The Kyrgyz Republic

Trade Facilitation and Logistics Development Strategy Report

Asian Development Bank

ADB

THE KYRGYZ REPUBLIC: Trade Facilitation and Logistics Development Strategy Report

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Asian Development Bank

Printed in the Philippines.

ISBN 978-971-561-816-8
Publication Stock No. RPS090630

Cataloging-In-Publication Data

Asian Development Bank.
The Kyrgyz Republic: trade facilitation and logistics development strategy report.
Mandaluyong City, Philippines: Asian Development Bank, 2009.

1. Trade facilitation. 2. Logistics development. 3. Kyrgyz Republic.
I. Asian Development Bank.

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Abbreviations

ADB	–	Asian Development Bank
BCP	–	border-crossing point
CAREC	–	Central Asia Regional Economic Cooperation
CIS	–	Commonwealth of Independent States
EurAsEC	–	Eurasian Economic Community
EU	–	European Union
FTZ	–	free trade zone
GDP	–	gross domestic product
GTZ	–	Deutsche Gesellschaft für Technische Zusammenarbeit (Germany Agency for Technical Cooperation)
ICD	–	inland container depot
IDB	–	Islamic Development Bank
ISO 9000	–	Quality Management System under International Standardization Organization
km^2	–	square kilometer
m	–	meter
MEDT	–	Ministry of Economic Development and Trade
MTC	–	Ministry of Transport and Communications
NGO	–	nongovernment organization
PPP	–	public–private partnership
PRC	–	People's Republic of China
TIR	–	Transports Internationaux Routiers
TRACECA	–	Transport Corridor Europe–Caucasus–Asia
XUAR	–	Xinjiang Uygur Autonomous Region

Note:

In this report, "$" refers to US dollars.

Foreword

The Asian Development Bank (ADB) is pleased to provide this report on the state of the transportation and logistics sectors in the Kyrgyz Republic. It covers key measures needed to make these sectors more efficient and cost-competitive. This volume will be useful for government policy makers, providers and users of transport and logistics services, and other stakeholders. Efficient and cost-competitive transportation and logistics sectors will enable the Kyrgyz Republic not only to spur economic activity and engender social and political cohesion within its borders, but also to take full advantage of its geographical position and serve as a transit corridor between the dynamic and growing economies in the East and West.

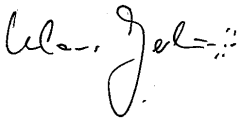
This report is part of a series of nine that cover the countries in the Central Asia Regional Economic Cooperation (CAREC) area: Afghanistan, Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, the People's Republic of China (specifically its Inner Mongolia and Xinjiang Uyghur autonomous regions), Tajikistan, and Uzbekistan. This series is part ADB's continuing support of CAREC and the region in an effort to further poverty alleviation and secure a better future for people. Support, provided under the ADB CAREC Program, has been focused on promoting more efficient and effective economic cooperation among CAREC countries in the areas of transport, trade policy, trade facilitation, and energy.

The reports highlight the substantial challenges CAREC countries need to overcome. Aside from being landlocked with varied terrain, these countries are challenged by inadequate infrastructure, unsupportive systems and policy environment, and lack of skills and management know-how. From the numerous measures recommended in these reports, a common theme has emerged: the compelling need for the members of CAREC to achieve unity in purpose and action. Across borders, customs procedures need to be harmonized, tariffs rationalized, and a common framework for achieving seamless movement of cargo agreed upon, Clearly, a general atmosphere of cooperation needs to be achieved if the whole region is to reap the full benefits of efficient and competitive transportation and logistics services.

ADB hopes that the publication of this report, as well as the eight others in the series, would inspire such spirit of cooperation and unity in the region.

The conduct of these trade logistics studies embodies ADB's new strategy under its Strategy 2020 and its five core areas of operation, two of which are infrastructure and regional cooperation and integration. The publication of the reports, meanwhile, is in line with ADB's new strategic direction of focusing on knowledge which is one of the five drivers of change. It is part of the efforts of the East Asia Region Department to develop knowledge products that will support ADB's mission of reducing poverty in Asia and the Pacific.

ADB staff contributions from the Financial Sector, Public Management, and Regional Cooperation Division, East Asia Department, and the Department of External Relations are greatly acknowledged. We also acknowledge the efforts of consultants who conducted primary research in the field. These combined efforts have resulted in a timely and significant contribution to trade facilitation and logistics in the CAREC region.



Klaus Gerhaeusser
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Executive Summary

The Kyrgyz Republic is a landlocked country located at the western border of the People's Republic of China (PRC) and three countries of the former Soviet Union (FSU)—Kazakhstan, Tajikistan, and Uzbekistan. Its topography is characterized by a number of valleys divided by mountain ranges, most of which rise over 4,000 meters above sea level. Its location along the ancient Silk Road positions it as the landbridge between the booming industrial regions of the PRC, the consumer markets of Europe, and sources of fossil fuels in the Middle East. It thus has the opportunity to benefit from being a transit country for trade among these markets, provided it offers a transport and trade facilitation system that is competitive in, among other factors, cost, speed, and efficiency.

This report assesses the country's business environment, transport infrastructure, and logistics capabilities; examines the institutional and operational constraints that hinder efficient trade and the development of its logistics system; and proposes a range of recommendations to address such constraints. Its recommendations are divided into (i) transport and trade facilitation, and (ii) infrastructure development activities. Transport and trade facilitation activities are focused primarily on so-called "soft issues", i.e., improvement of the business climate, as well as of government regulations and procedures that pertain to the transport and trade facilitation sectors, the enhancement of the investment attractiveness of the country, and the development of its human resources, particularly in the transport and trade sectors. Infrastructure development projects are focused primarily on "hard issues", i.e., the improvement and/or provision of road networks, logistics facilities, information technology infrastructure, as well as transport and other equipment.

Country Profile

The Kyrgyz Republic is one of the least successful FSU countries in implementing reforms supportive of private enterprise and the development of the private sector. After the collapse of the Soviet Union and its considerable economic decline in the early part of the 1990s, it has been able to resume growth. However, in comparison with other countries in the region, it continues to be unstable. This is mainly the result of weak law enforcement that stunts the advantages its relatively liberal political environment offers. According to the World Bank's Business Environment and Enterprise Performance Survey,[1] the Kyrgyz Republic is ranked considerably lower than average among Commonwealth of Independent States (CIS) countries in the areas of corruption, tax administration, and uncertainty of regulatory policies.

[1] World Bank–International Finance Corporation. 2008. Ranking Business Regulations. www.doingbusiness.org/economyrankings/

It is generally acknowledged that privatization in the Kyrgyz Republic was hasty and inefficient.[2] Many state-owned enterprises, including logistics and transport companies, were privatized, but the new owners were not successful in restructuring their businesses to make these competitive and profitable. The private sector is not fully independent from government officials and often, the success and profitability of companies depend on "connections" with authorities.

Because of the collapse of the Soviet Union, the Kyrgyz Republic lost both its industrial base and competent labor force. Its industrial sector during the Soviet era was not established based on the local availability of raw materials and demand. The end of the Soviet era took away both the supply of raw materials used by its industrial base and the demand for its industrial goods, thus making a great majority of its industrial firms either irrelevant or unable to produce at competitive costs. Moreover, most of the ethnic Russians who used to be employed in its industrial sector left the country, depriving its industrial base of the manpower needed to make it run efficiently. Because of the resulting lack of work and livelihood opportunities, the Kyrgyz Republic's labor force left the country and sought employment elsewhere. Current estimates show that more than 500,000 Kyrgyz workers are employed in the Russian Federation, Kazakhstan, and other countries and regularly remit salaries to their families.

Assessment of the Transport and Logistics Sectors

The Kyrgyz Republic's transport and logistics sectors declined faster than the rest of its economy. The road network, through which about 95% of its cargo is transported, lost a considerable portion of its paved surface because of inadequate maintenance. It was also fragmented because of the redrawing of borders after the Soviet Union collapsed that resulted in considerable portions of it being included in the territories of the country's neighbors, especially Uzbekistan. Reconnecting the fragmented network requires considerable investments for the construction of road links, many of which must go through difficult mountainous terrain.

Trucking companies in the Kyrgyz Republic are small, some very much so, and use mostly old trucks, the majority of which was produced during the Soviet era. These trucks are prone to frequent breakdowns, are not safe, and are ecologically unfriendly.

The Kyrgyz Republic's rail network, like its road network, has been disconnected in certain parts of the country. To get from the north of the country to the south by rail, it is necessary to travel through Kazakhstan and Uzbekistan. However, unlike the country's road network, the main track of the Kyrgyz rail network is in good condition because of a reasonable level of maintenance work and a severe decline in the usage of tracks. All rail lines of the Kyrgyz Republic are one-track lines.

The locomotive fleet of the Kyrgyz Republic, owned and operated by the government-owned Kyrgyz Railways, is small and old, although relatively well maintained. The fleet's rail cars and rail platforms are used by the Kyrgyz Republic to participate in the exchange of fleets among the rail networks of different CIS countries. Through this exchange of rail fleets, the shortage in the country's fleet can often be addressed by the use of rail cars from neighboring countries.

[2] ADB. 2007. *Joint Country Support Strategy: Kyrgyz Republic, 2007–2010*. Manila.

The air fleet of the Kyrgyz Republic consists of several old Soviet planes with no national carrier capable of serving new lines and investing in the fleet.

The country's airport infrastructure consists of two international airports—Manas and Osh—and about 20 small airports and airfields. In the 1990s, the Manas Airport underwent considerable reconstruction and, consequently, can now accept heavy planes like Boeing-747s It also has a cargo terminal and is used as an airbase of the United States (US). These factors, as well as its geographical location, have increased cargo flow through the airport. However, inadequate maintenance facilities and a very small number of domestic and international lines have constrained the airport from developing further as a transit point for transcontinental lines.

Water transport in the Kyrgyz Republic happens mainly on the Issyk-Kul Lake route. It is used primarily for the movement of bulky goods between Balykchi and other towns around the lake, mainly Karakol and Cholpon-Ata.

The pipeline transport system in the country, meanwhile, uses mainly the gas pipeline Maily-Say–Jalal-Abad–Kara-Suu–Osh and the transit pipeline Bukhara–Tashkent–Bishkek–Almaty.

Moving goods to, from, and through the Kyrgyz Republic is characterized by highly bureaucratic procedures, a lot of paperwork, and bribes. The number of required trade documents is approximately twice that of the Russian Federation and the PRC. There is no efficient control over import–export operations, and this results in the absence of reliable data on import–export and transit volumes through the country.

Kyrgyz border-crossing points are not properly equipped with information technology infrastructure and inspection equipment. Moreover, the inspection procedures and documentation requirements of various authorities are not aligned with each other, which results in considerable loss of time for importers and exporters.

A portion of the Kyrgyz Republic's logistics facilities, all of which were built during the Soviet era, has been lost due to inefficient privatization. The new owners of these facilities acquired them mainly through connections with authorities. Only a limited number, therefore, have the capability, inclination or interest to expand operations and achieve efficiencies. A substantial number of the logistics facilities have, as a consequence, been either left idle or operating at less-than-optimal levels. Apart from several initiatives like the construction of a cargo terminal in the Manas Airport and a container yard on the Alamedin railway station, there have been no considerable investments in logistics facilities in the Kyrgyz Republic.

The Kyrgyz Republic's logistics industry consists of a number of freight forwarding companies and road carriers. Freight forwarders are mostly resellers of rail and road transit services. Customers prefer to use these companies mostly to cope with the unwieldy documentation requirements and processes of Kyrgyz Railways and Kyrgyz Customs. The cost of these companies' services always includes provisions for bribes that are paid to facilitate transit and clearance services, and later to "explain" these payments during tax audits. Freight forwarders and carriers are grouped into three associations: the Kyrgyz Freight Forwarding Association, the Association of National Road Carriers, and the Association of International Road Carriers. There is more competition than cooperation and partnership among these associations.

The Kyrgyz government, nongovernment organizations, and international aid agencies are concerned with the current state of the logistics industry and infrastructure in the country. Within the last several years, a number of infrastructure rehabilitation projects have either been completed or initiated. The most significant of these are the rehabilitation of the Bishkek–Osh, Bishkek–Almaty, Osh–Sary-Tash–Irkeshtam, and Taraz–Talas–Suusamyr roads.

To improve cross-border trade, the government of the Kyrgyz Republic approved, in October 2007, the development of the border trade and logistics center in Sary-Tash, located near the PRC border along the Osh–Sary-Tash–Irkeshtan transit route. Another significant initiative was the issuance of Presidential Decree 464, which mandates the simplification of international trade documentation and procedures.

Recommendations

The measures recommended by the technical assistance project to improve the trade and logistics sectors in the Kyrgyz Republic are divided into two groups: trade facilitation initiatives and physical infrastructure development projects. Both groups are further divided into either public participation or public–private partnership (PPP) initiatives. All recommendations are summarized in Table 1.

Table 1: Summary List of Recommendations

Trade Facilitation Initiatives, Public Investments		
#	**Recommendation**	**Priority Level**
TF.1	Establishment of a weight certification system	High
TF.2	Strengthening of cross-border process management	High
TF.3	Improvement of the customs guarantee system	Moderate
TF.4	Development of the specifications for cross-border infrastructure	High
TF.5	Implementation of a customs cooperation program	High
TF.6	Installation of an integrated information system for international trade	High
TF.7	Promotion of the Kyrgyz Republic in the PRC	Moderate
TF.8	Deployment of safe packets	High
Trade Facilitation Initiatives, PSP/PPP		
#	**Recommendation**	**Priority Level**
TF.9	Strengthening of product certification capability	Moderate
TF.10	Provision of road maintenance support	High
TF.11	Provision of process management education for public servants and private organizations.	Moderate
TF.12	Promotion of completely-knocked-down production in FTZs	Low
TF.13	Provision of logistics training and development services	Moderate
TF.14	Implementation of a private sector–investment support program for the development of logistics centers	Moderate
Physical Infrastructure Development Projects, Public Investments		
#	**Recommendation**	**Priority Level**
IP.1	Development of cross-border infrastructure	High
IP.2	Construction of the Kashgar–Kara-Suu rail link	High
IP.3	Construction of the Kara-Keche–Balykchi rail link	Moderate
IP.4	Rehabilitation of the Kashgar–Irkeshtam–Osh road	High
IP.5	Rehabilitation of the Kashgar–Torugart–Balykchi–Bishkek road	High

continued on next page

Table 1: Summary List of Recommendations *(continuation)*

IP.6	Assessment of the Jalal-Abad–Suusamyr–Balykchi road	Low
Physical Infrastructure Development Projects, Public Investments		
#	**Recommendation**	**Priority Level**
IP.7	Electrification of railways	Moderate
IP.8	Improvement of in-transit service capability in the Manas Airport	Moderate
IP.9	Rehabilitation of the following roads: Osh–Isfana, Taraz–Talas–Suusamyr, Issyk–Kul Circular roads	Moderate to High
Physical Infrastructure Development Projects, PSP/PPP		
#	**Recommendation**	**Priority Level**
IP.10	Development of the At-Bashi logistics terminal	High
IP.11	Development of the Sary-Tash logistics terminal	Moderate
IP.12	Development of the Balykchi multimodal hub	Moderate
IP.13	Development of the Alamedin multimodal hub	High
IP.14	Development of the Osh container yard	High
IP.15	Development of the Kara-Suu multimodal hub	High
IP.16	Establishment of agribusiness marketing and logistics centers	High

FTZ = free trade zone, PPP = public–private parnership, PRC = People's Republic of China, PSP = private sector participation.

Source: Authors.

Given the Kyrgyz Republic's economic system, logistics depots can only be financed by the private sector or through PPP. Since decisions of private investors to invest in particular projects are determined mainly by economic factors and the assessment of investment risks, the Kyrgyz government can increase the attractiveness of logistics projects to investors by allocating land for logistics projects and providing incentives for potential investors. Based on existing road infrastructure and the location of centers of economic activity, a number of logistics depots are recommended in certain locations (Table 2 and Figure 1). It is important to note that functionality should not necessarily be concentrated in one depot. Depending on the competition and willingness of customers to pay the price for certain services, it is reasonable to expect a range of big and small logistics centers with different service portfolios and price offerings.

Table 2: Recommended Location and Functionality of Logistics Depots

Priority	Logistics depots	Main functions of logistics depots
1	Bishkek	Trade and support of trade ICDs and intermodal operations Import/export clearance Storage and bonded storage (especially for goods from the PRC)
2	Kara-Suu	Trade and support of trade Agricultural marketing and logistics centers ICDS and intermodal operations Import/export clearance Storage and bonded storage (especially for goods from the PRC)
2	Osh	ICDS and intermodal operations Agricultural marketing and logistics centers Import/export clearance Storage and bonded storage (especially for goods from the PRC)

continued on next page

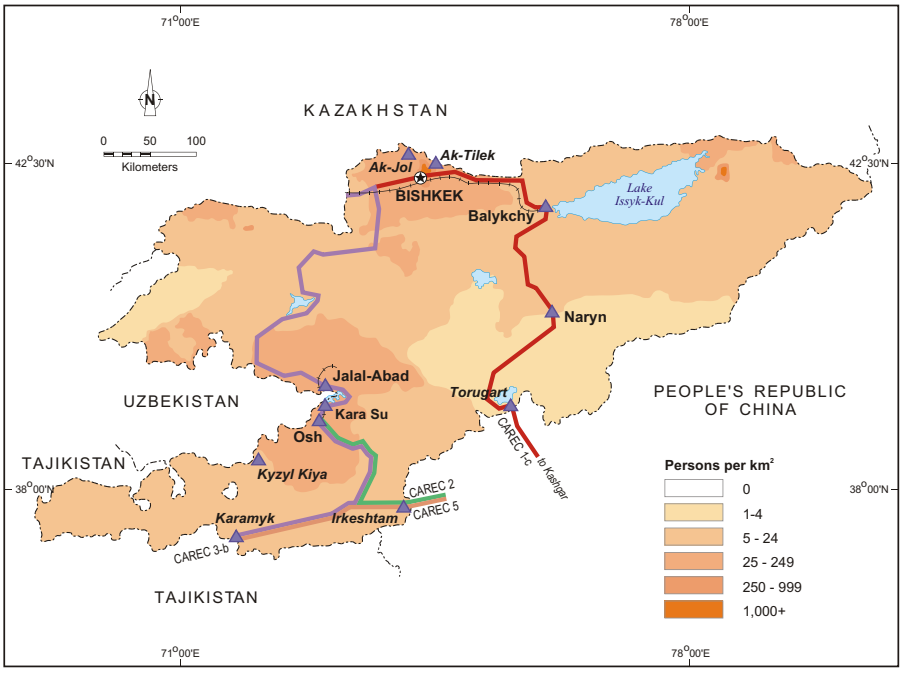
Table 2: Recommended Location and Functionality of Logistics Depots *(continuation)*

Priority	Logistics depots	Main functions of logistics depots
2	Balykchi	ICDS and intermodal operations Storage and bonded storage (especially for goods from the PRC) Import/export clearance Trade and support of trade Agricultural marketing and logistics centers
2	Jalal-Abad	ICDS and intermodal operations Import/export clearance Storage and bonded storage (especially for goods from the PRC) Agricultural marketing and logistics centers
3	At-Bashi (Torugart)	Import/export clearance Storage and bonded storage (especially for goods from the PRC) Border trade Transloading operations
3	Sary-Tash (Irkeshtam)	Import/export clearance Storage and bonded storage (especially for goods from the PRC) Border trade Transloading operations
3	Kyzyl-Kiya	Agricultural marketing and logistics centers ICDS and intermodal operations

ICD = inland container depot, PRC = People's Republic of China.

