



CAREC Transport and Trade Facilitation

Partnership for Prosperity





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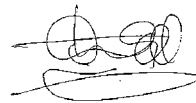
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Foreword

The Central Asia Regional Economic Cooperation (CAREC) Program has reached the “end of the beginning” and is now positioned to enter a new phase involving flagship projects in transport, energy, and trade facilitation. The first phase of the Program focused on in-depth analytical work and formulation of strategic frameworks. The second one will focus on doing projects.

The transport sector is an area with major investment needs. Some flagship projects have already been approved and/or are under execution in the CAREC participating countries (Afghanistan, Azerbaijan, People’s Republic of China, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan).

This document summarizes the transport and trade facilitation strategy and its implementation action plan. Improved transport connectivity cuts the cost of doing business, creates good conditions for larger trade flows, brings people closer to markets and social services, and ultimately becomes one of the means to reduce poverty and increase prosperity for all.



Juan Miranda
Director General
Central and West Asia Department

Preface

The preparation of the Transport and Trade Facilitation Strategy (the Strategy) for the Central Asia Regional Economic Cooperation (CAREC) area started in February 2007 with a study funded by the Asian Development Bank (ADB). The Strategy was developed through extensive consultations with CAREC countries. These consultations included field visits to CAREC countries; meetings with development partners, the private sector, freight forwarders' associations, and logistics service providers; and meetings with the members of the Transport Sector Coordinating Committee (TSCC) and Customs Cooperation Committee (CCC). The Strategy is based on comprehensive assessments of macroeconomic and traffic data and trade flows in the region. It is consistent with national transport and trade facilitation strategies and investment programs.

The Strategy was endorsed by the CAREC participating countries at the 6th CAREC Ministerial Conference in Dushanbe, Tajikistan in November 2007. Its implementation action plan (the Action Plan) was approved at the 7th ministerial conference on CAREC in Baku, Azerbaijan in November 2008. This publication presents the major elements of the Strategy and the Action Plan.

During the preparation of the Strategy, the governments of the CAREC countries provided the study team with extensive support, cooperation, and inputs. In particular, the members of TSCC and CCC carried out comprehensive reviews of the draft Strategy and provided most constructive comments and suggestions.

The Transport and Communications Division of the Central and West Asia Department (CWRD) of ADB supervised the Strategy preparation. Sean M. O'Sullivan, deputy director general, CWRD provided overall guidance on the work, and Haruya Koide, principal infrastructure finance specialist, managed the project. Ying Qian, principal economist (financial sector) in the Country Coordination, Regional Cooperation, Governance, Finance and Trade Division of the East Asia Department made substantive inputs to the Strategy, especially in the area of trade facilitation.

I hope the Strategy will give CAREC countries and their development partners a basis for thinking about the future development of the transport sector over the long term.



Hong Wang
Director
Transport and Communications Division
Central and West Asia Department

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Abbreviations

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
CCC	–	Customs Cooperation Committee
EBRD	–	European Bank for Reconstruction and Development
IsDB	–	Islamic Development Bank
JICA	–	Japan International Cooperation Agency
NJC	–	national joint transport and trade facilitation committee
OPEC	–	Organization of the Petroleum Exporting Countries
PRC	–	People’s Republic of China
RJC	–	regional joint transport and trade facilitation committee
TA	–	technical assistance
TSCC	–	Transport Sector Coordinating Committee

NOTES

In this report, “\$” refers to US dollars and “€” refers to euros.

Introduction

Challenges

More than a decade has passed since the launching of the Central Asia Regional Economic Cooperation (CAREC) Program.¹ Over this period, CAREC countries achieved high economic and trade growth. This has put pressure on the transport and trade system.

