Goods (1982)	-	-	2005	1998	-	2011	1996

* China allows the ATA Carnet to be utilized as a temporary importation instrument only for goods for display or use at exhibitions, trade fairs, meetings or similar events.