Source: Authors.

Figure 1: Map of Transport Corridors and Recommended Logistics Depots in the Kyrgyz Repubic



km² = square kilometer.

Source: Authors based on Central Asia Regional Economic Cooperation corridor map of TERA International and Population density map of Center for International Earth Science Information Network, Columbia University.

Introduction and Background

Project Overview

This regional technical assistance project of the Asian Development Bank (ADB) aims to analyze trade facilitation policies and related trade logistics sector issues in the Kyrgyz Republic and forms part of the Central Asia Regional Economic Cooperation (CAREC) program to promote intra- and interregional trade through regional cooperation and effective trade logistics arrangements. The overall purpose of the CAREC program is to leverage transit trade for development, and transform Central Asia and the inland provinces of the People's Republic of China (PRC) into modern "silk roads" or "landbridges" connecting East Asia with Europe.

Project Scope and Outcomes

The scope of this project includes the following:

(i) Analysis of polices and issues regarding the Kyrgyz logistics industry and the formulation of recommendations to address these issues;
(ii) Development of master plans for the Kyrgyz logistics industry, with particular attention being given to public infrastructure and the logistics platform, including a single–window operation for customs clearance and an over-the-counter system for logistics providers;
(iii) Compilation of a preliminary list of public investment projects as well as public–private partnerships for the development of the logistics industry; and
(iv) Formulation of cooperation mechanisms between the Kyrgyz Republic and the Xinjiang Uygur Autonomous Region (XUAR) of the PRC to support the development of the Kyrgyz logistics industry.

Methodology

To obtain information about the logistics industry and transport infrastructure of the Kyrgyz Republic, the team of consultants for this technical assistance used interviews, personal observations, report reviews, and government statistics. Several of the interviews were conducted in Almaty, Kazakhstan where the regional offices of several aid organizations and the offices of the Eurasian Economic Community (EurAsEC) Committee are located. These interviews enabled the consultants to understand better the overall regional development strategy for Central Asia and assess its impact on the Kyrgyz Republic. The list of interviewees appears as Appendix 1.

Two trips along the main transit routes of the Kyrgyz Republic enabled the consultants to acquire a better understanding of the country and its transportation and logistics infrastructure (Appendix 2).

The list of recommendations is based on the inputs of many people. Where possible, the sources of information were given in the report. In a number of cases, feedback from different parties varied quite considerably. In such cases, where possible, the consultants conducted further investigations through additional interviews and data analysis.

During the study, the consultants received a lot of statistical data. Only those data germane to the scope of the study were reported in this document. Production, transportation, and other volumetric parameters were used primarily to demonstrate general trends. Furthermore, there were considerable deficiencies in the recording and reporting of trade and transportation volumes between the Kyrgyz Republic and other countries. Thus, the data in the report were used with precaution.

Country Profile

Overview

The Kyrgyz Republic is a landlocked, mountainous country with formidable geographic barriers that seriously constrain its ability to effectively participate in international trade. Its development efforts are further hampered by inadequate physical infrastructure and the protectionist policies of neighboring countries. Moreover, it continues to be challenged by an unstable political environment resulting from the 2005 March revolution, with its government, parliament, and civil society competing for power.

The Kyrgyz Republic's population numbers over 5.3 million, its population density reaching 27 people per square kilometer. A majority of this population is concentrated in two valleys that are divided by mountain ridges—the Chu and Fergana valleys, where the country's two largest cities, Bishkek, the capital, and Osh, are respectively located (Table 3).

The population is relatively young and educated with an average age of 24.2 years, life expectancy of 69.1 years, and a literacy rate of 98.7%. Its main ethnic groups are Kyrgyz (64.9%), Uzbek (13.8%), and Russian (12.5%). Although the official language of the Kyrgyz Republic is Kyrgyz, almost all of the population can speak Russian.

Economy

The Kyrgyz Republic is facing a number of challenges that hinder its development. It is one of the poorest countries of the former Soviet Union, with its public external debt amounting

Table 3: Population of the Main Cities of the Kyrgyz Republic, 2007

City	Valley	Population
Bishkek	Chui	808,900
Osh	Fergana	221,300
Jalal-Abad	Fergana	83,400
Karakol	Issyk-Kul	62,200
Tokmak	Chui	57,000
Uzgen	Fergana	44,900
Kyzyl-Kiya	Fergana	43,700
Kara-Balta	Chui	43,600
Balykchi	Issyk-Kul	42,100
Naryn	Naryn	41,000

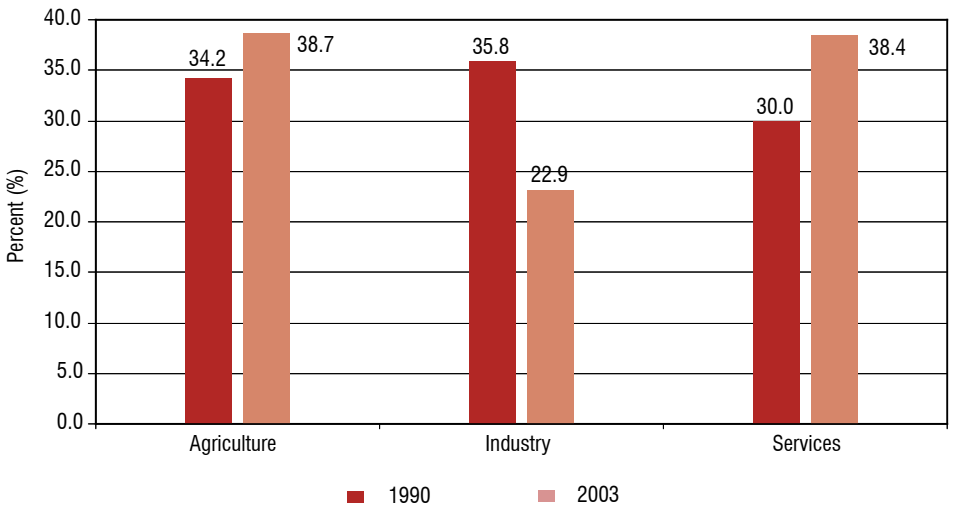
Source: National Statistics Committee, Kyrgyz Republic.

to nearly $3 billion, about 60% of its gross domestic product (GDP). Its per capita GDP is estimated at $943 at current prices and $2,200 at purchasing power parity.[1] Within the last two decades, it transformed itself from a planned to a market economy, with most of its industrial and agricultural enterprises being privatized. However, the private business sector that arose as a result of this transformation has not acquired economic and financial strength, has poor access to the resources needed to sustain growth, and is not capable of participating in large- and medium-sized development projects. Despite a sound record of macroeconomic performance in recent years, Kyrgyz economic growth has been modest and volatile, with the country so far not being able to return to its 1990 economic performance level.

Compared to Kazakhstan and Uzbekistan, the Kyrgyz Republic is relatively poor in natural resources and has a mostly inhospitable terrain, two factors that have limited its ability to develop its logistics industry, as well as to attain sustainable economic growth. During the Soviet era, it received generous financial support from the other Soviet republics that helped it build up its transport infrastructure and develop its industries. However, the development of its industries was not always based on local demand and the availability of local resources. After the collapse of the Soviet Union, the Kyrgyz Republic was left with production facilities that do not rely on local raw materials and do not cater to the needs of the local market. In addition, the dissolution of the Soviet Union created new borders in Central Asia that effectively separated the south from the north of the country. Roads that used to connect parts of the country now cross the borders of neighboring countries, considerably increasing travel time and costs.

Compared to industry and transport, the Kyrgyz Republic's agriculture and service sectors did not decline considerably. This resulted in a shift in the relative weights of industrial, agriculture, and services sectors in the economy (Figure 2).

Figure 2: Kyrgyz Republic GDP Share by Sectors, 1990 and 2003 (%)



Source: World Bank. World Development Indicators database.

[1] Central Intelligence Agency. *The World Factbook 2008: Kyrgyzstan.* www.cia.gov/library/publications/the-world-factbook/geos/kg.html

The agriculture sector consists of a large number of small farms. Despite difficulties in obtaining financing for equipment, seeds and livestock, and in marketing produce, it has been showing modest growth in its most important sub-sectors, while only a few sub-sectors have declined (Table 4).

Table 4: Kyrgyz Republic Agricultural Production, 1990, 1994, 1998, and 2002–2006
(thousands of tons)

	1990	1994	1998	2002	2003	2004	2005	2006
Grains	1,503.2	996.3	1,619.0	1,752.8	1,670.5	1,746.6	1,667.4	1,562.2
Wheat	482.3	565.6	1,203.7	1,162.6	1,013.7	998.2	950.1	840.3
Barley	591.6	288.2	161.7	149.3	197.9	233.4	213.5	204.0
Corn	406.0	129.3	227.9	373.6	398.5	452.9	437.3	438.0
Rice	2.1	3.9	11.0	20.8	18.3	18.3	17.1	18.7
Sugar beet	1.7	114.2	429.2	521.5	812.2	642.4	288.8	226.0
Cotton	80.9	53.5	77.8	106.4	105.9	121.7	118.1	117.5
Tobacco	53.9	36.4	28.1	6.1	8.7	13.0	13.4	13.4
Vegetable oil crop	10.3	14.2	43.8	72.4	77.6	93.9	87.6	78.6
Potatoes	365.1	310.9	773.5	1,244.0	1,308.2	1,362.5	1,141.5	1,254.7
Vegetables	487.3	265.6	555.9	456.2	678.0	742.2	736.6	761.3
Melons	71.4	18.9	46.6	42.2	85.3	88.0	85.8	97.7
Fruits and berries	140.9	79.1	102.6	152.6	141.9	175.8	146.7	186.6
Grapes	43.3	17.6	17.2	15.0	11.7	14.6	11.4	14.7
Meat (slaughtered)	254.1	197.2	191.1	200.4	193.6	187.7	181.7	182.6
Milk	1,185.0	871.6	972.7	1,172.9	1,191.8	1,184.7	1,197.6	1,212.1
Eggs (millions)	713.8	201.6	175.8	243.1	267.6	298.7	317.5	328.7
Wool	39.0	21.2	11.5	11.6	11.6	11.0	10.6	10.6

Source: National Statistics Committee, Kyrgyz Republic.

After the revolution of March 2005, the new government managed to maintain macroeconomic stability and declared its commitment to address three major challenges: low living standards, unemployment, and widespread corruption.[2] Unemployment is reported at slightly lower than 10%, and this rate would have been higher had it not been for the Kyrgyz Republic having a substantial number of its workforce employed in other countries and supporting their families through regular remittances. According to estimates, more than 500,000 people—10% of the population—are regularly employed in the Russian Federation and Kazakhstan (see footnote 2).

International Trade

From 2004 to 2008, the Kyrgyz Republic's international trade increased 31% per annum. A large part of this growth, however, was accounted for by imports which grew by 36% yearly over the same period. In contrast, exports grew by 2% per annum (Table 5).

The Kyrgyz Republic's main trading partners are the Russian Federation, Kazakhstan, and the PRC. Tables 6 and 7 show the country's relevant international trade statistics.

[2] ADB. 2007. *Kyrgyz Republic Factsheet*. Manila.

Table 5: Kyrgyz Republic International Trade Indicators, 2004–2008
($ million)

Year	Imports	Yearly % change	Exports	Yearly % change	Balance	Imports and Exports
2004	1,001		727		(274)	1,728
2005	1,125	12.4	679	(6.6)	(446)	1,804
2006	1,998	77.6	804	18.4	(1,194)	2,802
2007	2,740	37.1	1,152	43.3	(1,588)	3,892
2008	3,293	20.2	1,615	40.2	(1,678)	4,908
Average annual growth		**36.8**		**23.8**		

( ) = negative value.

Source: Consultant, based on data of State Customs Committee.

Table 6: Kyrgyz Republic Trade Balance (Import and Export) with Main Partners, 2008

	Major Import Partners				Major Export Partners		
	Partners	Value ($ million)	Share %		Partners	Value ($ million)	Share %
	World	**3,293**	**100.0**		**World**	**1,616**	**100.0**
1	Russian Federation	1,458	44.3	1	Switzerland	440	27.2
2	PRC	480	14.6	2	Russian Federation	310	19.2
3	Kazakhstan	374	11.4	3	Uzbekistan	230	14.2
4	Uzbekistan	146	4.4	4	Kazakhstan	183	11.3
5	United States	99	3.0	5	France	108	6.7
6	Ukraine	90	2.7	6	United Arab Emirates	52	3.2
7	Turkey	71	2.2	7	Afghanistan	45	2.8
8	Germany	57	1.7	8	PRC	45	2.8
9	Republic of Korea	46	1.4	9	Turkey	44	2.7
10	Belarus	42	1.3	10	Latvia	31	1.9

PRC = People's Republic of China.

Source: National Statistics Committee, Kyrgyz Republic.

Table 7: Kyrgyz Republic Total Trade with Main Partners, 2008

	Partners	Value ($ million)	Share (%)
	World	**4,909**	**100.0**
1	Russian Federation	1,768	36
2	Kazakhstan	557	11.3
3	People's Republic of China	525	10.7
4	Switzerland	448	9.1
5	Uzbekistan	376	7.7
6	France	124	2.5
7	Turkey	115	2.3
8	United States	104	2.1
9	Ukraine	96	2.0
10	Germany	75	1.5

Source: National Statistics Committee, Kyrgyz Republic.

The Russian Federation and Kazakhstan are the Kyrgyz Republic's leading trading partners in terms of value and volume, respectively (Tables 8 and 9). It should be noted, however, that there is a lack of comprehensive and accurate data on international trade in the country. The volume of undervalued or undeclared imports and exports can be considerable due to prevailing practices of clearance and reporting in the Kyrgyz Republic. Despite these limitations, it can be inferred that large volumes of trade with Kazakhstan and Uzbekistan consist of low-value density products (stones, ores, etc.).

Low-value density products normally merit transport by the least expensive modes, such as rail for longer distances and trucks for shorter ones. High-value density products, in contrast, may require transport by air. Tables 10 and 11 can be used as a reference for the relative value densities of different categories of Kyrgyz imports and exports.

Table 8: Volume, Value, and Value Density of Kyrgyz Republic Imports by Main Trading Partners, 2008*

	Trading Partner	Tons	Value ($'000)	% of total weight	Value density ($/kg)
	World	**7,941,353**	**3,293,384**	**100.0**	**0.41**
1	Kazakhstan	4,170,716	373,966	52.5	0.09
2	Russian Federation	1,810,074	1,457,829	22.8	0.81
3	Uzbekistan	817,625	146,260	10.3	0.18
4	People's Republic of China	717,926	480,262	9.0	0.67
5	Ukraine	59,906	89,946	0.8	1.50
6	Turkey	55,585	70,995	0.7	1.28
7	Belarus	52,002	42,440	0.7	0.82
8	United States	43,242	99,446	0.5	2.30
9	Republic of Korea	34,503	45,601	0.4	1.32
10	Iran	29,184	9,524	0.3	0.33

kg = kilogram.

* Data exclude goods imported by persons declaring importations declaring importations through a simplified procedure.

Source: National Statistics Committee, Kyrgyz Republic.

Table 9: Volume, Value, and Value Density of Kyrgyz Republic Exports by Main Trading Partners, 2006*

	Trading Partner	Tons	Value ($'000)	% of total weight	Value density ($/kg)
	World	**2,942,216**	**1,615,631**	**100.0**	**0.55**
1	Uzbekistan	1,348,312	230,316	45.8	0.17
2	Kazakhstan	617,412	183,235	21.0	0.30
3	Russian Federation	350,552	310,117	11.9	0.88
4	Tajikistan	175,057	25,891	5.9	0.15
5	People's Republic of China	122,212	44,565	4.2	0.36
6	Afghanistan	82,516	45,490	2.8	0.55
7	Iran	70,392	12,117	2.4	0.17
8	Latvia	49,165	30,664	1.7	0.62
9	Turkey	44,921	44,446	1.5	0.99
10	United Arab Emirates	18,774	52,248	0.6	2.78

kg = kilogram.

* Data exclude goods exported by persons declaring exportation through a simplified procedure.

Source: National Statistics Committee, Kyrgyz Republic.

Table 10: Volume, Value, and Value Density of Kyrgyz Republic Exports to Main Trading Partners by Product Group, 2006*

	Product group	Weight (tons)	Value ($ '000)	% of total weight	Value density ($/Kg)
	World	**3,112,744**	**803,834**	**100.0**	**0.26**
1	Salts, sulfurs, stones, plasters, cements	1,904,915	25,973	61.2	0.01
2	Crude oil, fuels, oils	270,129	149,805	8.7	0.55
3	Ferrous metals	172,835	9,662	5.6	0.06
4	Stone, plaster, cement asbestos produce	154,538	12,333	5.0	0.08
5	Ceramics	106,560	3,280	3.4	0.03
6	Vegetables	87,051	24,066	2.8	0.28
7	Glass and glass products	85,414	28,429	2.7	0.33
8	Cotton	47,855	39,672	1.5	0.83
9	Skins and leather	38,897	14,126	1.2	0.36
10	Milk products, eggs, honey	37,422	20,438	1.2	0.55
11	Fruits and nuts	34,,508	10,538	1.1	0.31
12	Sugar and confectionary products	30,407	7,130	1.0	0.23

* Data exclude goods exported by persons declaring exportations through a simplified procedure.

Source: National Statistics Committee, Kyrgyz Republic.

Table 11: Volume, Value, and Value Density of Kyrgyz Republic Imports from Main Trading Partners by Product Group, 2006*

	Product group	Weight (tons)	Value ($ '000)	% of total weight	Value density ($/Kg)
	World	**5,978,963**	**1,998,305**	**100.0**	**0.33**
1	Crude oil, fuels, oils	2,312,682	485,704	38.7	0.21
2	Salts, sulfurs, stones, plasters, cements	1,855,180	21,242	31.0	0.01
3	Ores, slag, ashes	280,420	3,630	4.7	0.01
4	Grains and cereals	262,046	34,875	4.4	0.13
5	Woods, wooden products, charcoals	117,504	28,497	2.0	0.24
6	Sugar and confectionary products	107,112	51,796	1.8	0.48
7	Fertilizers	76,302	10,872	1.3	0.14
8	Fruits and nuts	74,316	12,365	1.2	0.17
9	Ceramics	69,809	13,628	1.2	0.20
10	Flour products, starch, barleys	54,711	9,639	0.9	0.18
11	Beverages	54,696	2,607	0.9	0.48
12	Ferrous metals	51,705	33,501	0.9	0.65
13	Plastic products	45,434	50,274	0.8	1.11

continued on next page

Table 11: Volume, Value, and Value Density of Kyrgyz Republic Imports *(continuation)*

	Product group	Weight (tons)	Value ($ '000)	% of total weight	Value density ($/Kg)
14	Non-organic chemicals	44,468	21,017	0.7	0.47
15	Chemical fibers	43,886	21,390	0.7	0.49
16	Metals and metal parts	39,965	33,699	0.7	0.84
17	Tooling, cutlery, cookery	38,377	14,844	0.6	0.39
18	Paper and cardboard products	29,605	26,067	0.5	0.88
19	Fats, butters, vegetable oils	29,170	21,364	0.5	0.73
20	Locomotives, rail cars, trams, spare parts	28,741	7,914	0.5	0.28
21	Boilers, mechanical equipments, spare parts	28,315	175,237	0.5	6.19

kg = kilogram.