About 36%—8,640 kilometers (km)—of arterial roads needs reconstruction or rehabilitation. Although the CAREC countries have increased budgetary resources and introduced cost-effective maintenance contracts, road maintenance remains inadequate. Train speeds on some rail lines are about 30 km per hour. The railway system needs rehabilitation, new rolling stock, and new traffic management equipment and systems. Ports at Baku, Azerbaijan and Aktau, Kazakhstan need more capacity to cope with increasing transport volumes. A number of international airports need to expand. Trucks spend too long at border points along major transport routes. Logistics centers and services have limited capacity. Distances between import and export markets are substantial—frequently more than 3,000 km—leading high costs. The majority of the road network traverses mountainous terrain, and altitudes frequently exceed 1,000 meters (m) above sea level. Steep gradients, deep cuttings, and high embankments are common, and landslides occur frequently. In addition, severe weather hampers accessibility and makes it difficult to maintain transport infrastructure.



Road in very poor condition South of Naryn, Kyrgyz Republic

Pavement durability, for example, is affected because of winter freezing and high summer temperatures.

Progress in the Last Decade

CAREC countries have improved several segments of key transport corridors in the region. External financing—totaling about \$5 billion—was mobilized to improve transport infrastructure and trade. About 60% of the total length of major road corridors has been rehabilitated.

¹ The CAREC countries comprise Afghanistan, Azerbaijan, People's Republic of China, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan. The CAREC Program is being supported by six multilateral institutions: the Asian Development Bank, European Bank for Reconstruction and Development, International Monetary Fund, Islamic Development Bank, United Nations Development Programme, and World Bank.

Roads

External financing to rehabilitate about 3,000 km of the 6,000-km north–south road corridor between Kazakhstan and the Middle East has been raised. The improved section runs from Almaty in Kazakhstan through Bishkek and Osh in the Kyrgyz Republic, Dushanbe in Tajikistan, Termez in Uzbekistan, and Hairatan to Islam Qila in Afghanistan. The five governments along this corridor and development partners, including the Asian Development Bank (ADB), Islamic Development Bank (IsDB), and Japan International Cooperation Agency (JICA),² provided financial and technical support. About 98% of the regional road transport corridors in Afghanistan, totaling about 3,200 km, have been or are being improved with external assistance of more than \$1 billion. ADB, Saudi Fund for Development, IsDB, Organization of the Petroleum Exporting Countries (OPEC) Fund for International Development, and World Bank committed a total of more than \$1 billion to upgrade the east–west and north–south road corridors in Azerbaijan. Regional corridors in Xinjiang, People’s Republic of China (PRC) are being upgraded with financial assistance from ADB and World Bank (\$400 million). ADB, the European Bank for Reconstruction and Development (EBRD), and IsDB supported the rehabilitation of main roads in Kazakhstan, including the Almaty–Bishkek regional road (a total of \$270 million). ADB, IsDB, and JICA provided a total of about \$310 million to improve the north–south corridor in the Kyrgyz Republic. ADB assisted Mongolia to upgrade the two main international road corridors, with financial assistance amounting to \$127 million. Tajikistan mobilized a total of \$118 million from ADB to rehabilitate its international road corridors. ADB provided one loan (\$75.3 million) to upgrade the road network in Uzbekistan. On 26 August 2007, the governments of Afghanistan and Tajikistan inaugurated a bridge across the Pianj River, financed by the United States, which replaced the cross ferry service and enabled 9-hour road travel from Kabul to Dushanbe.

Railways

EBRD supported Kazakhstan’s railway sector to enhance track maintenance and commercialization (\$67.1 million). Railways in Mongolia were rehabilitated with two JICA concessional loans totaling about \$75 million and

a grant of about \$10 million from the Government of Japan. Railway transport capacity in Kazakhstan was improved with a JICA loan of about \$70 million. ADB and EBRD supported railway modernization in Uzbekistan through four loans totaling \$250 million. Railways in Uzbekistan, including construction of a 222-km railway line between Tashguzar and Kumkurgan, have been upgraded with support from two JICA concessional loans amounting to about \$190 million. The Government of Uzbekistan opened the Guzar–Termez railway section on 25 August 2007.