* Data exclude goods imported by persons declaring importations declaring importations through a simplified procedure.

Source: National Statistics Committee, Kyrgyz Republic.

Most largest trading partners, except Kazakhstan, the Russian Federation, and Uzbekistan, export goods to the Kyrgyz Republic that are of higher value density than what they import from the country. The average value density of the country's imports, except those from Kazakhstan, the Russian Federation, and Uzbekistan, amounts to $1.15 per kilogram (/kg), while the average value of its imports from these three Commonwealth of Independent States (CIS) countries is only $0.29/kg. A similar situation applies to its exports. The average value density of the country's exports, except those to Kazakhstan, the Russian Federation and Uzbekistan, amounts to $1.42/kg, while the average value of its exports to these three (CIS) countries is only $0.31/kg. Normally, lower value density goods tend to be transported by more economic modes of transport (rail, water). In landlocked Kyrgyz Republic, with its poor rail network and the absence of waterways, however, local exporters tend to rely on the more expensive road transport. Combined with various non-physical barriers along the road corridors, this results in a considerable increase in the cost of the country's exports and imports.

The value density for imports from the PRC is double that of exports to the same country. The Kyrgyz Republic imports consumer products and machinery from the PRC and exports low value-added materials.

Eighty percent of the volume of the Kyrgyz Republic's imports and exports consists of basic construction materials and oil products. The importation of oil products, which accounts for about 40% of the country's total import volume and 25% of the total import value, had impacted strongly on increases in import figures and the development of trade deficits due to increases in oil prices in the last several years.

Assessment of the Transport and Logistics Sectors

Overview of the Transport Sector

The Kyrgyz Republic is ranked last among 181 countries in "Trading across the Borders" component of the World Bank's "Doing Business" ranking system (Table 12). The "Trading across the Borders" index is based on the number of import and export documents, trading days, and cost required for the import or export of one 20-foot multimodal container (Table 13). On the other hand, the country has the highest logistics performance index (LPI) among all Central Asian countries, being ranked 104th of the 150 countries included in the 2007 World Bank study (Table 14). The LPI measures a country's trade logistics using parameters such as customs procedures, logistics services, and infrastructure. A country that scores a high LPI has lower trade costs and is more efficient in moving goods.

Table 12: Ranks of CAREC Countries in the "Trading across the borders" Component of the World Bank's Doing Business Index and in the Overall Doing Business Index, 2008

Country	Rank in the "Trading across the borders" Component of the Doing Business Index	Rank in the Overall Doing Business Index
People's Republic of China	48	83
Mongolia	156	58
Uzbekistan	171	138
Tajikistan	177	159
Azerbaijan	174	33
Afghanistan	179	162
Kazakhstan	180	70
Kyrgyz Republic	**181**	**68**

Source: World Bank. 2009. *Doing Business 2009*. www.doingbusiness.org/economyrankings/

The transport infrastructure of the Kyrgyz Republic was created during the Soviet era and was oriented toward the movement of goods among the republics of the Soviet Union. At that time, the transit of vehicles among Central Asian countries was free, while borders with the People's Republic of China (PRC) were highly protected, with trade relationships with the PRC being given low priority.

In the last two decades since the collapse of the Soviet Union, relationships and trade flows in Central Asia have changed quite considerably. Convenient roads between the northern and

Table 13: CAREC Countries' Ranks in the World Bank's Trading Across the Borders Index, as well as No. of Documents, Time, and Cost Required for Import/Export Transactions, 2008

Country	Rank	Import			Export		
		No. of documents	Days	Cost per 20-foot container ($)	NO. of documents	Days	Cost per 20-foot container ($)
People's Republic of China	48	6	24	545	7	21	460
Mongolia	156	8	49	2,274	8	49	2,131
Uzbekistan	171	11	104	4,600	7	80	3,100
Tajikistan	177	10	83	4,550	10	82	3,150
Azerbaijan	174	14	56	3,420	9	48	3,075
Afghanistan	179	11	77	2,600	12	74	3,000
Kazakhstan	180	13	76	3,055	11	89	3,005
Kyrgyz Republic	**181**	**13**	**75**	**3,250**	**13**	**64**	**3,000**

Source: World Bank. 2009. Doing Business Index. www.doingbusiness.org/economyrankings/

Table 14: Ranks of CAREC Countries in Overall Logistics Performance Index and Component Indixes, 2007

Country	Rank 2007	Customs	Infrastructure	Ease of shipment	Logistics services	Ease of tracking	Internal logistics costs	Timeliness
People's Republic of China	30	2.99	3.20	3.31	3.39	3.37	2.97	3.68
Kyrgyz Republic	**104**	**2.20**	**2.06**	**2.35**	**2.35**	**2.38**	**2.80**	**2.76**
Azerbaijan	111	2.23	2.00	2.50	2.00	2.38	2.88	2.63
Kazakhstan	125	1.95	1.90	2.15	2.10	2.25	2.75	2.68
Uzbekistan	127	1.94	2.00	2.07	2.25	2.00	2.91	2.73
Tajikistan	146	1.91	2.00	2.00	1.90	1.67	2.33	2.11
Afghanistan	150	1.30	1.10	1.22	1.25	1.00	3.13	1.38

Source: World Bank. 2007. Logistics Performance Index. info.worldbank.org/etools/tradesurvey/mode1b.asp

western regions and between the northern and southern regions of the Kyrgyz Republic now go through the territories of Kazakhstan and Uzbekistan, where traffic is subject to delays at border-crossing points (BCPs) and the official and unofficial payments imposed by Kazakh and Uzbek authorities. In addition, some roads within the Kyrgyz Republic transit through Uzbek and Tajik enclaves. To meet these new obstacles, the country needs to develop its internal road network to connect different parts of the country.

Meanwhile, the PRC has now turned into the Kyrgyz Republic's most important trading partner, with the total volume of trade between these two countries exceeding that between the Kyrgyz Republic and all the Commonwealth of Independent States (CIS) countries combined, all of which are former Soviet republics. Optimizing the opportunities for trade with the PRC necessitates the development of new infrastructure to connect the Kyrgyz Republic with the Xinjiang Uygur Autonomous Region (XUAR) of the PRC, including both a road network and a rail link.

The volume of transport in the Kyrgyz Republic declined considerably in the beginning of the 1990s. Starting from the mid-1990s, however, the volume in road and rail transport has grown slightly. The country's key transport indicators over the last 16 years are shown in Tables 15 and 16.

Due to a considerable decline in cargo turnover, from 338.5 million tons in 1990 to 29.1 million tons in 2006, the Kyrgyz Republic has excess capacity in transport vehicles, mostly trucks. Meanwhile, cargo-moving equipment is getting older and more than 60% of vehicles are obsolete.

Most of the Soviet-era government transport agencies were privatized, giving rise to a large number of small enterprises. The efficiency of these companies is low, while their operating expenses are high. Despite relatively high transport rates, many companies have not been able to achieve reasonable profitability.

Table 15: Cargo Turnover by All Modes of Transport, 1990, 1995, 2000, 2005, and 2006
(millions of tons)

Mode of transport	1990	1995	2000	2005	2006
Road	329.9	27.2	25.0	26.1	26.6
Rail	8.0	0.9	1.0	1.7	1.9
Pipeline	–	–	0.6	0.6	0.6
Land transport, total	**337.5**	**28.1**	**26.6**	**28.4**	**29.1**
Air	0.010	0.0056	0.0035	0.0014	0.0007
Water	0.646	0.035	0.035	0.026	0.035
TOTAL	**338.6**	**28.1**	**26.6**	**28.4**	**29.1**

Source: Ministry of Transport and Communications, Kyrgyz Republic.

Table 16: Cargo Turnover by All Modes of Transport, 1990, 1995, 2000, 2005, and 2006
(million ton-km)

Mode of transport	1990	1995	2000	2005	2006
Road	5,626.9	708.6	1,199.9	821.2	864.0
Rail	2,619.6	402.6	337.9	661.8	725.0
Pipeline	–	–	292.4	314.4	210.2
Land transport, total	**8,246.5**	**1,111.2**	**1,830.2**	**1,797.4**	**1,826.2**
Air	371.7	94.4	55.5	42.4	34.2
Water	113.9	6.2	5.9	4.9	6.3
TOTAL	**8,732.1**	**1,211.8**	**1,891.6**	**1,844.7**	**1,866.7**

km = kilometer.

Source: Ministry of Transport and Communications, Kyrgyz Republic.

Road Transport

Road transport accounts for about 95% of the total cargo transported in the Kyrgyz Republic. There are 34,000 kilometers (km) of roads, of which 18,810 km are national while the rest are community and private.[3]

The Ministry of Transport and Communications (MTC) has identified eight roads, totaling 2,242 km, as the Kyrgyz Republic's main transport corridors. It also identified 5,500 km of roads as basic infrastructure, which includes regional transport corridors and a part of the internal road network connecting oblasts or states. It has been estimated that the Bishkek–Naryn–Torugart and the Osh–Sary-Tash–Irkeshtam routes carry about 50% of the total volume of Kyrgyz road transit cargo.

One of the key priorities identified by MTC is improving the conditions of the key transit routes as shown in Table 17.

MTC has determined that the rehabilitation of the regional transport corridors will cost a total of $490 million. Only a small part of this investment has been secured through loans from international financial institutions (Table 18).

Table 17: Length and Actual and Projected 2010 Compliance to Standards of Main Transit Corridors of the Kyrgyz Republic

Transport corridors	Length (km)	Conformance to standards (%)	
		2006	2010
Bishkek–Osh	672	71	100
Bishkek–Georgieveka	16	80	100
Bishkek–Naryn–Torugart	539	0	35
Taraz–Talas–Suusamyr	199	12	100
Osh–Sarytash–Irkeshtam	258	1	100
Osh–Isfana	385	0	57
Sarytash–Karamyk–Zhergital	142	0	100
Karabalta–Chaldovar	31	0	100

Source: Ministry of Transport and Communications, Kyrgyz Republic.

Table 18: Road Infrastructure Investment Projects, Committed and Additional Funding Requirements, 2007 ($ million)

Project	Committed Funds	Additional Funding Required
Bishkek–Naryn–Torugart	**20.0** (20.0 - ADB, 14.0 - IDB)	**136.0**
Osh–Sarytash–Irkeshtam	**54.1** (ADB - 32.8, IDB - 17.3, PRC - 4.0)	**66.0**
Osh–Batken–Isfana	**18.4** (8.4 - EU, 10.0 - World Bank)	**127.6**
Suusamyr–Talas–Taraz	**20.4** (10.4 - IDB, 10.0 - IDB)	**55.6**
TOTAL	**90.8**	**363.1**

ADB = Asian Development Bank, EU = European Union, IDB = Islamic Development Bank, PRC = People's Republic of China.

Source: Ministry of Transport and Communications, 2007.

[3] Ministry of Transport and Communication. Kyrgyz Republic. *Strategy of Road Sector Development, 2007–2010, Bishkek, the Kyrgyz Republic, 2007.*

The Kyrgyz Republic has several Uzbek and Tajik enclaves inside its territory. Since the delineation of borders in Central Asia following the collapse of the Soviet Union, transit through these enclaves has faced considerable delays and extra costs. Bypassing these enclaves would require constructing 163 km of new roads: the Koktalaa–Pulgon (14.7 km), Pulgon–Burgandy (49.7 km), and Batken–Akturpak (29.7 km) routes; the road along the Toktogul water reserve (23.5 km); and the bypass roads along the Shamaldysay–Uchkorgon Power Station–Chatkal (45 km). It would also require the construction of two 276–meter (m) bridges (see footnote 5).

The government's estimate of $6–$7 million as the amount needed to maintain the road system in the Kyrgyz Republic is less than 20% of the required budget. Insufficient funding for road maintenance leads to the loss of about 200 km of surfaced roads every year.

The MTC defines several sources of financing for road maintenance: road taxes that are consolidated as the Road Fund, transit fees, and international grants and loans. The Road Fund has never been effective since road taxes have been consolidated into the country budget along with other government resources. The use of government revenues has not been sufficiently transparent, and normally not all revenues in the Road Fund have been invested into road maintenance and development.

Currently, roads are maintained by 57 road units under the MTC. There are plans to privatize the road maintenance function, with private contractors being engaged to maintain roads and road systems. However, private maintenance contractors would likely find it difficult to access sufficient financing, and this would prevent them from running profitable operations, investing in capital assets, and maintaining operating equipment.

Rail Transport

The Kyrgyz rail network has 423.5 km of railway tracks and all rail lines consist of one wide-gauge rail track (1,520 millimeters). The network's locomotive fleet consists of 50 diesel locomotives, while its rolling stock is comprised of more than 2,000 rail cars. The rail network is maintained in relatively good condition and Kyrgyz Railways has maintained relatively profitable operations over the last several years, allowing it to invest in new facilities and equipment, and to retain qualified personnel.

The whole network is represented by five small appendices, linked to the rail network of the CIS countries, but not within the territory of the Kyrgyz Republic. Currently, Kyrgyz rail has two separate systems: the Northern and the Southern systems (Appendix 3).

The Northern system consists of only one rail track measuring 340 km in length and links the borders of Kazakhstan to the railway station in Balykchi, located at the southwestern corner of Issyk-Kul lake. It used to be part of the Almaty rail network during the Soviet era. Accordingly, management skills and rail design and training facilities are located in Almaty, Kazakhstan.

Despite the considerable advancement in the overall management of its operations, Kyrgyz Railways strongly depends on other CIS countries for railway maintenance, operational scheduling, rolling stock availability, and railway development expertise.

The key stations along the Northern system are located within or near Bishkek (Bishkek I, Bishkek II, and Alamedin). During the Soviet era, the terminal station in Balykchi played a significant role in the flow of cargo to the region. During the study, it was found that while its rail track and signaling systems were in proper condition, the volume of transport through this station dropped by almost 20 times to less than 5%–7% of its capacity. Despite this decline in its volume of operations, Balykchi still has the potential to play a significant role as a regional trade and logistics center in the future.

Only one rail station in the Northern system has equipment for handling multimodal containers. The Alamedin station, which is located in the industrial area of Bishkek, has a container yard equipped with stack car loaders, one of which was procured with funding from the Technical Aid to the Commonwealth of Independent States program and the other one with retained Kyrgyz Railways profits. This station has the capacity to handle up to 1,000 containers a month and is prepared to expand in the future.

Authorities managing the station are considering plans to further expand its operating area, which currently measures 180 m by 34 m—enough for operating with 12 rail platforms simultaneously. This area can be relatively easy to expand lengthwise to accommodate up to 16 rail platforms. This improvement would entail investing only in the paving of the yard. Expansion in width, meanwhile, will require investments in the purchase of lands adjacent to the south border of the yard's current operating area.

The Southern system of the Kyrgyz rail network consists of four short spurs entering into the territory of the Kyrgyz Republic from Uzbekistan. During the Soviet era, these tracks were a part of the Fergana rail network. Accordingly, the management of this network was exercised from Tashkent in Uzbekistan.

Unlike road transport between the Kyrgyz Republic and Uzbekistan, where obstacles are believed to be imposed by Uzbek authorities, rail transit between these two countries is relatively smooth. Having wide-gauge rail networks, CIS countries have a common set of operating practices, which allow moving cargo between countries relatively easy compared to roads.

The Kyrgyz Republic, being the smallest "railway nation" in the CIS, has relatively low bargaining power compared to the other commonwealth member–countries and thus is heavily dependent on Kazakhstan and Uzbekistan for the supply of rail cars and multimodal containers within the framework of the Organization for Cooperation Between Railways. On the other hand, being a small player, Kyrgyz Railways is pushed to manage and schedule its operations efficiently to avoid demurrage charges from its neighbors. All rail cars that enter the country have to be unloaded and, if return loads exist, loaded and moved back to Kazakhstan or Uzbekistan quickly. This makes Kyrgyz Railways less complacent than other railway authorities in CIS countries and thus be more willing to adopt further reforms and more customer-focused operating practices.

The key railway stations of the Southern system are Osh and Jalal-Abad, both located relatively close to each other, but divided by Uzbek territory. Cargo flow through these two stations is primarily determined by their locations near a large consumer base of the second and the third largest cities of the Kyrgyz Republic. A large proportion of the goods flowing through these stations consists of construction materials and fuel.

The Osh station is the only one in the Southern system with container handling equipment for the loading and unloading of 20-foot and 40-foot containers. Relatively consistent container operations in the station started only in the spring of 2007, after the installation of a 60-ton rail track maintenance crane. Currently, containers are mostly used to transport imports of second-hand cars. Since the beginning of its regular container operations, the flow of containers through the station has reached 200 per month. Further increases in container handling capacity are possible only after investments are poured into the expansion of the container yard.

The Jalal-Abad station does not have facilities for multimodal operations. It does, however, have equal or even better opportunities than Osh for having a container yard as it has more space for expansion in the area where abandoned rail sidings of bankrupt production enterprises are located.

The construction of the rail link between Kashgar in the PRC and the Southern system of the Kyrgyz rail network has the potential to have a substantial impact on the development of the transit infrastructure of the Kyrgyz Republic. This rail link would connect the PRC with Europe and the Middle East via the country. A feasibility study on the project is currently ongoing and it is expected that the specifications of the rail link will be finalized in 2008.

Air Transport

Aviation infrastructure in the Kyrgyz Republic consists of two international airports (Manas [Bishkek] and Osh), and 22 domestic airports and airfields. The Manas Airport, the main gateway of the the Kyrgyz Republic, has a 4,200 x 60 m runway and is equipped in accordance with Class 1 International Civil Aviation Organization requirements. It therefore has the capacity to serve wide-body aircrafts, including Boeing 747 planes. A part of it is also used as the United States' airbase in the country.

In 1994, international consultants prepared a development program for the airport that requires an investment outlay of $150 million over 20 years. Part of the investment program was implemented and this resulted in the construction of the international passenger terminal, a cargo terminal, and catering facilities, as well as the upgrading of navigation equipment.

Currently, the volume of flights through the airport is low. The Kyrgyz Republic does not have a strong national carrier and depends significantly on charter flights and flights of international carriers, such as British Airways, Aeroflot, and Turkish Airways.

The aircraft fleet of the Kyrgyz Republic is small and obsolete. The fleet of the national carrier "Kyrgyzstan" consists of two TU-154M, one TU-134, and two AN-24 planes. Other Kyrgyz carriers have similar fleets. Most aircraft do not meet International Air Transport Association standards, and this serves as a disincentive for potential customers, turning them away toward the airlines of other CIS countries and to other airports like those in Almaty (Kazakhstan) and Tashkent (Uzbekistan).

A number of transport and tourism companies use the Manas Airport for air cargo handling using IL-76, AN-12, and AN-124 planes. The carrier Panalpina, through its local agent, operates

regular flights using a Boeing 747. Normally, 60% of the cargo arriving in the Kyrgyz Republic on this flight is destined for Kazakhstan. Panalpina operates a similar flight to Almaty, Kazakhstan. Courier companies, like DHL, also actively use the Manas Airport to haul parcels and documents to their sorting hubs. The low capacity of Kyrgyz line hauls, mainly resulting from the limited availability of flights and space in the cargo compartments of passenger planes, often force these companies to reroute part of their cargo to Almaty Airport, which is located 240 km from Bishkek.

The cargo terminal at the Manas Airport was constructed in 2000. Most of its equipment is about 5–7 years old, with some already needing to be replaced. When several aircraft arrive, the handling equipment's low capacity causes bottlenecks. The replacement of these equipment, and new equipment that have been purchased, are not immediately deployed. At the time of the consultants' site visit to the cargo terminal, a number of recently purchased air pallet loading platforms were lying unused in the yard as authorities have yet to decide whether or not these are subject for customs duties.

Logistics Sector

Road Freight Industry

The road freight industry in the Kyrgyz Republic consists of many small players, with a few companies managing to become relatively big with hundreds of trucks in their fleets. Such fleets are formed by engaging drivers who own the trucks they drive. Under this arrangement, the holding company normally performs the sales and documentation functions while drivers are responsible for the hauling of goods and the maintenance of their trucks. Drivers have patents for cargo handling as private entrepreneurs and are free to work either exclusively for a particular company or to accept and fulfill orders from other customers.

Small entrepreneurs use old Soviet trucks while those who have better financial capabilities use second hand European trucks and trailers. These trucks are normally prone to frequent breakdowns, which often happen along the transit routes. Drivers must therefore have good truck repair and maintenance skills because maintenance services are very limited along the main transit routes in the Kyrgyz Republic.

Most tractor units are Russian Federation- and Belarus-made trucks, normally above 10 years old. There is a shortage of specialized trailer units, such as refrigerators and flat bed trailers for International Standard Organization containers.

During the Soviet era, freight terminals existed in the main industrial centers of the Kyrgyz Republic, serving as consolidation and maintenance centers. These facilities were privatized along with transport fleets and most have stopped functioning as they were initially intended to.

Currently, most contracting of road hauling services occurs at *pyataks* (meeting places for truck drivers). There are dozens of pyataks all over the country and prices for domestic cargo handling are relatively fixed at competitive levels.

Table 19: TIR Carnets issued by the International Road Union to National Associations in Selected Central Asian Countries, 2000–2005

Country	2000	2001	2002	2003	2004	2005
Kyrgyz Republic	**100**	**550**	**1,250**	**2,700**	**4,900**	**6,250**
Russian Federation	236,800	192,800	263,700	313,550	375,650	424,000
Kazakhstan	10,400	9,100	6,400	17,400	17,000	19,600
Uzbekistan	900	600	500	900	2,400	1,800
Turkmenistan		150		150	200	400
Tajikistan					0	50

Source: International Road Union.

A number of carriers that specialize in the international handling of goods operate under the Transports Internationaux Routiers (TIR) transit guarantee system.[4] The number of TIR trucks in the Kyrgyz Republic has been increasing steadily. Table 19 shows the growth of TIR carnets issued by the International Road Union to the national association in the Kyrgyz Republic, as compared to those in selected countries in Central Asia.

Road carriers in the Kyrgyz Republic have two associations: the National Association of Road Carriers and the Association of International Road Carriers. The Association of International Road Carriers is the guaranteeing entity for the TIR carnet system.

Transport Corridors and Logistics Centers

During the Soviet era, the border between the Kyrgyz Republic and the PRC was one of the most protected areas in the world, and this did not support the development of trade along the PRC–Kyrgyz Republic routes. Security issues are now of considerably lower importance and both the PRC and the Kyrgyz Republic are looking for opportunities to develop trade along the newly established transit routes between them.

One of the most significant gaps that constrain the growth of the international transit of goods through the Kyrgyz Republic is the absence of a rail link between the PRC and Kyrgyz rail networks. Such a link would support the development of the Central Asia Regional Economic Cooperation program (CAREC)-1 (Middle Route) and CAREC-2 (TRACECA) transit corridors.

In contrast to the rail corridors, transit traffic through road links from the PRC via the Torugart pass (CAREC-1 Corridor) and the Irkeshtam pass (CAREC-2 Corridor) is growing at a considerable pace. Such growth could increase further if the technical condition of these links is improved. The main constraints to this end are inefficient and slow cross-border procedures, poor road infrastructure, and lack of logistics and other services along the route.

All transit corridors through the Kyrgyz Republic are multimodal. According to the CAREC Transport and Trade Facilitation Strategy, four transit corridors—CAREC 1-b, 2, 3-b, and 5—go through Kyrgyz territory (Figure 3).

[4] The TIR system is designed to reduce delays at border crossings by allowing the movement of cargo from the country of origin to the destination, even through transit countries, without customs formalities at each border crossing. The system operates across all modes of transport so long as one segment is by road. It reduces transport costs, documentation requirements, security risks, and inspections, guarantees duty payments, and promotes the efficient use of customs personnel.

Logistics centers and facilities in the Kyrgyz Republic consist of container yards and market places. There is only one container yard officially assigned to operate with multimodal containers. It is located in the Alamedin railway station in Bishkek. This container yard has a railway siding for 12 platforms and a Fantuzzi stack car loader. Two other railway stations can handle 20- and 40-foot containers: Osh, which developed the operational capability to handle and store multimodal containers in late spring of 2007, and the private container yard of the Kumtor Operating Company in Balykchi.

In Dordoi, the largest marketplace in the Kyrgyz Republic located near Bishkek, traders use mostly multimodal containers as trade stalls. There are two types of commercial transactions in Dordoi: retail sales and sales to wholesalers, who normally buy full truckload quantities to either sell in the Kyrgyz Republic or export to other countries. Another marketplace of similar size is located in Kara-Suu near Osh city.

Until the 1990s, the Kyrgyz Republic had a network of logistics and freight terminals in its largest urban and industrial areas. These terminals were used for the centralized consolidation and distribution of goods, as well as the provision of food and accommodation services to truck drivers. In the 1990s, all these terminals were privatized, some to public officials who bought the facilities at low costs and who had little vision and purpose to develop the facilities. As a result, a number of these facilities have been completely lost to the logistics industry. Those that remain functional in the logistics industry have been operating based on business and investment strategies that are fully defined by their owners.

In 2006, Kyrgyz customs had 15 branches with 67 customs posts. Most of the import and export clearance procedures occur in the customs posts which are located near large cities. According to the freight forwarders who were interviewed in the course of this study, customs clearance in the Kyrgyz Republic always involves unofficial payments to "speed up the process".

Figure 3: Map of Multimodal Transit Corridors in the Kyrgyz Republic

CAREC = Central Asia Regional Economic Cooperation, km² = square kilometer.

Source: Authors, based on TERA International's definition of CAREC corridors (May 2008).

Many firms have internal capability in customs brokering, while smaller companies often use the services of unlicensed brokers.

Compared to the Russian Federation and Kazakhstan, the Kyrgyz Republic has not been investing enough in its logistics industry. Currently, only one investment project is given some degree of attention: the construction of the logistics and trade center in Sary-Tash. This project will establish a freight terminal at this border area, where inbound cargo from the PRC will be cleared, sold or reloaded onto domestic trucks for further distribution in the Kyrgyz Republic or transit to other CIS countries.

Transit through the Kyrgyz Republic

Compared to other countries in the region, the Kyrgyz Republic has a relatively liberal environment for trade and cargo transit. Presidential Decree 464, which lays down plans for the further simplification and standardization of import–export and transit procedures, has been designed to further liberalize this environment. More specifically, it requires action in the following directions, and sets a time frame for their implementation:

(i) simplification of import–export procedures and reduction of paperwork;
(ii) assessment and standardization of customs fees;
(iii) definition of BCPs which require the full set of inspections, including those for phyto-sanitary and quarantine standards;
(iv) definition and implementation of the most efficient processes of coordination among various inspecting authorities on selected BCPs;
(v) definition of the list of equipment and required investments for infrastructure, facilities and equipment of the selected BCPs, and the inclusion of these outlays in the country's budget plan for 2008;
(vi) establishment of the National Committee for Trade and Logistics Facilitation;
(vii) definition and finalization of the concept of "single window" operations in the provision of government services at BCPs; and
(viii) development of the single government database of legal entities participating in international trade.

The Kyrgyz Republic does not have significant legal constrains that hinder trade with other countries in the region, or the transit of goods through its territory. However, relationships with its different trading partners are regulated by a number of multilateral and bilateral agreements and therefore have some specific challenges.

On 25 December 2003, the governments of the Kyrgyz Republic and Kazakhstan signed an agreement that made possible the non-licensed carriage of cargo and passengers between the two countries. On the 27 February 2004, the government of Kazakhstan issued Decree 238, which defines 11 BCPs along the border between Kazakhstan and the Kyrgyz Republic, and 20 internal points for the control of the transit flow of cargo and passengers between the two countries.

On 4 April 2007, the MTC of Kazakhstan issued further instructions that require that BCPs in Kazakhstan to operate according to the "one stop" approach, i.e., that all inspections occur at the BCP and that the special coupon confirming that all controlling procedures had been completed

be issued at the same BCP. The intent of this issuance is to exempt drivers from further controls in the territory of Kazakhstan. However, in reality, inspections continue to be conducted inside the borders on vehicles already checked at BCPs.

The transit of goods from the Kyrgyz Republic through Kazakhstan is governed by an agreement between the two countries that was signed on 26 March 2004 and took effect on 11 May 2005. This agreement allows the transport of cargo through the customs territory of Kazakhstan under a guarantee commitment from Kyrgyz customs. More specifically, it provides that a carrier or its guarantee bank in the Kyrgyz Republic commits to Kyrgyz customs a deposit that is equal to the amount of customs duties that need to be paid in Kazakhstan. If the goods enter but do not leave Kazakhstan, Kyrgyz customs transfers these duties to Kazakh customs. This agreement is "one-sided", i.e., it works for the transit of goods through Kazakhstan, but not for goods transported through the Kyrgyz Republic.

The agreement between the Kyrgyz Republic and Kazakhstan served as a model for the development of a similar agreement between the Kyrgyz Republic and Tajikistan, except that the latter agreement covered the transit of goods through both countries. This agreement was signed on the 22 July 2005 and came into effect on 15 March 2006.

While the Kyrgyz Republic's relations with Kazakhstan and Tajikistan are based on the pragmatic objectives of facilitating trade and reducing transit constraints, that with Uzbekistan has a range of constraints that handicap the development of road transit between the two countries.

The relationship between the Kyrgyz Republic and Uzbekistan in transit transport is regulated by the intergovernmental agreement of 4 September 1996. The Kyrgyz Republic acts according to this agreement and does not impose any constraints and duties on Uzbek road vehicles transiting through it. Uzbekistan, on the other hand, imposes a fee of $300 on Kyrgyz vehicles transiting through its territory. It also imposes fees for customs escort in the amount of ¤50 for distances less than 200 km and ¤120 for distances over 200 km.

The relationship between the Kyrgyz Republic and Uzbekistan in transit transport is also regulated by multilateral agreements among CIS countries, which maintain zero customs duties in mutual trade. However, trade with Uzbekistan is affected by the constraints on the import of currency into, and on currency conversions in, Uzbekistan.

The Kyrgyz Republic's relationship with the PRC in the field of road transport is regulated by an agreement, signed by both countries 1 June 1994, under which PRC trucks can travel through the Kyrgyz Republic until Bishkek and Osh. Meanwhile, Kyrgyz trucks can go only until the freight terminals Topo (104 km from the Torugart BCP) and Symkana (5 km from the Irkeshtam BCP). Travel beyond these points requires a PRC license for road haulage operations.

Although the Kyrgyz Republic has one of the most liberal legal frameworks in the area of international trade among the Central Asian countries, its logistics infrastructure constrains its further development as a transit country. The main areas that need attention are the simplification and standardization of cross-border procedures and the development of its road infrastructure.

A regional project of the Kyrgyz Customs Committee is modernizing customs service and infrastructure in the country. The project, which started in February 2006 and is expected to be completed in December 2009, is financed by the Asian Development Bank (ADB) with a loan of $7.5 million. Among the project deliverables is the deployment of the customs information system with an underlying information technology (IT) communications network.

Cross-Border Movement of Cargo

Cross-border movement of goods within Central Asia is notoriously poor. All countries in the region have very low logistics performance index scores, particularly in the cross-border movement of cargo. In 2007, the Kyrgyz Republic was rated 104th among 150 countries; this ranking puts it relatively higher than other Central Asian countries, which rated even lower.

The main delays and costs in the transit of goods through the Kyrgyz Republic arise at the BCPs. According to the study of the Special Program for the Economies of Central Asia Project Working Group on Transport and Border Crossing, loaded trucks from Bishkek (the Kyrgyz Republic) to Novosibirsk (the Russian Federation) spend one-third of their total travel time in each of the Kyrgyz Republic–Kazakhstan and Kazakhstan–Russian Federation BCPs. BCPs account for 63% of the overall costs paid along the trip. Most of these expenses are unofficial payments.[5]

Meanwhile, monitoring by the Road Transport Association of the Kyrgyz Republic shows that more than two-thirds of overall payments to various controlling authorities are unofficial payments and that main delays and costs arise at the BCPs.

The border crossing of vehicles is controlled by five government agencies: border guards, customs, the phyto sanitary and veterinary inspection agency, the transport inspection agency, and the quarantine agency. Each of these agencies requires a separate set of documents and this results in the lengthy process of inspection at the border posts, which normally takes hours. Monitoring units reported a number of corrupt practices at BCPs. It is generally accepted that a driver with proper documentation would wait hours before being allowed to cross the border, while a driver who is prepared to pay bribes would pass through the border posts without any delay and inspection.

There are three main areas that require attention if cross-border operations in the Kyrgyz Republic are to be improved: cross-border infrastructure, customs administration processes, and ethical practices. Customs and other authorities are normally comfortable discussing the first area and less inclined to talk about the last two.

Cross-Border Infrastructure

The Kyrgyz Republic has about 40 BCPs with four neighboring countries. The equipment used in all these BCPs is considered inadequate. In response to this situation, the Customs Committee of the Kyrgyz Republic aims to upgrade the infrastructure in 2 to 3 BCPs per year. However, the specifications of the required equipment have not been clearly defined and investment priorities have not been set. Observation and interviews at the Torugart (the PRC), Dostuk (Uzbekistan),

[5] Special Program for the Economies of Central Asia Project Working Group on Transport and Border Crossing, *Analysis of Selected Routes of the SPECA Region using UNESCAP Time/Cost-Distance Methodology,* Special Program for the Economies of Central Asia (11)/6.

and Kara-Suu (Uzbekistan) BCPs revealed that there are no clear guidelines about what kind of infrastructure should be deployed at the BCPs.

The decision to invest in infrastructure depends on a number of factors, such as the traffic that is predominant in a route, plans of the neighboring countries in promoting particular activities on certain corridors, and the availability of finance. A set of recommendations about what infrastructure and equipment should be provided at BCPs was compiled by the Eurasian Economic Community (EurAsEC). This list of equipment was distributed to the organization's member countries for further fine-tuning according to their particular needs. Given the recommended set of equipment, every country should develop its own set of specifications for every BCP based on the priority level set for a particular transit route and available financial resources.

There are possible synergies in equipment and infrastructure that may be achieved if authorities of different countries cooperate on cross-border issues. For example, nonintrusive inspection systems can be installed on one side of the BCP and the second side can accept the results of inspection by the other party.

Unfortunately, customs cooperation is one of the areas where significant effort still needs to be exerted. The consultants for the technical assistance found that it was uncommon for customs and border guard authorities of neighboring countries to talk to each other and share information. On the Torugart BCP, customs authorities of the Kyrgyz Republic and the PRC do not even have communications equipment to enable them to share information. The operations of PRC and Kyrgyz BCPs are completely disjointed. PRC and Kyrgyz authorities are divided by distance, language and even timing of operations. As a result, Kyrgyz authorities have little or no information about how many trucks have been released by PRC authorities at the Topo customs warehouse complex and when these should arrive at their borders.

The absence of a customs guarantee system acceptable to both the Kyrgyz Republic and the PRC also complicates cross-border trade between the two countries. The Kyrgyz Republic authorities issue import and export clearances not at the BCPs, but at the bonded warehouses located near the consignors' or consignees' main place of operation. Location and security requirements at the BCPs between the Kyrgyz Republic and the PRC make customs clearance operations at the border unfeasible. Thus, imports and transit goods must be covered by some form of customs guarantee or be escorted by customs authorities to the clearance points.

The TIR Convention is one of the widely accepted forms of customs guarantee for the international transit of goods. Currently, it is widely accepted in the Kyrgyz Republic for the transit of goods to European countries. Compared to other countries in the region, the Kyrgyz Republic has a relatively large proportion of vehicles with TIR carnets. Accordingly, Kyrgyz carriers actively participate in transport operations between the European Union (EU) and Central Asia. More than 60% of Kyrgyz vehicles with TIR carnets are refrigerator vehicles, which are used to transport fruits and vegetables. These vehicles carry goods, produced not only in the Kyrgyz Republic, but also in Uzbekistan and in Tajikistan.

There are some limitations in the application of the TIR system in the Kyrgyz Republic. First is that the PRC has not adopted the TIR Convention. Although the General Administration of

Customs of the PRC plans to join the TIR Convention soon, the full roll out of the TIR system and its acceptance by PRC shippers and carriers can take a considerable amount of time. The second limitation is that many goods that originate in the Kyrgyz Republic have low-value density (i.e., cost per truck) and relatively low associated customs duties, and that many Kyrgyz shippers and carriers tend to handle a small volume of imports and exports at erratic schedules. All these factors make TIR a costly or even unfeasible guarantee system for Kyrgyz shippers and carriers.

A customs guarantee system is currently being tested in the Russian Federation. This system, which operates through customs deposit cards, allows money equivalent to the amount of duties which should be paid if goods do not leave the transit country, to be frozen. Potentially this system or any similar system of customs guarantee, based on electronic cards, can gain acceptance within EurAsEC, as a feasible addition or even an alternative to the TIR. However, without the proper information technology infrastructure, which does not exist in Kyrgyz BCPs, such systems of customs guarantee will not be fully efficient.

Customs Administration Processes at BCPs

Cross-border monitoring reports show that carriers lose a lot of time and money during cross-border inspection, mainly because of complex, poorly implemented, and nontransparent procedures. Not only do these procedures and the way they are implemented cause delays, they also provide ample opportunity for corruption. In turn, the proliferation of corrupt practices and bribes attract to public service people with low qualifications and low ethical standards, who are neither capable nor willing to implement or support reforms in the system.

Recognizing the severity of the problem, the Kyrgyz government issued Presidential Decree No. 464 which defines the country's policy toward the conduct of international trade within its borders and aims to simplify the cross-border procedures and reduce unnecessary paperwork. It is expected that this government initiative will result in organizational changes in Kyrgyz customs, specifically in BCPs, as well as in other government agencies related to trade. It is the result of the efforts of the German Agency for Technical Cooperation (GTZ) to promote the simplification of import–export procedures in the Kyrgyz Republic. One of the objectives of this program is to promote single-window operations, which would allow the submission, assessment, and acceptance of one set of documents in one integrated and automated process.