Container block train services linking the PRC and Moscow, Russian Federation started in October 2007, providing speedy, reliable, and punctual services between Lianyungang and Moscow. All cargoes are tracked continuously and are accorded efficient customs clearance. Investments are currently underway to expand the marshalling yard and gauge change facilities in Ala Shankou and Dostyk in anticipation of an expected increase in cross-border rail traffic.

Airports

ADB assisted the rehabilitation of seven local airports in Afghanistan (\$30 million). Azerbaijan upgraded its international passenger terminal and civil navigation systems with EBRD assistance (\$13.7 million). Kazakhstan improved the Atyrau Airport with EBRD financing (\$30 million). The Osh Airport in the Kyrgyz Republic was rehabilitated with IsDB’s financial support (\$7 million). The international



Pianji River Bridge

² Concessional loan operations of the Japan Bank for International Cooperation (JBIC) were integrated into the operations of JICA on 1 October 2008.



Almaty–Bishkek Road, Kazakhstan, CAREC Corridor 1b and Corridor 3

Bishkek–Osh, Kyrgyz Republic, CAREC Corridor 3



Dushanbe–Karamik, Tajikistan, CAREC Corridor 3b and Corridor 5



Dushanbe–Tursunzade, Tajikistan, CAREC Corridor 3b

airport in Ulaanbaatar, Mongolia was improved with a loan from ADB (\$36 million) in the 1990s. The Kabul International Airport (Afghanistan), Astana Airport (Kazakhstan), Bishkek Manas International Airport (Kyrgyz Republic), Urumqi International Airport (the PRC), and three regional airports (Bukhara, Samarkand, and Urgench in Uzbekistan) were improved through five concessional loans from JICA, amounting to about \$350 million, and grants from the Government of Japan of about \$30 million. EBRD assisted Khujand Airport's improvement and upgrading of its air fleet and navigation systems in Tajikistan (\$19.7 million). The Tashkent Airport was rehabilitated with a loan from EBRD (\$48 million).

Ports

Baku's ferry terminal was upgraded with EBRD financing (about \$20 million). The port at Aktau (Kazakhstan) received about \$20 million from the Japan Bank for International Cooperation (semicommercial) through the Kazakhstan Development Bank for the development of oil export facilities.

Customs and Trade Facilitation

CAREC countries have made important progress in customs modernization and trade facilitation. They have simplified customs procedures in line with international standards. In addition, some border-crossing points were improved with support from development partners. CAREC countries completed the diagnostic assessments of customs procedures with support from the World Customs Organization and sped up the implementation of customs reform and modernization programs. CAREC countries have established transport and trade facilitation organizations or similar institutional setups to address transport and trade issues. Afghanistan has made progress in customs modernization and trade facilitation with World Bank support (\$31 million). The Khorgas Global Logistics Center is being developed in Xinjiang Uygur Autonomous Region (Xinjiang), PRC. In Kazakhstan, a Kazakh–Russian joint venture company is developing large-scale logistics centers in Astana, Aktobe, and Almaty for distribution services in Kazakhstan and Central Asia. Kazakhstan is carrying out customs modernization with a World Bank loan of \$18.5 million. In 2002, Kyrgyz Republic and Tajikistan started to pursue regional trade facilitation and customs cooperation with ADB assistance (\$25 million). They also implemented regional customs modernization

and infrastructure development with additional ADB assistance (\$18.2 million). Mongolia's customs modernization was assisted by ADB (\$5.5 million).

Institution Building

CAREC countries have implemented institutional building projects with support from development partners including ADB, European Union, World Bank, and bilateral sources. For instance, the European Union provided over 60 technical assistance and investment projects totaling more than €120 million, covering issues such as training freight forwarders, contract supervision for highway rehabilitation, agreements on transport of dangerous goods, and maritime and civil aviation training.

Rationale for the Development of the CAREC Transport and Trade Facilitation Strategy

CAREC countries pursue a shared vision of "Good Neighbors, Good Partners, and Good Prospects," and are working together to improve the region's transport infrastructure and reduce the cost of trade. This gave rise to the development of a new CAREC transport and trade facilitation strategy (the Strategy), giving the countries direction and priority in regional transport development and trade facilitation.

The Strategy aims to improve the region's competitiveness and expand trade among CAREC economies and the rest of the world. Key elements of the Strategy are coordinated improvements of transport infrastructure and trade facilitation, including harmonized cross-border regulations, procedures, and standards along priority transport corridors. These improvements will result in significant and measurable reductions in transport costs and time for local, cross-border, and transit traffic, and trade along the corridors.

The Strategy will guide and strengthen the work of the CAREC Program in transport and trade facilitation for the next 10 years. The Strategy builds on the substantial work completed by the Transport Sector Coordinating Committee (TSCC) and the Customs Cooperation Committee (CCC) of CAREC in recent years.



High Tech Logistic, Almaty, Kazakhstan

CAREC Transport and Trade Facilitation Strategy 2008–2017

Strategic Approaches

The transport and trade facilitation strategy (the Strategy) will support the Central Asia Regional Economic Cooperation (CAREC) Program's goal of development through cooperation. Accelerated economic growth, poverty reduction, and efficient movement of people and goods will be achieved by upgrading key transport corridors across the CAREC region and simplifying and harmonizing the regulations that govern cross-border trade in the region.

A results-based approach to transport improvements and trade facilitation will be pursued. Time and cost along the selected corridors will be monitored to provide benchmarks against which progress in transport and trade facilitation can be assessed.

Goals

The Strategy has three overarching goals:

- establish competitive corridors across the CAREC region;
- facilitate efficient movement of people and goods through CAREC corridors and across borders; and
- develop sustainable, safe, user-friendly transport and trade networks.

Transport Component

Policy

The transport component of the Strategy underpins the strategic approach described above by reinforcing the three pillars—infrastructure, management, and technology—that characterize the challenges and opportunities faced by the sector. The following policy statement provides an overall framework for the regional transport strategy:

It is the policy of the governments of CAREC countries to provide safe, dependable, effective, efficient, and fully integrated transport operations and infrastructure to support social and economic development in the CAREC region. This will be achieved by improving levels of service; minimizing costs; and improving infrastructure, management, and technology in an economically and environmentally sustainable manner. In addition, the efficiency of the transport systems in the region will be enhanced to allow the CAREC region to exploit its unique geographical position.

CAREC Corridors

The Strategy emphasizes a selective transport corridor approach, concentrating resources for both investment and operational management, and focusing on balanced improvement of infrastructure, management, and technology.

The corridors reflect current and potential trade flow patterns. The selection of corridors is based on the inclusion rule of at least two CAREC countries and the following five criteria:

- current traffic volume;
- prospects for economic and traffic growth;
- ability to increase connectivity between regional economic and population centers;
- prospects of mitigating delays and other hindrances such as the number of cross-border points and the number of gauge changes; and
- economic and financial sustainability of infrastructure, management, and technology improvements.

Six CAREC corridors have been identified:

- CAREC 1: Europe–East Asia
- CAREC 2: Mediterranean–East Asia
- CAREC 3: Russian Federation–Middle East and South Asia
- CAREC 4: Russian Federation–East Asia
- CAREC 5: East Asia–Middle East and South Asia
- CAREC 6: Europe–Middle East and South Asia

A corridor map is provided in map 1, and road and railway traffic density for the identified corridors is shown in map 2.