GTZ estimates that by simplifying procedures, reducing the number of required documents, developing computerized single window operations, and introducing an efficient system of customs guarantee, overall logistics cost in the Kyrgyz Republic would be reduced over the period from 2007 to 2015 by $0.7 billion–$1.7 billion.

It is essential that these efforts not be lost and instead result in the sustainable improvement of cross-border procedures. The most widely accepted way to ensure the sustainability of improvement is the ISO 9000 standards that have been adopted by a wide range of organizations, including a large number of public organizations all over the world.

The adoption of ISO 9000 standards offers three benefits to any organization that adopts them. First, they provide a set of clearly defined rules for managing key business processes, with a

documented set of procedures and control mechanisms. Second, they provide the basis for the continuous improvement of all operating processes. Third, they are an indication to the business community, regulators and other stakeholders, that the organization is properly managed and can be considered as a trustful partner.

The process of adopting ISO 9000 in Kyrgyz customs can start with an institution of controllers to examine the existing processes across all BCPs and clearance facilities, audit the facilities, and, together with business associations or external auditors, develop and improve internal procedures.

Improved and transparent processes and more advanced tools for measuring and transferring information support the development of more robust practices and should be considered as primary tools for the development of efficient and transparent operations in public agencies.

However, a recent event at the Horgos BCP shows that sophisticated technology and IT systems can be easily cheated. In December 2007, Kazakh mass media reported that a number of transport inspectors installed a channel beam under the platform of an electronic weighbridge. This allowed them to underweight transit data and then pocket the difference between what was actually collected and what was remitted. The ingenious way the inspectors were able to circumvent the technology at the Horgos BCP only underscores the fact that, ultimately, what is needed to contain corruption is a reorientation of the value systems of the most corruption-vulnerable. Ethical codes of practice have long been needed in multinational companies and many public agencies throughout the world. The Kyrgyz Republic should seriously consider the use of ethical codes and other effective means for promoting ethical practices (including reporting of unethical practices, selection of right personnel, and providing incentives) to establish transparent and efficient cross-border processes.

Weighing and Product Certification

Weighing control is an area of concern and criticism among international and domestic road carriers, as it is one of the most vulnerable to abuse by traffic authorities and road police. Since weighbridges used by different authorities in BCPs and along the transit routes show quite different figures that do not match those in cargo documents, a large amount of discretion is left to traffic authorities and road police in deterring violations of weight regulations.

To minimize the incidence of extortion, one of the initiatives of Kyrgyz and other countries' associations of roads carriers is to push for the standardization of weighbridges and the use of mutually recognized weight certificates. The main idea of this initiative is to develop a system of certifying weighbridges that is commonly recognized by different authorities in different countries. This system will allow a truck to be weighed at the beginning of a trip, sealed and, if the seal is not broken, allowed through until the end of its journey. If this system is put in place, the use of any non-certified weighbridges should become illegal.

Product certification also demands attention. Often, customs and other authorities require product certificates for those goods that, in the first place, do not require certification. This issue was addressed by the GTZ project and is included in the scope of Presidential Decree 464, which sought to simplify trade procedures and reduce paperwork.

Some of the exports from the Kyrgyz Republic require product certification. The current state of certification laboratories in the Kyrgyz Republic, however, often does not allow for the carrying out of full product certification. Often, only a part of the product parameters is tested, thus making a second certification necessary in the importing country. Repeated tests cause considerable delays for Kyrgyz exporters. Strengthening the capabilities of the Kyrgyz certification centers will result in reduced time for certification while improving the competitiveness of Kyrgyz exporters.

Cross-Border Cooperation

There is a lack of cross-border cooperation among controlling authorities in Central Asia, adversely affecting the flow of trade and people across borders. This lack of cooperation at the level of BCPs can be seen in the example of the Torugart BCP, where Kyrgyz and PRC customs officials do not even have any means of communication. Operations at both ends of this BCP are not coordinated. For example, Kyrgyz and PRC customs officers work from 9 am to 6 pm, on weekdays, but since time in the PRC is 2 hours ahead of Kyrgyz time, 2 hours of operations in both sides of the BCP are wasted. Moreover, trucks from the PRC are released in batches and have to travel for 100 km until the Kyrgyz BCP. This adds to the time when Kyrgyz Republic customs authorities at the BCP are idle. It is estimated that the idle time at both ends of the Torugart BCP is considerably lower than 50% of total operating hours.

Impact on the Kyrgyz Logistics Sector of the Western People's Republic of China–Western Europe Corridor

A majority of cargo from the PRC reaches the Kyrgyz Republic via XUAR. Rail cargo goes through the Dostuk–Alashankou BCP, which is located between Kazakhstan and the PRC, and the Merke–Chaldovar BCP between Kazakhstan and the Kyrgyz Republic. Road cargo, meanwhile, goes through the Korgas (Kazakhstan)–Horgos (PRC) and the Korday (Kazakhstan)–Ak-Zhol (Kyrgyz Republic) BCPs. The Kyrgyz Republic has the Torugart BCP as an alternative route for cargo going via its northern regions. Cargo via its southern regions travels through the Irkeshtam BCP.

The Kyrgyz Republic ranks second to Kazakhstan as the largest trading partner of XUAR, although trade between XUAR and Kazakhstan far outstrips that between XUAR and the Kyrgyz Republic. However, the share of trade between XUAR and the Kyrgyz Republic to the total PRC trade with Central Asia has been increasing over the past several years, from 8% in 2003 to 25.1% in 2006. In contrast, the trade between XUAR and Kazakhstan has been declining, from 89.4% to 67.8% over the same period (Table 20).

According to the Kyrgyz State Customs Committee, the growth of traffic through CBPs with the PRC significantly exceeded that of traffic through the Kyrgyz–Kazakh CBP (Table 21).

Given the high volume of trade between them, a lot of attention is given to the development of trade logistics facilities along the routes from the PRC to Kazakhstan, especially the routes through the CBPs Alashankou–Dostuk and Horgos–Korgas. For instance, the Kazakh and PRC governments have agreed to construct a railway link and build a global logistics port there. In 2008, PRC and Kazakh authorities allocated 15.01 square kilometers (km^2) for the development

Table 20: Volume of Exports and Imports between PRC and Central Asian Republics and between Xinjiang Uygur Autonomous Region and Central Asian Republics, 2003–2006
($ million)

Import and Export Volume			2003	2004	2005	2006
Total Import and Export between the PRC and Central Asia five countries			**4,075.0**	**5,843.3**	**8,726.8**	**12,057.9**
Between XUAR and Five countries	Central Asia five countries	Total Import and Export	2,848.3	3,868.4	6,013.7	7,399.7
		Proportion of the PRC (%)	69.9	66.2	68.9	61.4
	Kazakhstan	Total Import and Export	2,546.1	3,286.1	5,015.6	5,014.7
		Proportion of Xinjiang (%)	89.4	84.9	83.4	67.8
	Turkmenistan	Total Import and Export	24.7	3.6	13.6	43.3
		Proportion of Xinjiang (%)	0.9	0.1	0.2	0.6
	Kyrgyz Republic	Total Import and Export	230.9	462.1	746.9	1,857.3
		Proportion of Xinjiang (%)	8.1	12.0	12.4	25.1
	Uzbekistan	Total Import and Export	37.7	85.8	138.3	266.3
		Proportion of Xinjiang (%)	1.3	2.2	2.3	3.6
	Tajikistan	Total Import and Export	8.7	30.9	99.3	218.1
		Proportion of Xinjiang (%)	0.3	0.8	1.7	2.9

Source: People's Republic of China Statistical Yearbook 2007, Xinjiang Statistical Yearbook 2001–2007.

Table 21: Volume of Vehicular Traffic through Kyrgyz–Kazakh and Kyrgyz–People's Republic of China (PRC) Border-Crossing Posts, 2005–2006
(vehicles)

Cross-Border Point	Country	2005	2006	Increase (%)
Ak-Zhol	Kazakhstan	3,091	3,589	16
Chaldovar	Kazakhstan	598	610	2
Torugart	PRC	5,471	11,772	115
Irkeshtam	PRC	4,453	5,850	31

Source: State Customs Committee.

of the Horgos Global Logistics Center and free trade zone (FTZ). Both governments have also agreed to consider expanding the FTZ area to up to 177 km^2 on each side of the border. In addition to the trade and inland logistics facilities, the Kazakh Ministry of Transport and Communications unveiled the plan in 2008 to build a cargo airport near Horgos. The airport will be fully equipped for the landing of large airplanes, such as Boeing 747s.

While the Khorgos port (Kazakhstan) is going to be the largest logistics port in the region, other locations are also being considered as locations for smaller logistics ports. Among these ports are the Torugart and Irkeshtam logistics ports at the Kyrgyz–PRC border.

The Torugart port in XUAR is located 100 km from the PRC-Kyrgyz border at the altitude of 2,800 m. The volume of road cargo traffic through it is relatively high even compared to that passing through the biggest ports on the PRC-Kazakh border. This volume is, however, very small compared to railway volumes through the Alashankou–Dostuk BCP (Table 22). The port is planned to measure 5 km^2, although only 0.75 km^2 will be allocated during the first phase of its development.

Although the logistics and transport infrastructure of XUAR are considerably more developed than those of the Kyrgyz Republic, there are no world-class logistics centers in the routes between the two countries. However, it is important to acknowledge that most logistics functionalities can be found in multiple trade centers in XUAR.

Trade and logistics ports are located primarily in Urumqi and main cross-border trade areas (e.g., Horgos). Their main function is to facilitate trade of PRC-made consumer products with neighboring countries. Small traders from Central Asia usually purchase consumer products in less-than-truckload quantities and await the cargo of other traders at gates assigned for the purpose. When enough cargo is available, these are consolidated into a truck which then leaves the gate for the traders' hometown.

Table 22: Volume and Value of Cargo Traffic through Main Xinjiang Uygur Autonomous Region Border-Crossing Posts, 2006

Port name	Horgos*	Alashankou	Torugart	Irkeshtam
Exports and imports of cargo (ton)	432,037	13,240,835 (Railway – 3,112,614, road – 128,221)	328,825	322,300
Imports (ton)	39,129	9,981,686 (Railway – 9,980,511, road – 1,175)	54,418	52,100
General exports (ton)	290,012	3,259,149 (Railway – 3,132,103, road – 127,046)	274407	270,200
Total trade volume ($ Million)	1,095.6	4,500	432.0	545.0
Imports ($ Million)	64.2	3,151	41.5	33.0
General exports ($ Million)	965.4	1,349	390.5	512.0

* Total trade volume for Horgos includes tour shopping ($41.33 million) and border trade ($24.7 million).

Source: Xinjiang Uygur Autonomous Region Customs.

Most trade and logistics ports were created by private entrepreneurs, their facilities and locations often being not fully appropriate for the designated purpose. For instance, the port of Gomao in Urumqi was developed on the site of a hotel, which was fully redesigned to be a trade and logistics center.

Currently the town administration of Urumqi is facing the challenge of relocating existing trade ports that developed quite spontaneously in random locations. With the explosive pace of development in Urumqi and XUAR, some of these ports appeared to be located in areas that are more appropriate for lucrative office or residential buildings.

The most promising developments are likely to happen along the "Western PRC–Western Europe" corridor linking Urumqi to Western Europe and the Middle East through the Kuitun–Alashankou–Khorgos through Kazakhstan route (CAREC Corridors 1-a and 1-b). These corridors go through relatively flat terrain, which allows the development of high-capacity road and rail links. The corridors through the Kyrgyz Republic (CAREC 1-c, 2, and 5) can be supported by the development of logistics centers in Korla, Aksu, and Kashgar. Kashgar, the second largest town of XUAR, has the potential of becoming one of the most important logistics hubs in the region, because it provides the best connection linking XUAR to the Kyrgyz Republic, Uzbekistan, Tajikistan, and Afghanistan.

Kashgar has the second largest international airport in XUAR and a rail link to the rest of the PRC. Currently traffic volumes going through it on the way to the Kyrgyz Republic consist primarily of exported consumer products, averaging 700,000 tons per year. Preliminary traffic forecasts by PRC and Uzbek expert teams show that after the construction of a railway link though the Kyrgyz Republic, total traffic will increase to 10–14 million tons per year and will include a considerably larger proportion of products to the PRC.

Recommendations

The Kyrgyz Republic is considered as one of the most liberal countries in the Commonwealth of Independent States (CIS) in regulating international trade activities, making it a relatively attractive transit route compared to other countries of Central Asia. However, its transport and trade facilitation industries, like so many others that were privatized in the 1990s, are inefficient and uncompetitive. The hasty and inefficient way industries were privatized resulted in the takeover of a large share of assets by public officials or people closely associated with authorities, a great majority of whom have neither the training nor the inclination to be entrepreneurs. Because industries are controlled by public officials or by those closely associated with public officials, the intent and means to protect particular industries or businesses from fair competition exists. This has resulted in inefficiencies, with companies being unable to provide the best goods and services at the least cost. The most important sectors in the Kyrgyz Republic that have not been able to be competitive are the financial markets and the industrial and financial sectors.

Because of the low level of competition in its economy, the Kyrgyz Republic has generally lower potential for attracting private investment compared to the Russian Federation and Kazakhstan. There are, however, some sectors of the Kyrgyz economy that attract investment from neighboring countries, e.g., banking, which is dominated by Kazakh banks, and mobile telecommunications, which is dominated by Russian companies. Potentially, therefore, Kazakh and Russian investors could be interested in the development of the Kyrgyz logistics industry, except that the current boom in the logistics industry in these countries, the uncertainty of investing in relatively unstable Kyrgyz Republic, and direct competition between these countries for the People's Republic of China's (PRC) trade have served as disincentives.

On the other hand, the Kyrgyz Republic is located just at the point where the industrial areas of the PRC, the major markets for PRC-made consumer goods in Europe, and sources of oil in the Middle East intersect. Because of this, the PRC and other Asian countries have started playing a more significant role in the development of roads in the Kyrgyz Republic. Thus, despite a common past and long-standing ties with its partners in the CIS, the Kyrgyz Republic should look to the East for the sources of investments in its logistics infrastructure.

Table 23 summarizes the recommendations of the consultants under the technical assistance project. These recommendations can be broadly divided into two groups. The first group of recommendations defines the activities needed to facilitate imports and exports from, and transit flows through, the Kyrgyz Republic, mainly by reforming procedures and amending or enacting legislation. This group of activities is challenging because it requires strong political will, clear leadership, and effective change management capabilities. The second group of activities includes long-term road and other logistics infrastructure development and maintenance. These activities have very clear deliverables (i.e., road constructed, equipment installed and made operational). Their downside is that they are costly and some of them require considerable time to be completed. Both groups are further divided into subgroups, the first one being activities of

Table 23: List of Recommendations

Trade Facilitation Initiatives, Public Projects			
#	Recommendation	Stakeholder	Priority
TF.1	Establishment of a weight certification	MTC, MEDT	High
TF.2	Strengthening of cross-border process management	MEDT, Customs	High
TF.3	Improvement of the customs guarantee system	MEDT, Customs	Moderate
TF.4	Development of the specifications for cross-border infrastructure	Customs	High
TF.5	Implementation of a customs cooperation program	Customs	High
TF.6	Installation of an Integrated Information System for International Trade	MEDT, Customs, MTC, Border Police	High
TF.7	Promotion of the Kyrgyz Republic in the PRC	MEDT	Moderate
TF.8	Deployment of safe packets	Customs, MTC	High
Trade Facilitation Initiatives, PSP/PPP			
#	Recommendation	Stakeholder	Priority
TF.9	Strengthening of product certification capability	MEDT	Moderate
TF.10	Provision of road maintenance support	MTC	High
TF.11	Provision of process management education for public servants and private organizations. Promotion of ISO 9000	MEDT	Moderate
TF.12	Promotion of completely-knocked-down production in FTZ	MEDT	Low
TF.13	Provision of logistics training and development	MEDT	Moderate
TF.14	Implementation of a private sector investment support program for the development of logistics centers	MEDT	Moderate
Physical Infrastructure Development Projects, Public Investments			
#	Recommendation	Stakeholders	Priority
IP.1	Development of cross-border infrastructure	Customs	High
IP.2	Construction of the Kashgar–Kara-Suu rail link	MTC, MEDT	High
IP.3	Construction of the Kara-Keche–Balykchi rail link	MTC, MEDT	Moderate
IP.4	Rehabilitation of the Kashgar–Irkeshtam–Osh road	MTC, MEDT	High
IP.5	Rehabilitation of the Kashgar–Torugart–Balykchi–Bishkek road	MTC, MEDT	High
IP.6	Assessment of the Jalal-Abad–Suusamyr–Balykchi road	MTC	Low
IP.7	Electrification of railways	Rail, MTC	Moderate
IP.8	Improvement of in-transit service capability in airport Manas	MTC, Manas	Moderate
Physical Infrastructure Development Projects, Public Investments			
#	Recommendation	Stakeholders	Priority
IP.9	Rehabilitation of the following roads: Osh-Isfana, Taraz–Talas–Suusamyr, Issyk-Kul Circular roads	MTC, MEDT	Moderate to High
IP.10	Development of the At-Bashi logistics terminal	MEDT, MTC, Customs, Naryn FTZ	High

continued on next page

Table 23: List of Recommendations *(continuation)*

Physical Infrastructure Development Projects, PSP/PPP			
#	Recommendation	Stakeholders	Priority
IP.11	Development of the Sary-Tash logistics terminal	MEDT, MTC, Customs	Moderate
IP.12	Development of the Balykchi multimodal hub	MTC, MEDT, Rail	Moderate
IP.13	Development of the Alamedin multimodal hub	MTC, MEDT, Rail	High
IP.14	Development of the Osh container yard	MTC, MEDT, Rail	High
IP.15	Development of the Kara-Suu multimodal hub	MTC, MEDT, Rail, Customs	High
IP.16	Establishment of agribusiness marketing and logistics centers	MEDT, Ministry of Agriculture	High

FTZ = free trade zone, ISO 9000 = Quality Management System under International Standardization Organization, MEDT = Ministry of Economic Development and Trade, MTC = Ministry of Transport and Communications, PPP = public–private partnership, PRC = People's Republic of China, PSP = private sector participation.

Source: Authors.

the government, and the second being activities that can implemented by the public sector alone or through public–private partnership (PPP) schemes.

Trade Facilitation Initiatives

Weight Control and Weighbridge Certification (TF.1)

The frequent checking of total vehicle weight and axle load at border-crossing points (BCPs) and along the internal roads, as well as the different systems of calibration of weighbridges at different control points create good opportunities for the bribery of transport control authorities of different countries along the transit corridors. There is thus a need to optimize the number of weight control points along transit corridors in Central Asia and standardize weighing scales. All weighbridges used for the control of vehicle and axle loads should be certified and weight certificates of different countries should be mutually recognized by both importing and exporting countries.

Cross-Border Process Management (TF.2, TF.11)

Several aid agencies, including the German Agency for Technical Cooperation (GTZ) and ADB, are promoting the simplification of cross-border procedures in Central Asia. Kyrgyz authorities have actively participated in the dialogue with these agencies and responded with their own initiatives, the most important of which are contained in Decree 464. There is a range of factors which will determine the success of these initiatives. A lot depends on the political leadership and its ability to maintain the pace of change. If the leadership continues to be clear and consistent, the next factor of success is institutional capability to implement the changes.

Efforts must be exerted to manage cross-border processes to ensure they are made more effective, efficient, sustainable, and dynamic. While the full implementation of, and certification for, ISO 9000 needs to be fully assessed, public authorities of the Kyrgyz Republic should benefit

from basic training and development programs in the area of process management. The training of the general staff and the establishment of more qualified process-controlling and -auditing units should have a positive effect on improvement programs and, as important, the further development of these changes.

A Customs Transit Guarantee System (TF.3)

The full deployment of a viable and appropriate customs transit guarantee system is one of the main prerequisites for the Kyrgyz Republic to attract transit flows of goods among the PRC, Europe, and the Middle East. This requires that all countries accept and follow the same principles and processes for the transit of goods. The Transports Internationaux Routiers (TIR) Convention is one of the most established tools for customs transit guarantee. Developed in Europe, it has now become more related to cargo transit in the former Soviet Union countries. The PRC is considering joining the Convention, and its accession would give further impetus to the development of transit trade through Central Asia. On the other hand, the TIR Convention has proven to be at times inefficient in former Soviet Union countries, especially the Russian Federation. Because of this and other considerations, customs authorities of Eurasian Economic Community (EurAsEC) countries are looking for other alternatives that will better utilize the information technology advancements made over the last decades. The Kyrgyz Republic depends on the decisions of the PRC about the latter's accession to the TIR Convention and on the actions of EurAsEC countries regarding this matter. The overall strategic focus of the Kyrgyz Republic should then be on the further simplification of the TIR system, and the installation at BCPs of equipment with information technology and telecommunications applications to enable electronic guarantee systems to be established.

Specifications for Cross-Border Infrastructure (TF.4)

The infrastructure at Kyrgyz BCPs requires considerable improvement. Recently, several BCPs were modernized with the help of international organizations. These BCPs were Kara-Suu and Ak-Zhol, which were modernized with the help of the Border Management in Central Asia–Central Asian Drug Action Program, Dostuk, with help of International Organization for Migrations, and Ak-Tilek, with financing from the United States (US) government.

The infrastructure facilities in each new BCP differ with those of other new BCPs as their specifications were developed by different organizations. In addition, it is possible to find cases when, for the same or smaller budgets, it was possible to realize more functionality in one BCP than in another. This shows that there is no standard approach and blueprint for the development of Kyrgyz BCPs. Having a standard approach blueprint based on the required functionality in each particular location might produce considerable benefits for the Kyrgyz Republic. These benefits include the improved visibility of the total scope of work for the upgrade of the cross-border infrastructure, improved potential for the financing of the most important BCPs, and cost reduction for the overall BCP program. The overall scope of this work can be implemented within one technical assistance project.

Customs Cooperation (TF.5)

Cooperation among various government bodies overseeing the cross-border movement of goods, especially customs authorities, should significantly improve cross-border processes.

Cooperation and coordination must be improved both at all BCPs and among the government officials who define policies and development programs. Regular round-table meetings and informal meetings of customs and other authorities of different countries at different levels should help to develop partnerships and facilitate joint improvement programs. Where relationships of government authorities of different countries are far from ideal or when several countries are involved, workshops and other activities should be facilitated by third-party organizations.

Integrated Information System for International Trade (TF.6)

The development of the Integrated Information System for International Trade is considered a high priority task by a range of institutions that include the Customs Committee of the Kyrgyz Republic, GTZ, EurAsEC, and ADB. The purpose of this system is to store and record all relevant information about legal entities participating in international trade as well as all import–export–transit transactions in the territory of the Kyrgyz Republic. Developing this system will facilitate the simplification of international trade transactions, the development of "single-window" operations and a customs transit guarantee system through single entry data capture, as well as the installation of an online data retrieval system by all government entities. Moreover, linking the Kyrgyz system with systems of other CIS countries will enable the further simplification of trade transactions and the improvement of the control of international trade operations among CIS countries. The development of this system is actively being considered by the Integration Committee of EurAsEC. The further integration of the EurAsEC Information Systems for International Trade with PRC systems, together with the simplification of international trade procedures, will help create a relatively seamless transport corridor from the PRC to the borders of European Union (EU) through the CIS countries.

It should be noted that the success of this initiative also depends on other factors. The first factor is the level of attention given to the processes of international trade, especially during stages preceding the actual development of the system. It is a common mistake in the development of information systems that these processes are given scant attention, if at all, despite the fact that the legal base and processes of international trade should be simplified and deployed first before these are automated. Otherwise, the information systems installed will reflect the inefficiencies and complexities that plague the processes. Second, the roll-out of the information system requires the deployment of all underlying information technology and infrastructure at the designated key cross-border and clearance points in the Kyrgyz Republic. Third, administrative barriers should be reduced through the simplification and automation of international trade procedures in parallel with the development of transportation network and logistics centers to enable the full realization of the Kyrgyz Republic's transit potential.

Promotion of the Kyrgyz Republic (TF.7)

Currently, demand for Kyrgyz transport and logistics services comes primarily from local businesses, which normally either import or export goods. The attractiveness of the Kyrgyz Republic as a transit country continues to be low. Promoting it as a transit country at this stage will probably not increase demand for its logistics services until the existing business and logistics constraints are removed. Despite these challenges, the Kyrgyz Republic as the only World Trade Organization member in Central Asia with relatively liberal trade regime can attract investment in the area of trade and, accordingly, trade logistics. The Kyrgyz Republic ought to promote itself as such.

It would not be realistic to expect investments in the logistics infrastructure and facilities of the Kyrgyz Republic from CIS countries, all of whom are currently preoccupied with the development of their own transit programs that often compete directly with those of the Kyrgyz Republic. Moreover, although the Kyrgyz Republic can attract some investments in the mineral extraction industries, and in the construction of rail sidings and local roads, these investments will primarily serve the purpose of these investors, not necessarily of the Kyrgyz Republic.

The PRC is the most interested in being a partner in the development of the Kyrgyz logistics sector. The scope and potential of its investments should be defined through continuous dialogue with the Kyrgyz Republic.

To attract investors from the PRC and other countries, the Kyrgyz Republic can issue a list of potential private participation and private–public partnership projects that can be the objects of foreign investments. Special events and trade shows, as well as social events hosted by the Kyrgyz Republic embassies can also help substantially in publicizing investment potentials in the logistics sector in the Kyrgyz Republic.

Safe Packets (TF.8)

Safe packets and electronic seals are actively used by Kazakh customs to improve the control of customs goods in transit and eliminate beyond-the-border barriers for international road carriers. A safe packet is a plastic envelope that contains all documentation related to the goods in transit. Normally, after the cross-border inspection by customs and other authorities, all documents are placed inside of the safe packet; the safe packet is then sealed and carried by a vehicle driver within the territory of Kazakhstan until goods arrive to a customs warehouse for customs clearance. At the same time, the cargo compartment of a vehicle is sealed with an electronic seal, which can be traced by a global positioning system (GPS)–enabled system. This system eliminates the need for customs escort, which normally results in considerable delays at the BCPs because customs escorts inspect vehicles in groups. In addition, road police and other controlling agencies are not allowed to open the safe packets while goods are in transit. Thus, they have fewer opportunities for rent-seeking.

In the Kyrgyz Republic, safe packets can be initially implemented as a stand-alone solution against the rent-seeking by the road police. In the future, Kyrgyz customs should assess the feasibility of the full implementation of the transit control system, similar to the system deployed in Kazakhstan, where safe packets and electronic seals are used as a part of an integrated computerized automatic system for goods delivery control, called ASKDT.

Product Certification (TF.9)

Kyrgyz certificates of product quality are not always recognized by importing countries. For instance, although the Kyrgyz Republic uses similar standards of certification as the Russian Federation and Kazakhstan, certificates issued by Kyrgyz certification laboratories do not always comply with the requirements of these two countries. One of the reasons for this inability of Kyrgyz certification processes to fully comply with the requirements of importing countries is the lack of modern and efficient equipment in Kyrgyz certification centers. Improving the technical capability of these certification bodies should go a long way to enhancing the credibility of Kyrgyz certificates among importing countries. This, in turn, would lead to these certificates

being recognized as valid by the Kyrgyz Republic's trading partners, thus facilitating the flow of goods between the Kyrgyz Republic and its trading partners. Moreover, appropriate certification processes that anticipate the requirements of the Kyrgyz Republic's trading partners would allow Kyrgyz producers to develop processes and products that will have considerably better chances of being accepted by importing countries. This, in turn, would lead to better efficiencies in the production of Kyrgyz exports. Certifying and other government bodies should therefore receive the proper equipment and training in the use of these equipment and in improving their services.

Road Maintenance (TF.10)

The Ministry of Transport and Communications (MTC) road strategy for 2007–2010 estimates the operating expenses for the proper maintenance of the road infrastructure in the Kyrgyz Republic (Table 24). It also mandates that key or basic road networks should receive full financing, while less important roads will receive partial financing based on the availability of financial resources. The MTC road fund is designated as the key source of financing for road maintenance and development.

The MTC road fund has not always been used for its stated purpose. Revenues collected through road taxes are pooled, together with other revenues, into the country's general budget; just a proportion of these funds, usually insufficient for requirements, is spent for road maintenance. The Kyrgyz government should establish an allocation system which will allow sufficient funding to be provided for road maintenance and development.

MTC road strategy proposes to use private contractors, under the control of government authorities, to maintain the country's road system. Given the realities of Central Asia, such an arrangement may not always work efficiently. To improve efficiency in road maintenance, nongovernment organizations, such as the Kyrgyz Road Union, and donor organizations should be included in tender committees and monitoring units.

Completely Knocked-Down and Value-Added Production in Free Trade Zones (TF.12)

The Kyrgyz Republic's industrial base during the Soviet era was not oriented toward local raw materials and consumption, and this resulted in the quick demise of most of the industrial

Table 24: Kyrgyz Republic Road Maintenance Expenditures Required and Financed
($ '000)

Road category	Length (km)	Regular Maintenance	Regular repair (every 6 years)	Capital repair (every 17 years)	Total required
I	139	112.6	347.5	899.4	**1,359.5**
II	456	332.9	1,033.6	2,601.9	**3,968.4**
III	2,275	1,524.3	4,550.0	10,371.3	**16,445.6**
IV	8,481	5,046.2	14,559.1	33,425.1	**53,030.4**
V	7,466	2,911.7	9,954.7	20,202.1	**33,068.5**
Total	**18,817**	**9,927.7**	**30,444.8**	**67,499.9**	**107,872.3**

continued on next page

Table 24: Kyrgyz Republic Road Maintenance Expenditures Required *(continuation)*

Road category	Length (km)	Regular Maintenance	Regular repair (every 6 years)	Capital repair (every 17 years)	Total financed	% of required
I	139	112.6	347.5	899.4	1,359.5	100%
II	456	332.9	1,033.6	2,601.9	3,968.4	100%
III	2,275	1,524.3	4,550.0	10,371.32	16,445.6	100%
IV	1,500	525.0	2,575.0	5,911.8	9,011.8	17%
V	1,000	250.0	1,333.3	2,705.9	4,291.2	13%
Total	**5,370**	**2,744.8**	**9,839.4**	**22,490.32**	**35,074.5**	**33%**
% of required		**28%**	**32%**	**33%**		

Source: Ministry of Transport and Communications. Kyrgyz Republic.

enterprises and the fast de-industrialization of the country after the disintegration of the Soviet Union. This deterioration of the country's industrial base has resulted in the displacement of the Kyrgyz workforce, a large proportion of which now works mostly in the Russian Federation and Kazakhstan, and in most of the Soviet-era industrial facilities being idle or used as storage facilities.

Despite the collapse of its Soviet-era industrial base, the Kyrgyz Republic offers advantages that ought to make it attractive to local and foreign investors. It has one of the most liberal investment regimes in the CIS. It likewise has a large and cheap labor force, and imposes zero tariffs on exports into fast growing markets of neighboring CIS countries. It also borders the PRC. These factors make the country attractive as an investment destination for investors interested in the development of completely knocked-down and value-added production. Production in the Kyrgyz Republic ought to maximize the country's comparative advantages. For instance, Kyrgyz raw materials can be exported to the PRC for processing and then reimported to the Kyrgyz Republic for finishing operations (e.g., addition of leather products). The finished products will be of Kyrgyz origin and thus will be exported to other CIS countries without customs duties.

Logistics Training and Human Resource Development (TF.13)

Logistics training and development is one of the areas which can help develop the demand side of the market for logistics services in the Kyrgyz Republic. Currently, most of the companies in Central Asia tend to outsource transport and customs clearance services and prefer to keep storage capacities in-house. Companies rely on the least expensive modes of transport and tend to have excessive stock levels. This results in high costs and low flexibility in logistics operations. In addition, low demand for integrated logistics solutions, break bulk and consolidation services, and other logistics-related value-added activities results in the very slow development of the logistics and warehousing industry. This low demand for logistics services can be explained by the very low level of knowledge about modern logistics principles and operations, and training in this area might have a significant positive effect in the development of the Kyrgyz logistics sector.

The Kyrgyz Republic has several full-time undergraduate and postgraduate programs in transport. However, executive-level training programs consist only of International Federation of

Freight Forwarding Associations qualification programs, which are focused primarily on freight forwarding companies and are not very useful for companies in other sectors of the economy. To increase the overall level of logistics competence in the Kyrgyz Republic, it is necessary to introduce a completely different set of training and development programs, which include both the operational and the management aspects of logistics. The indicative list of topics that need to be covered by such logistics training programs is provided in Table 25.

The Kyrgyz Republic can host summer logistics training programs at the Issyk-Kul lake, which is a famous tourist destination and would therefore be an attractive location for a summer logistics school. The summer logistics school or even just logistics training programs can be organized jointly by the professional transport associations of several Central Asian countries with professional international instructors serving in the faculty. Currently, the country does not have a logistics-related association. However, existing professional associations of road carriers and freight forwarders could be tapped and encouraged to include education and professional development among their development strategies and programs.

Private Investment Support Program for the Development of Logistics Centers (TF.14)

After the privatization of public enterprises in the 1990s, the Kyrgyz government has been playing a relatively less significant role in economic activities, primarily confining its role to that of the regulator. It is now primarily the private investors who have taken over the privatized assets who are expected to lead in the development of the logistics centers in the country. Some of these new owners have considered investing in these facilities and increasing the scope and volume of their operations. However, most of them continue using old assets and maintaining relatively small operations. Based on interviews, the major reason for the reluctance of private investors to expand their operations aggressively are the uncertain business environment and the relatively high investment requirements and expensive financing available in the country. In this business environment, financial grants and favorable loan and tax conditions can assist in the development of logistics facilities. Depending on the scope of investments, support can be provided in various forms by a range of institutions, including international financial institutions. The program should be administered by the Kyrgyz government together with other independent stakeholders.

Table 25: Indicative List of Topics for General Logistics Training

No.	Topic
1	**Supply Chain Management and Logistics Mix.** Logistics activities and processes. Achieving of competitive advantage through effective and efficient logistics.
2	**Service role of logistics.** Time and place value of effective logistics.
3	**Logistics costs.** Logistics cost modeling. Managing logistics assets.
4	**Inventory value.** Purchasing and materials management.
5	**Transport**. Modes of transport and their characteristics. Transportation providers and their roles. Eurasian transportation corridors and Kyrgyz transport network.
6	**Warehousing.** Functions and types of warehouses. Warehousing markets. Warehouse management systems.
7	**Planning and organizing logistics functions.** Make-or-buy decisions. Operators and Third-Party Logistics (3PL). Purchasing of logistics services.

Source: Authors.

Physical Infrastructure Development Projects

Cross-Border Infrastructure Development (IP.1)

Presidential Decree 464 mandates that key BCPs be identified and their infrastructure and equipment investment requirements included in the country's 2008 budget. Meanwhile, the EurAsEC Working Group for the Modernization of Cross-Border Points, which includes representatives of all EurAsEC customs authorities, recommended that, among other equipment, X-ray inspection systems be installed in the BCPs of country–participants of EurAsEC and that the Integrated Information System for Control of Customs Transit through the territory of EurAsEC countries be developed. The exact requirements to the equipment of BCPs, and the sources of financing for the acquisition of these equipment, should be defined by individual EurAsEC member states.

Construction of Kashgar–Kara-Suu and Kara-Keche–Balykchi Rail Links (IP.2, IP.3)

Cargo moved by Kyrgyz railways accounts for less than 5% of the total cargo volume transported in the country, substantially lower than the 50% share accounted for by railways in Uzbekistan and Kazakhstan. This is because of the fact that the rail network of the Kyrgyz Republic is fragmented and short, limiting its potential for linking the southern and northern regions of the country. Nonetheless, this railway network is the end of the CIS railway network which is separated by 250 kilometers (km) of mountainous terrain from the railway network of the PRC. Linking these two networks can give the Kyrgyz Republic the real opportunity to become a transit country between the PRC and Europe along the Transport Corridor Europe–Caucasus–Asia (TRACECA) route.

Two possible routes are being considered for linking the PRC and CIS railway networks—the rail link via the Irkeshtam pass and the rail link via the Torugart pass. The rail link via the Torugart pass better meets the interests of the Kyrgyz Republic as it opens an opportunity for the Kyrgyz Republic to add a rail branch traversing the Kara-Keche–Balykchi route to the Kashgar–Torugart–Kara-Suu railway and thus link the northern and southern branches of the Kyrgyz railway system. Another benefit of this route for the Kyrgyz Republic and its neighbors is that even a partially constructed rail link to Balykchi would make possible the building of railway branches leading to the mineral resources of Kochkor and Kara-Keche districts, which consist of deposits of coal, gold, ferrous and nonferrous metals (tungsten, molybdenum, silver, etc.), oil and gas, and alumina.

Preliminary estimates show that the transit cargo volume through the Kashgar–Torugart–Kara-Suu (or alternatively, Jalal-Abad) railway link would reach 4.3 million tons per year in the first year of operations, 5.4 million tons per year after 5 years of operations, and 10.0 million tons a year after 10 years of operations. Other data about the project are provided in Table 26.

Road Infrastructure Development and Maintenance (IP.4, IP.5, IP.6, IP.9)

The Kyrgyz Republic's roads are generally of poor quality. Those along the Osh–Sary-Tash–Irkeshtam and the Bishkek–Naryn–Torugart routes, which the Kyrgyz MTC road strategy has

Table 26. Feasibility Analysis and Preliminary Specifications of the Railway Link Kashgar–Torugart–Kara-Suu

Parameter	Value
Estimated transit (million ton/ year)	4.3 (first year) 5.4 (in 5 years)
Estimated cost of construction	$1.05 billion
Estimated time of construction	5–6 years
Estimated pay-back period	12.5 years
Total length	268.4 km
Number of stations	12
Tunnels	48 (49.9 km)
Bridges	95 (20.9 km)

km = kilometer.
Souce: Kyrgyz Railways.

identified as the most important ones for the transit of goods to and from the PRC, are no exceptions. In 2007, financial help from the Japanese government allowed the Kyrgyz Republic to improve conditions along the Bishkek–Naryn–Torugart route. Although they are gravel roads, the surface of many sectors of this road system does not impose constraints on the movement of cargo. Moreover, its traffic capacity far exceeds present demand, and would continue to be so, if it is properly maintained, especially in spring and winter, and if there is a range of maintenance and catering services available for drivers. Apart from occasional snowstorms, the longest delays along this transit route are associated with the inefficient operations of PRC and Kyrgyz BCPs.