Map 1: CAREC Corridors



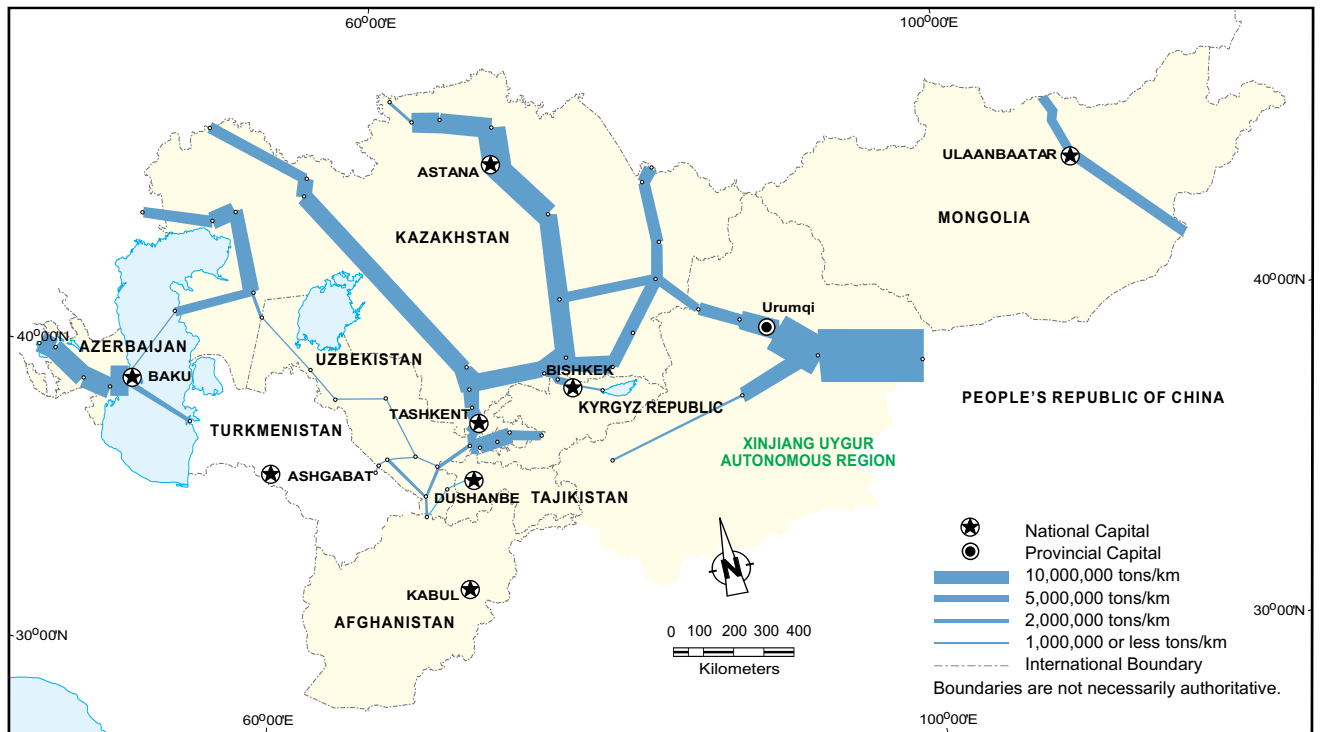
CAREC = Central Asia Regional Economic Cooperation.
Source: Asian Development Bank.

Map 2: Road and Railway Traffic Density

Map 2.1: Road



Map 2.2: Railway



Source: Asian Development Bank.

Actions

The following are actions to achieve the three goals of the Strategy.

Establish competitive transport corridors across the CAREC region

The selected CAREC corridors will be physically developed and improved to link production centers and markets within CAREC countries and to enhance access to neighboring regions and markets. This will reduce transport costs and time between major CAREC cities and along principal Eurasian trade directions, and will eliminate the weak or missing road links by rehabilitating existing roads or constructing new roads.

Technologies will be improved to integrate with modern global value chains. This will generate higher intermodal traffic volume in the CAREC region and in Eurasian transit trades, support the development of the logistics industry, and optimize modal choice for freight traffic along corridors.

Sustained results require maintenance of the assets deployed. Corridor investments must be economically and financially sustainable, without relying on excessive government financing. This will require innovative financing mechanisms based on fair and balanced user-pay principles. To maximize efficiency in the use of available financial resources, maintenance services will also be organized on the basis of competition.

Facilitate movements of people and goods across borders

Border-crossing delays will be reduced by improved infrastructure, equipment, procedures, and working conditions, encompassing

- adequate, well-equipped, and efficient facilities;
- simplified and standardized cross-border procedures and documentation;
- use of electronic information in control and inspection and sharing information;
- trained and motivated staff; and
- elimination of high transaction costs. Actions in this area will be coordinated with the trade facilitation component of the Strategy.