The Kyrgyz government was able to secure funding for the rehabilitation of the Osh–Sary-Tash–Irkeshtam road. The intention of the Kyrgyz government to reduce administrative barriers for trade, improve BCP processes and infrastructure, and establish a border trade center in Sary-Tash would be served by this initiative. However, it should be noted that without proper allocation of funds and appropriate management structures for road maintenance, traffic services, and cross-border government services, this investment will not yield maximum results.

Electrification of Kyrgyz Railroads (IP.7)

Kyrgyz Railways is considering electrifying its Northern system. The main driver for this project is the very high cost of diesel fuel, which the Kyrgyz Republic imports while being a net exporter of hydropower electricity. The other drivers for this project are ecological considerations and the increased power and efficiency of electric locomotives. Attempts to electrify the Kyrgyz railroad system were undertaken in the mid-1990s in partnership with Siemens, which was prepared to implement the project under Kyrgyz government financial guarantee. At that time, the project did not receive government support. Latest estimates show that, at present, the project can have a payback period of 5–8 years. As the Kyrgyz Republic does not have its own source of fossil fuels, which has become significantly more expensive since mid-1990s, it is important to make the commitment to the development of electrified lines. However, in the short term, this project might be affected by the electric power shortages currently being experienced by the country. The deployment of the new electrical generation capacities, including the Kambarata Hydropower Station, should increase the attractiveness of this project in the mid- to long-term period.

Improvement of In-Transit Service Capability in the Manas Airport (IP.8)

Although the Manas Airport is relatively well equipped for the servicing of cargo and passenger aircrafts, its passenger and cargo flows continue to decline. To reverse this trend, the airport must look into servicing transcontinental flights between Europe and Southeast Asia, as its domestic market for air transport services is too small. To attract this traffic, it should develop the capability to provide all the required value-added services to the airlines, including quick refueling, catering and routine maintenance services, at competitive prices.

In addition, as part of the Bishkek Free Trade Zone (FTZ), the Manas airport can develop a range of value-added logistics services for importers of high-technology equipment into the CIS market. For example, having bonded storage facilities for telecommunications spare parts in Manas could allow telecom equipment producers (e.g., Huawei) to stockpile parts without paying duties in a relatively close distance to their customers. Should these producers need parts, storage facilities would allow them to clear and ship goods to customers in the Kyrgyz Republic or transship them to other countries of the CIS in a relatively short period of time and with fewer costs.

Development of Border-Area Trade and Logistics Centers (IP.10, IP.11)

The Kyrgyz government approved plans for the creation of the border trade and logistics center in Sary-Tash. This center will be located along the Osh–Irkeshtam–Kashgar road and will fulfill both logistics and trade functions. The project is promoted by the administration of Osh oblast, which estimates that the center will attract about $23 million in investments during its first stage of implementation, with further investments of up to $100 million expected thereafter. The Osh oblast government also estimates that this center will create about 3,000 new jobs in the area and, together with the rehabilitation of the Osh–Sary-Tash–Irkeshtam road, help increase the trade flow between PRC and the Kyrgyz Republic by 3-4 times by 2009.

A similar project is being promoted by the administration of the Naryn FTZ, which prepared a feasibility report on the development of the border trade and logistics facility in the At-Bashi valley. The proposed center would be used as a customs clearance center, a cross-docking facility for reloading of cargo from PRC trucks onto the Kyrgyz vehicles and vice versa, and a service facility for road carriers. In the future, it can be developed into a regional trade center. According to the Naryn FTZ administration, this center will facilitate the creation of about 3,000 new jobs in one of the most depressed regions of the Kyrgyz Republic.

Both centers should help to create a better environment for the development of the road freight industry of the Kyrgyz Republic. Currently, much of the demand for the handling and transport of goods from PRC is being supplied by PRC trucking companies. On the other hand, the Kyrgyz truckers' market share is limited by the smaller payload capacities of their trucks. Uncertainty in the future demand for their services serves as a disincentive to investment in new trucks. As a result, Kyrgyz drivers very frequently spend more time on repairing their trucks than on transporting cargo.

A further benefit from the development of logistics terminals, where goods will be cross-docked from PRC trucks onto Kyrgyz and other CIS vehicles, is reduced road destruction due to the lower axle loads of Kyrgyz trucks.

The role of border trade centers should be reassessed after PRC's accession to the TIR Convention, after which PRC carriers will be expected to develop trailer fleets that comply with the requirements of the TIR agreement. Such vehicles will have rights to transit through the Kyrgyz Republic to other countries of Central Asia without any stops, except for technical reasons.

Unlike the trade and logistics center in Sary-Tash, and despite the enthusiasm of Naryn FTZ administration and Naryn Customs authorities, the At-Bashi project has yet to receive official government support as of the writing of this report.

Multimodal Centers (IP.12, IP.13, IP.14, and IP.15)

The construction of a railway link between the PRC and the Kyrgyz Republic should increase Kyrgyz transit capacity. Several railway stations in the Kyrgyz Republic have the potential for being developed into multimodal centers, with Bishkek having the best because of its large consumer base and its good location near the border with Kazakhstan, the international airport, and three railway stations that include the Alamedin station, which has the country's largest container yard. In addition, this city has the largest concentration of human and financial capital in the Kyrgyz Republic. Kyrgyz Railways is investing in the development of the Alamedin railway station which has customs clearance facilities, storage facilities, and space for the enlargement of its operating area.

Another railway station that has the potential for multimodal operations, is the Balykchi station. Balykchi, located in the Northern system of the Kyrgyz rail network, has several container yards, some of which have been privatized, with some still belonging to Kyrgyz Railways. One of the container yards under the control of Kyrgyz Railways has concrete pavement and sufficiently long rail siding for container operations with multimodal ISO containers. To start operations, it needs container handling equipment (e.g., container loaders).

The most obvious route for rail transit from the PRC is via the Dostuk BCP (Kazakhstan). This route is attracting increasing volumes of cargo, but queues and delays along this route push shippers and freight forwarders to look for alternative routes. The multimodal Kashgar (by rail)–Torugart (road)–Balykchi (rail) route can become the viable alternative for those shippers who demand speed at reasonable (but not the lowest) cost. The competitiveness of this route will depend not only on the availability of container handling equipment in its stations but also on how efficiently Kyrgyz authorities can move cargo. On the other hand, efficient cargo registration and loading procedures at Balykchi and other railway stations, including Alamedin, can increase its attractiveness.

The container yard in Balykchi has a good chance to becoming profitable even without transit cargo, which will initially be relatively small. Like the Alamedin and Osh stations, the first customers of the yard will be importers of cars. Growing demand from automotive importers of the Issyk-Kul and Naryn oblasts should enable the yard to develop self-sustaining operations which could later be extended into the import and export of other consumer and industrial goods.

Multimodal centers on the southern branch of the Kyrgyz railways can be located in Osh, Kara-Suu or Jalal-Abad. Osh has small volume container operations, but has relatively moderate opportunities for expansion. Kara-Suu is closer to rail and road BCPs with Uzbekistan and it houses the largest trade house in southern Kyrgyz Republic. Jalal-Abad is close to industrial enterprises and has opportunities for the construction of large container facilities.

The location of Kara-Suu at the rail and road cross-border points of the Kyrgyz Republic with Uzbekistan and a close distance to Osh (about 20 km) provides a strong case for the further development of logistics facilities and services in this city, including multimodal and logistics facilities for agricultural products. In addition, according to the latest agreements between railways authorities of the Kyrgyz Republic and the PRC, the PRC–Kyrgyz Republic–Uzbekistan rail link should join with the existing railroad at the Kara-Suu–Osh branch, rather than the Jalal-Abad branch, which is separated from Osh and Kara-Suu by Uzbek territory.

Agribusiness Logistics Centers (IP.16)

Agriculture accounts for 39% of gross domestic product (GDP) and employs over 50% of the population of the Kyrgyz Republic. It is characterized by a large number of small farms and agricultural enterprises created as a result of the privatization of public enterprises in the 1990s. Its products have a considerably large export market in the Russian Federation, Kazakhstan, and other countries of Central Asia.

The further development of agriculture is constrained by the small size and the lack of efficient access to markets of agricultural enterprises. Potential customers look for a stable and timely supply of fresh and processed products, which is impossible to achieve with small and fragmented agricultural enterprises.

Agricultural logistics and marketing centers offer a solution to the fragmentation of the Kyrgyz Republic's agricultural enterprises. These centers can serve as consolidation points for the agricultural produce of many small farms and act as marketing and sales agents for many small producers. In turn, these consolidation points can be linked together to form an agricultural logistics network.

According to the Agribusiness Competitiveness Center, a nongovernment organization actively promoting agricultural logistics and marketing centers, consolidation points should be created in all main agricultural regions of the country during several implementation phases. The first phase should involve agricultural logistics centers near Bishkek, Osh, and Karakol. Later, the whole program can be extended to involve Kyzyl-Kiya, Batken, Jalal-Abad, Talas, and Naryn. The program would rely on the initiative of private entrepreneurs.

Another program that can improve the competitiveness of Kyrgyz agricultural produce is the development of the country's ability to store and distribute perishable goods, including fruits and vegetables. In 2007, the EU supported a project to strengthen the capability of Central Asian countries in the cold storage and transport of perishable products in line with the Agreement on International Transportation of Perishable Goods (ATP). The Kyrgyz Republic has not joined the ATP Agreement and lags behind its Central Asian neighbors in implementing the ATP standards. To improve food safety in the country and increase the competitiveness of its international road carriers, it is important that it expedites its accession to this agreement.

Location of Logistics Centers

The Kyrgyz Republic's population and economic activities are concentrated in two areas: the Chu valley in which is located the capital city of Bishkek, and Fergana valley with the city of Osh. These areas are therefore logical locations for logistics centers.

Bishkek, being the capital city and the main economic center of the Kyrgyz Republic, as well as being located close to the borders of Kazakhstan, has the potential to be the key logistics center of the country. Currently, it has the largest railway station with a container yard, an international airport, and good connection to the road network. Because of the liberal trade regime in the Kyrgyz Republic, the flow of consumer goods from the PRC to Central Asia is concentrated in its Dordoi market, one of the largest and most developed wholesale markets in Central Asia. The logistics depots of Bishkek have the potential to provide the full range of inland logistics services: customs clearance, multimodal operations, bonded storage, express logistics services, groupage, local distribution, etc.

Fergana valley has several potential locations for logistics centers. Among these locations, Kara-Suu has probably the highest potential for further development. It is a border town with Uzbekistan and a railway node which links Jalal-Abad and Osh to the Uzbek and, consequently, the wide-gauge rail network of the United System of Railways. It already hosts the largest wholesale market south of the Kyrgyz Republic. It also has the potential for offering a full range of logistics services. In addition, it can serve as a consolidation center for local agricultural produce. Osh and Jalal-Abad provide good opportunities for the development of logistics services, which are summarized in Table 27 and shown in Figure 4.

Figure 4: Map of Transit Routes and Recommended Logistics Depots

km² = square kilometer.

Source: Author based on Central Asia Regional Economic Cooperation corridor map of TERA International and Population density map of Center for International Earth Science Information Network, Columbia University.

Another potential location for a logistics center in the Kyrgyz Republic is the Issyk-Kul valley. Although the valley, which is located around Issyk-Kul lake, has a smaller population and fewer economic activities than Chu and Fergana valleys, it is the most attractive tourist region in the country and a gateway to key mineral deposits of the Kyrgyz Republic, most of which have yet to be developed. Balykchi, which is located in this valley, is the terminal station of the northern branch of Kyrgyz railways and can serve as a multimodal center for the transport of goods between the PRC and Central Asia. Being located along the multimodal route from the PRC to Central Asia, Balykchi can be considered a good location for customs clearance services, bonded storage, and a trade center. It can also be developed to serve the Issyk-Kul tourist area. Summer tourist seasons can be supplemented by trade fairs. The market and logistics potential of Balykchi can increase after the construction of a new road between Almaty and Issyk-Kul.

Table 27: Recommended Location and Functionality of Logistics Depots

Priority	Logistics depots	Rationale for establishment	Main functions of logistics depots
1	Bishkek	• Capital city with 18% of the country population (Bishkek area and Chui oblast account for 33% of population) • Close to the key BCPs with Kazakhstan (Ak-Tilek, Ak-Zhol) • Dordoi wholesale market • International airport Manas	• Trade and support of trade • ICDs and intermodal operations • Import–export clearance • Storage and bonded storage (especially for goods from the PRC)
2	Kara-Suu	• Close location to the largest city in southern Kyrgyz Republic—Osh • Three-directional rail link to Osh, Jalal-Abad, and Uzbek railway network • Kara-Suu wholesale market • Highly volume of agricultural production in Fergana valley (both Kyrgyz and Uzbek sides)	• Trade and support of trade • Agricultural marketing and logistics centers • ICDs and intermodal operations • Import–export clearance • Storage and bonded storage (especially for goods from the PRC)
2	Osh	• Key city of southern Kyrgyz Republic • Highly volume of agricultural production in Fergana valley (both Kyrgyz and Uzbek sides) • Osh International airport • Terminal railway station of the southern branch of Kyrgyz rail network	• ICDs and intermodal operations • Agricultural marketing and logistics centers • Import–export clearance • Storage and bonded storage (especially for goods from the PRC)
2	Balykchi	• Gateway to Issyk-Kul tourist area • Terminal railway station of the northern branch of Kyrgyz rail network • Gateway to the mineral resources of southeastern Kyrgyz Republic • Lake port • Established as large transportation center during Soviet era, with good potential for further expansion and development	• ICDs and intermodal operations • Storage and bonded storage (especially for goods from the PRC) • Import–export clearance • Trade and support of trade • Agricultural marketing and logistics centers

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Table 27: Recommended Location and Functionality of Logistics Depots *(continuation)*

Priority	Logistics depots	Rationale for establishment	Main functions of logistics depots
2	Jalal-Abad	• Third largest city in the Kyrgyz Republic • Highly volume of agricultural production in Fergana valley (both Kyrgyz and Uzbek sides) • One of key railway stations in the southern branch of Kyrgyz rail network	• ICDs and intermodal operations • Import–export clearance • Storage and bonded storage (especially for goods from the PRC) • Agricultural marketing and logistics centers
3	At-Bashi (Torugart)	• Key BCP with the PRC • Intended to reduce vehicle axle load and reduce destruction of Kyrgyz roads	• Import–export clearance • Storage and bonded storage (especially for goods from the PRC) • Border trade • Transloading operations
3	Sary-Tash (Irkeshtam)	• Key BCP with the PRC • Intended to reduce vehicle axle load and reduce destruction of Kyrgyz roads	• Import–export clearance • Storage and bonded storage (especially for goods from the PRC) • Border trade • Transloading operations
3	Kyzyl-Kiya	• Highly volume of agricultural production in Fergana valley (both Kyrgyz and Uzbek sides) • Terminal railway station of the southern branch of Kyrgyz rail network	• Agricultural marketing and logistics centers • ICDs and intermodal operations

BCP = border-crossing point, ICD = inland container depot, PRC = People's Republic of China.

Source: Author.

Implementation Issues

Under Presidential Decree 464, the focal point for the whole range of trade facilitation initiatives is the Ministry of Economic Development and Trade. Other organizations willing to facilitate changes include the National Customs Committee and the Ministry of Transport and Communications (MTC). Outside of government, there are nongovernment organizations (NGOs) that have shown interest and have in fact been participating in the same efforts. During interviews, the consultants for the technical assistance received feedback that international financial institutions are perceived to prefer working with government agencies and officials, and have excluded NGOs in the promotion and facilitation of changes. It was particularly noted that institutional capability initiatives have not included these groups. The Associations of National Carriers and the Freight Forwarding Association have already taken active roles in a range of projects, and these groups have expressed interest in projects that will help them strengthen their internal capabilities and make them better participants in development efforts.

For the successful implementation of initiatives, it is necessary to take into consideration the fact that the Kyrgyz Republic is part of several economic and political communities in which it does not play the key role due to its lack of economic and political resources. It is also necessary to take into account that the Kyrgyz Republic's relationship with its neighbors varies from that of brotherhood and amity, to cold tolerance. Thus, any project in the Kyrgyz Republic should be aligned with the overall trends within those communities (e.g., Shanghai Cooperation Organization and Eurasian Economic Community), and that efforts to mobilize support from its neighbors ought to be appropriate to the level of amity that exists between it and its neighbors.

Synchronization and acceleration of trade facilitation initiatives and infrastructure development projects can give Kyrgyz transit routes a competitive advantage over other corridors. The speedy implementation of institutional changes, where success does not depend on the amount of financial resources invested, can result in enhancing the attractiveness of mountainous Kyrgyz transit routes over Kazakh and Russian Federation land and sea routes.

The Kyrgyz Republic has a very weak private sector controlled by government officials. This results in apathy within the Kyrgyz private sector regarding long-term infrastructure projects. Thus, the Kyrgyz government, while continuing its effort to fight corruption and develop the private sector, finds that it cannot rely on internal private sources of funding for infrastructure projects, necessitating a search for external support. Taking into account that its Commonwealth of Independent States neighbors focus on the development of their own transit potential and are not always willing to consider the Kyrgyz Republic as a partner, the Kyrgyz Republic should actively try to attract investment from the People's Republic of China and other international partners.

Conclusions and Summary

The Kyrgyz Republic's potential as a transit country in the immediate future is low. The development of this potential demands the rehabilitation of road links to the People's Republic of China (PRC), the construction of a rail link between Kashgar (PRC) and Kara-Suu (the Kyrgyz Republic), the simplification of cross-border procedures, and the development of logistics facilities along the transit routes. Combined, these imperatives require investments comparable with the country's annual gross domestic product (GDP), as well as years of hard work.

The Kyrgyz Republic has a range of options to finance its infrastructure development requirements. These options include investing its own resources and tapping internal private sector investments. Another, more feasible option, is to attract PRC public and private sector investment.

The development of the Kyrgyz logistics industry is also constrained by the inhospitable business climate in the country. Thus, it is recommended that the Kyrgyz Republic logistics development strategy should provide equal emphasis on a favorable environment for private logistics companies and an underlying transport infrastructure.

Among the projects related to the development of Kyrgyz transit corridors, the construction of the rail link from Kashgar to Kara-Suu is the most important for the development of the Kyrgyz logistics industry. It will lead to the development of the Kyrgyz Republic's south–eastern and central regions, while making it possible for the country to assume an increased geopolitical role in Central Asia.

Over the last 20 years, the share of the Kyrgyz Republic's industrial sector in the country's GDP has decreased considerably while that of its agricultural sector has increased by approximately the same degree. Although most of the agricultural enterprises are small and produce at low volumes, the high homogeneity of agricultural production and the relatively strong concentration of agricultural production in several regions represent a strong argument for the development of agricultural marketing and logistics centers. These centers can develop logistics know-how and then start serving nonagricultural customers.