Transport regulations will be harmonized among CAREC countries to create a level playing field for transport operators and promote efficiency and better services. The standard international transport conventions will be the basis to achieve this. The CAREC countries will endeavor to accede to and implement the relevant international conventions appropriately.

The ongoing restructuring of the railway sector will be supported to establish competitive regionalized services with private sector participation and integrated cross-border operations. The modernization of the civil aviation sector will be pursued with a focus on safety. The trucking fleet will be modernized to increase participation by CAREC countries in intra-regional and transit traffic.

Develop sustainable, safe, people-friendly transport systems

The CAREC transport network will be sustainable and people friendly, complying with the best standards of safety and comfort. Border crossings and visa requirements will be simplified. The transport system will be developed in an environment-friendly manner, with minimal adverse impacts on the environment in CAREC countries.

Trade Facilitation Component

Definition

Trade facilitation, as defined by the World Trade Organization, is

the simplification and harmonization of international trade procedures, including the activities, practices, and formalities involved in collecting, presenting, communicating, and processing data and other information required for the movement of goods in international trade.³

Trade facilitation relates to a wide range of activities such as import or export procedures, transport formalities and payments, insurance, and other financial requirements.

³ World Trade Organization. 1998. What is Trade Facilitation? 2 August 2006. Available: www.wto.org/english/thewto_e/whatis_e/eol/e/wto02/wto2_69.htm.#note2

Improvements in trade facilitation in CAREC countries will reduce costs that arise from

- a lack of integrated border management, which results in complex procedures in preparation for crossing the border or at the border itself, imposing time and money costs on traders;
- a lack of coordination between the two sides of a border crossing; and
- other miscellaneous costs.

Objectives

The goals of the CAREC trade facilitation component are to

- reduce transaction costs and time significantly by improving administrative efficiency and simplifying, standardizing, and harmonizing trade procedures;
- encourage the free movement of people and goods; and
- enhance the transparency of laws, regulations, procedures, and forms, and share information on these and other trade issues.

The trade facilitation component will be guided by seven objectives:

- strengthened customs cooperation as the core program of the trade facilitation strategy;
- expanded scope of the work program to address broader issues of trade facilitation;
- focus on trade facilitation efforts for the CAREC corridors;
- adoption of a results-based approach to monitor time and cost savings as the key indicators of the component;
- support for logistics assessments and planning focusing on priority corridors;
- support for bilateral initiatives among CAREC countries with sharing of experience through the Customer Cooperation Committee (CCC); and
- enhanced partnership between CAREC's participating multilateral institutions and key international agencies supporting customs reform, trade facilitation, and logistics development in the region.

The trade facilitation component comprises three elements aimed at reducing trade costs: promoting concerted customs reform and modernization; using an

integrated trade facilitation approach through inter-agency cooperation and public-private partnerships; and developing efficient regional logistics.

Customs reform and modernization

Customs cooperation will remain the core of trade facilitation. The medium-term objective will be to promote concerted customs reforms and modernization, with CCC serving as a regional forum to address issues of common interest. Simplification and harmonization of customs procedures are being achieved in the CAREC region by adopting new customs codes in line with the Revised Kyoto Convention and introducing risk management practices, joint customs control, and customs automation. The process of changing the culture of customs administrations from control orientation to compliance facilitation is crucial and has begun. The Strategy will support this process.

The customs-related work program in the short to medium term will focus on

- harmonization of customs procedures and documentation;
- customs automation;
- data exchange;
- joint customs control;
- risk management, post-entry audit, and customs intelligence;
- regional transit development;
- frameworks for customs cooperation; and
- training.

Integrated trade facilitation

Trade facilitation involves more than border measures. Improved border-crossing processing and measures can result in large economic benefits. The impediments to trade fall most heavily on exports other than the main primary product exports (e.g., oil and gas, cotton, and minerals) and on small and medium-sized enterprises and traders. Effective trade facilitation involves numerous agencies within a country. It will be important for representatives of relevant agencies in each country to work in concert to identify the steps required to facilitate trade and establish priorities and timelines to implement those steps, thereby creating a holistic strategy. To support this effort, national joint transport and trade facilitation committees (NJCs) or similar organizations will be established in CAREC countries.