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Appendixes

Appendix 1:

Organizations Visited and Interviewed (29 October–16 November 2007)

Organization	Person
Asian Development Bank	Ashraf Malik, Country Director (Acting) Lan Wu, Country Director (New) Lyaziza Sabyrova, Senior Country Economist Aidana Berdybekova, Regional Cooperation Coordinator Gulkayr Tentieva, Economics Officer Valeriy Tyan, Economics Officer
Customs Committee	Kuanychbek Kulmatov, First Deputy Chairman Kazybek Nadyrbekov, Director of Project Office Zhamilya Turganova, Deputy Director of Project Office
Ministry of Transport	Kuanychbek Mamaev, Deputy Minister Jolboldy Sharapov, Director, KyrgyzInTrans
Ministry of Economic Development and Trade	Sanjar Mukanbetov, Deputy Minister
Kyrgyz Rail	Argunbek Balabaev, Deputy Director
Kyrgyzzheldorstroy – National company for development and construction of railways	Sadykpek Ablesov, General Manager Kadyk Raimkulov, Deputy General Manager
Railway Station Alamedin (Bishkek)	Viktor Nefedchenko, Head of the station
Railway Station, Balykchi	Kasymbek Torobaev, Director of Railway Station
Railway Station, Jalal-Abad	Abdulazhan Shaiev, Deputy head of Southern Kyrgyz Rail branch
Railway Station, Osh	Deputy head of the Osh 2 station Head of the container yard operation
Border-Crossing Point Dostuk (the Kyrgyz Republic–Uzbekistan)	Ibragim Ikramov, Chief Inspector
Border-Crossing Point Kara-Suu (the Kyrgyz Republic–Uzbekistan)	Head of the customs post
Border-Crossing Point Torugart	Head of the customs post
Border-Crossing Point Madaniat	Sabyr, Deputy Director of Trade House the Kyrgyz Republic
Association of National Carriers	Temirbek Shabdanaliev, President

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Organizations Visited and Interviewed *(continuation)*

Organization	Person
National Association of Freight Forwarders	Viktor Kim, President
Association of Automotive Carriers (Kyrgyz AIA)	Faizulla Halmurzaev, General Secretary
Jalalabad Oblast Administration	Zhanysh Kurbanov, First Deputy Governor
Naryn Free Economic Zone	Atyrkul Sadanbekova, Deputy Director
Agribusiness Competitiveness Center, Osh Branch	Orozaaly Esenaliev, Director
ZhelDorAsiaCenter, Freight forwarding company (Rail)	Lyudmila Kasyanova, Director
TAEK, Freight forwarding company (Rail)	Larisa Klochko, Director
Airport Manas (Bishkek)	Erik Akmatov, Vice-President on manufacture
Latvian Agency of Investment and Economic Development	Kalvis Vitolinsh, Economic Advisor
German Agency for Technical Cooperation (GTC)	Jonathan Hornbrook, Program Director
Central Asian Regional Economic Cooperation Program, Almaty	Maksat Kystaubaev, Regional Cooperation Specialist, CAREC Unit
Union of International Road Carriers of the Republic of Kazakhstan (KazATO), Almaty	Alexander Denisenko, Deputy General Secretary
Eurasian Economic Community. Integration Committee Secretariat, Almaty	Sergey Belousov, Head of Department of Customs and Border Issues Konstantin Kachurovskiy, Consultant, Department of Customs and Border Issues
Transport Corridor Europe–Caucasus–Asia	Vadim Turdzeladze, Consultant
European Union (BOMCA/CADAP project), Almaty	Ulrich Rainer, Project Manager, Attaché

BOMCA = Border Management Programme for Central Asia, CADAP = Central Asia Drug Action Programme, CAREC = Central Asia Regional Economic Cooperation.

Appendix 2:

Project Site Visit Summary

Site visits play an important role in the data collection for this study. The project team completed two such visits, both requiring 3 days. The first visit was along the transit route from the People's Republic of China (PRC) to Bishkek. The purpose of this visit was to review the transit route and investigate three existing or potential logistics centers along the route: (i) the Torugart border-crossing point (BCP) that links the Kyrgyz Republic with the PRC, (ii) At-Bashi valley, which is viewed as a potential place for a cross-border freight terminal, and (iii) the town of Balykchi, which played an important role as a multimodal center during the Soviet times. The second trip was along the newly rehabilitated Bishkek–Osh road that ends in the second and third largest cities of the Kyrgyz Republic: Osh and Jalal-Abad. Both cities are located at the terminal stations of the Commonwealth of Independent States (CIS) rail network and are tightly linked economically to neighboring Uzbekistan.

The intercity road network of the Kyrgyz Republic measures almost 19,000 kilometers (km). Most of the roads in this network are in very poor condition. Eight roads, measuring a total of 2,242 km, are parts of regional transport corridors. These roads are

- Bishkek–Osh – 672 km
- Bishkek–Georgievka – 16 km
- Bishkek–Chaldovar – 31 km
- Bishkek–Naryn–Torugart – 539 km
- Taraz–Talas–Suusamyr – 199 km
- Osh–Sarytash–Irkeshtam – 258 km
- Osh–Isfana – 385 km
- Sarytash–Karamyk – 142 km

The project schedule being tight, two of these routes were chosen for a more detailed review: the Bishkek–Naryn–Torugart and the Bishkek–Osh roads.

The Bishkek–Naryn–Torugart Route

Along the Bishkek–Naryn–At-Bashi–Torugart–Naryn–Balykchi–Bishkek route (1,200 km), several logistics facilities were visited and reviewed in more detail: the Alamedin railway station in Bishkek, Balykchi railway station, Naryn free trade zone (FTZ), At-Bashi valley, and Torugart BCP.

The Alamedin railway station in Bishek is the most adequately equipped station in the Kyrgyz Republic for operations with International Standardization Organization (ISO) containers. It is equipped with two high-capacity container loaders, one of which requires repair. The yard is primarily used for the import of cars. The volume of multimodal transit through the yard is insignificant, and thus, the container yard can be extended to accommodate bigger volume of containers. The concreting of the pavement, which would make the extension of the yard possible, has been budgeted and planned by the Kyrgyz railways.

Balykchi, meanwhile, used to be a relatively large logistics center during the Soviet era. It is located at the terminal station of the CIS rail network and is linked by road to the PRC. In addition, it is linked by waterways to the largest city in the Issyk-Kul oblast, Karakol. The visit to the Balykchi railway station confirmed that despite the turbulent times of 1990s, the Kyrgyz rail network is maintained in relatively good condition. The rail track between Balykchi and Bishkek is properly maintained, and semaphores and gantry cranes are in proper condition. The logistics center's gantry cranes, however, have the capacity of up to 10 tons, which makes them inappropriate for handling 20- and 40-foot ISO containers.

The project team visited two container yards in Balykchi. One of the container yards measured about 500 meters (m) in length and has a rail track for 20 rail cars. It is paved in concrete, which makes it appropriate for container loading operations with stack car loaders. Kyrgyz rail has two Fantuzzi stack car loaders in the Alamedin station, one of which is being considered for relocation to the Balykchi container yard after repair.

The major customer for the Balykchi rail station is Kumtor Gold Company, which maintains its own fully equipped container yard. The railway station moves an average of 15–20 rail cars and rail platforms per day, which amounts to approximately 5%–7% of its capacity.

The next stop on the trip to Torugart was Naryn town. Naryn is the center of the Naryn oblast and the Naryn FTZ. Most of the territory of the Naryn oblast is located at an altitude of at least 2,000 m above sea level, and the severe climate plus the presence of mountain ranges have considerable impact on transportation operations. Most of the cargo traffic in the Naryn oblast consists of consumer and industrial goods from the PRC.

Transit flows normally originate in Topo, aborder post in the PRC 110 km from the Torugart pass, which serves as a freight terminal for the traffic to the Kyrgyz Republic. Goods are normally moved by PRC or Kyrgyz trucks through the Torugart BCP. One segment of the imported goods from the PRC clear customs in Naryn, the other in Bishkek.

There is a considerable difference between the conditions of the trucks used for traffic between Topo and Naryn. The typical Kyrgyz truck is an old semi-trailer Russian-made KaMAZ or Belarus-made MAZ truck with a maximum total weight of 40 tons (t) and payload of 20 t. These trucks are prone to frequent breakdowns. PRC trucks, on the other hand, have a maximum total weight of 55 t with a payload of more than 30 t; most of them look new.

The administration of the Naryn FTZ is lobbying for the development of the logistics terminal in At-Bashi valley (140 km from the Torugart BCP, 85 km from Naryn). The terminal is viewed as a hub, where goods from the PRC will be cleared and reloaded onto Kyrgyz trucks for further distribution. The hub is supposed to have bonded and free storage facilities, a hotel, filling stations, maintenance shops, and cafés. The results of the feasibility analysis were forwarded to the Kyrgyz government for further consideration.

The road from the village of At-Bashi to the Torugart BCP gradually ascends along three quite flat plateaus: the At-Bashi, Arpa, and Chatyr-Kul valleys divided by two relatively flat passes. The last 100 km before the BCP are unpaved. The main challenge of this road is its condition. Although covered with new gravel in the summer of 2007, it remains very unfriendly to shock absorbers and tires. In addition, there are no petrol stations and maintenance shops in the Kyrgyz Republic within 150 km of Torugart.

The Torugart BCP is located 3,750 m above sea level. It is characterized by severe climate and poor water supply. Currently the post is poorly equipped to fulfill its purpose.

The volume of trucks that goes through the BCP is increasing steadily over the last several years. According to the head of the post, 500 trucks per week (Monday through Friday) pass through Torugart. The key bottlenecks are customs inspection and weighting stations. A new weighting station was to have been installed in November–December 2007.

Poor communications between PRC and Kyrgyz customs and frontier service agencies imposes additional burden on the flow of traffic in Torugart. Kyrgyz customs does not have any information about the volume of trucks released from Topo. Normally, trucks are released and arrive in large batches, with Kyrgyz customs being uninformed of the size of these groups. Sometimes the Torugart BCP has to work until the late hours to cope with the backlog of trucks.

The Bishkek–Jalal-Abad–Osh Route

The purpose of the Bishkek–Jalal-Abad–Osh trip was to review the condition and maintenance of the newly rehabilitated road, see facilities at the terminal railway stations of Jalal-Abad and Osh, and observe cross-border operations at the border posts with Uzbekistan.

The road condition along the route was excellent, especially in comparison to the Bishkek–Torugart route. Several newly rehabilitated sections of the route, however, are in relatively poor condition. During interviews, road users claimed that sections that were rehabilitated by Turkish subcontractors were in much worse condition than those completed by PRC and Korean subcontractors.

The availability and quality of road services along the route vary quite considerably and in general are inadequate. The most challenging part of the trip is the section between Sosnovka village (south of Kara-Balta) and Toktogul. This part of the route has a length of over 200 km, goes through the two passes of Tu-Ashu and Alabel, and is 3,000 m above sea level. The project team did not see any petrol stations between Sosnovka and Toktogul. There was one place in the middle of this section, called Paris, where drivers can potentially buy petrol, packed in 5-liter plastic bottles. All drivers have to fill their tanks full before entering this area, which explains why the small village of Toktogul has about 20 petrol stations.

A driver who often uses this part of the road complained that during winter, the road is not adequately maintained and becomes dangerous because of snowdrifts. If car accidents occur, drivers cannot rely on much help because many parts of the road are not covered by mobile service.

During the trip to Osh, the project team visited three different BCPs. The first BCP, Madaniat, serves as an exchange point for food products between the Kyrgyz Republic and Uzbekistan. Farmers and brokers normally bring their crops to the Trade House, located at the BCP, where products are reloaded from seller trucks into the buyer trucks on the other side of the border. The movement of products from one country to another is done with large handcarts, usually pulled by several boys. Trucks are not permitted to cross the border. One crew of boys can move up to 2.5 t of produce at a time. At the time of the visit, in November, the main import of the Kyrgyz Republic was potatoes while its main export was persimmons. The peak season for exchange

between countries is June, when the volume of trade can amount to 50 pairs of trucks per day on each side. In winter, trade exchange is reduced to almost zero.

The second BCP, Dostuk, is used for transit and import–export flows between the Kyrgyz Republic and Uzbekistan. It was recently rehabilitated, but the customs administration had complaints about the project implementation. According to the Deputy Chief, contractors spent about $800,000 on the project, but achieved quite modest results. In comparison, the Kara-Suu BCP was reconstructed on time at the cost of only $450,000, a part of which was defrayed by the European Union.

At the time of the visit, construction work at the Kara-Suu BCP had not yet been completed. Visually the quality of work was better than in Dostuk. The BCP is to be used for trade between the Kyrgyz Republic and Uzbekistan. Transit trucks are to be processed in the Dostuk BCP. However, Uzbekistan constructed a large modern terminal on the other side of the border. According to the Chief of the Kara-Suu BCP, Uzbekistan invested over $20 million in the facility. Considerable investments by Uzbekistan can mean that they plan a more significant role for this BCP in the future.

The southern system of Kyrgyz Railways consists of four relatively short sections linked to the Uzbek rail network (Appendix 3). The movement of goods by rail through the Kyrgyz–Uzbek border is comparatively easy. Movements through Uzbek and Kyrgyz networks are centrally coordinated by Russian Railways in Moscow which controls any use of the rolling stock of one country by another country and which calculates the payments for such use of rolling stock. These payments are cleared monthly among the countries of the CIS rail network.

The volume of traffic through the Kyrgyz rail network grew considerably over the last few years. However, even with double-digit increases, current volumes represent less than 20% of the transit capacity of the rail network. Despite a considerable decline in operations in the 1990s and the beginning of 2000s, the main rail track is maintained in good condition. Only a small part of the railway sidings is still maintained in proper condition, because most of the industrial plants of the former Soviet Union that used those sidings have ceased to exist.

Until May 2007, only one station in the Kyrgyz Republic, the Alamedin station, had regular operations processing 40-foot containers. In May 2007, Kyrgyz railways installed a 60 t crane in Osh II station, which allowed the station to begin container operations in the Southern system of Kyrgyz railways.

After the installation of the crane, the volume of container operations in Osh II station has skyrocketed and continues to grow. In November 2007, the cargo volume was approaching 200 containers per month. Like in the Alamedin container station, the container yard is used mainly for handling imported second-hand cars.

Despite its new container handling equipment, the growth potential for container operations in Osh II station is limited and will reach its capacity relatively soon. Currently, fixed-position cranes unload containers from platforms and puts them on the yard. Only 6 full containers can be on the yard at the same time. Containers are emptied by consignees before they can be moved by a 10 t gantry crane to the empty container yard. Obviously this technology slows down the process and should be considered only as a temporary solution.

Extending the container yard capacity in Osh requires investments for the pavement of the yard and the purchase of container handling equipment. Setting up a container yard in Jalal-Abad will require additional investments into dismantling of the redundant rail siding tracks.

Table A2 provides a summary of the site visits during November 2008.

Table A2: Summary of Site Visits

Trade Logistics facility	Observations and Recommendations
Transport Corridor Bishkek–Naryn–Torugart (Part of CAREC 1-c)	Relatively moderate increase of altitude from Bishkek (800 m above sea level) to Torugart BCP (3,600 m), except Dolon pass (3,000 m). Poor condition of pavement. Last 100 km is a gravel road. Some maintenance operations are carried out to improve road conditions. Limited supply of maintenance and catering services along the route, especially between Naryn and Torugart BCP.
Transport Corridor Bishkek–Jalal-Abad–Osh (Part of CAREC 3-b)	Steep mountainous sectors between Sosnovka and Suusamyr, and between Alabel and Toktogul. New paved road. Some sectors of the road have quality issues. Limited supply of maintenance and catering services along the route, especially between Sosnovka and Toktogul.
BCP Torugart (with PRC)	High volume of traffic–around 100 trucks per day. Low volume of passenger traffic because of large distance from inhabited settlements. High altitude (3,600 m) and severe weather conditions. Old infrastructure, separate inspection posts (customs, border control, sanitary, transport inspection, quarantine, veterinary). Irregular arrival of trucks create long queues and extra work hours at the BCP.
BCP Dostuk (with Uzbekistan)	Low amount of vehicle traffic was observed. Volume of transactions by small traders and passenger traffic are significant. Some pedestrians bypass the BCP. Payment of bribes was observed. Updated facilities, although additional developments are required.
BCP Kara-Suu (with Uzbekistan)	Large numbers of pedestrians were observed. At the time of the visit, the BCP was closed for major reconstruction work (financed through Border Management Programme in Central Asia–Central Asian Drug Action Programme). A large logistics facility on the Uzbek side was observed.
BCP Ak-Zhol (with Kazakhstan)	Main BCP near Kyrgyz capital Bishkek. Large volume of passenger traffic creates bottlenecks during daytime. Used primarily by TIR vehicles during the night hours. Kyrgyz inspection services have separate physical locations and are distributed over the distance of 600 m. Contrary to Kazakh BCPs, Korday uses single-window concept of cross-border control.
BCP Ak-Tilek (with Kazakhstan)	The largest BCP by cargo traffic movement with relatively low passenger traffic. Kyrgyz inspection services have separate physical locations and are distributed over the distance of 2,000 m. Cross-border facilities were in the process of improvement, focused on increased security and prevention of drug trafficking.
BCP Madaniat (with Uzbekistan)	Now transit of motor vehicles of any kind. All transactions are happening in batches of 2 t, carried in carts by loaders. Officially this BCP is used for low volume transactions of food products grown by local farmers under simplified customs regime. All transaction occur in the Madaniat trading house. Payment of bribes was observed.

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Table A2: Summary of Site Visits *(continuation)*

Trade Logistics facility	Observations and Recommendations
Railway Station Alamedin	The largest railway station in the Kyrgyz Republic, located in the industrial area of Bishkek. Equipped for handling of multimodal ISO containers: two stack loaders, concrete paved yard, rail spur for 20 rail cars. Available land for expansion of the yard area.
Railway Station Balykchi	Multimodal center during Soviet times: sufficient number of rail spurs, good road access, access to Issyk-Kul port area, transloading facilities. Now utilized at less than 10% of its capacity. Available space for container yards and storage sheds. Some container yards and storage facilities are privatized and operational. Owners of privatized facilities are reluctant to invest (probably only except of Kumtor Operating Company).
Railway Station Jalal-Abad	Railway station has spare railway sidings, used in the past by industrial enterprises. These sidings can be converted into container yards and storage areas.
Railway Station Osh	Station was opened for container operations in 2007 after installation of a 60 t maintenance crane. Further expansion of the container yard can be constrained by rails, warehouses and residential buildings.
Free-Trade Zone Naryn	Located in the least developed area of the Kyrgyz Republic, close to the borders of the PRC. Management of FTZ promotes the concept of a cargo freight terminal in At-Bashi valley as a transloading, customs, maintenance, and service point on the route to and from the PRC.

BCP = border-crossing point, CAREC = Central Asia Regional Economic Cooperation, FTZ = free trade zone, ISO = International Standardization Organization, km = kilometer, m = meter, PRC = People's Republic of China, t = ton, TIR = Transports Internationaux Routiers.

Source: Authors.