Regional logistics development

The trade facilitation component will support the development of an efficient regional logistics industry. The work program, which will be closely coordinated with related efforts of the Transport Sector Coordinating Committee (TSCC), will include

- establishing a regional forum to harmonize and plan trade logistics development;
- supporting national trade logistics assessments; and
- facilitating and financing key investments, including public–private partnerships.

Implementation Action Plan

Introduction

The transport and trade facilitation strategy (the Strategy) entails a time-bound and detailed implementation action plan (the Action Plan) that was prepared in consultation with and endorsed by Central Asia Regional Economic Cooperation (CAREC) countries and external aid agencies in 2008. The Action Plan specifies the key results, prioritizes investments and technical assistance (TA) projects, provides measurable performance indicators, and defines overall institutional arrangements for implementation.

The Action Plan will focus on

- about 24,000 kilometers (km) of roads,⁴ 20,000 km of railways,⁵ and 28 border crossing points along CAREC corridors;
- two ports (Aktau in Kazakhstan and Baku in Azerbaijan) and a shipping route (400 km between Aktau and Baku);⁶ and
- 41 airports with international air services.

Key Results

The key results of the Action Plan are the following:

- about 75% of the CAREC corridors improved by 2012 and 100% by 2017, compared with 64% in 2007;

- increased transit trade volume via the CAREC corridors to 2% of trade between Europe and East Asia by 2012 and 5% by 2017, from less than 1% (about 34 million tons) in 2005;
- increased intra-regional trade volume by 25% by 2012 and by 50% by 2017, from the 2005 level (about 32 million tons);
- reduced time for border crossing along the CAREC corridors by 50% by 2012 and by an additional 30% by 2017, compared with 2007; and
- effective functioning of the national joint transport and trade facilitation committee or a similar organization in each CAREC country for managing the CAREC corridors by 2012.

Investment and Technical Assistance Projects

The Action Plan includes the priority investment and TA projects to develop infrastructure, upgrade technology, and improve management through policy reforms and capacity strengthening. There are 62 investment projects with an estimated cost of \$21.1 billion. The investment projects comprise 40 new projects with an estimated cost of \$15.8 billion and 22 ongoing projects with an estimated cost of

⁴ Sixty-four percent of the CAREC road corridors are in good condition, followed by fair (21%), and bad (15%). Interventions will focus on the fair and bad road sections.

⁵ Fiber optic communications networks along the railway tracks will provide telecommunication and information technology companies with new business opportunities.

⁶ A 325-kilometer shipping route between Baku, Azerbaijan and Turkmenbashi, Turkmenistan will also be monitored.

Table 1: Summary of Investment and Technical Assistance Projects

Mode	Investment			Technical Assistance		
	New	Ongoing	Total	New	Ongoing	Total
By Cost Estimates						
		(\$ billion)			(\$ million)	
Road	10.3	2.5	12.8	10.3	1.8	12.1
Railway	4.3	1.4	5.7	6.8	0.0	6.8
Airport and Civil Aviation	0.5	0.4	0.9	11.6	0.5	12.1
Port and Shipping	0.1	0.4	0.5	2.0	0.0	2.0
Logistics	0.4	0.1	0.5	7.2	1.1	8.3
Trade Facilitation	0.2	0.5	0.7	25.5	1.7	27.2
Total	15.8	5.3	21.1	63.4	5.1	68.5
By Number of Projects						
Road	12	13	25	12	2	14
Railway	15	3	18	10	0	10
Airport and Civil Aviation	6	1	7	4	1	5
Port and Shipping	1	1	2	2	0	2
Logistics	4	1	5	8	2	10
Trade Facilitation	2	3	5	23	1	24
Total	40	22	62	59	6	65

Source: ADB staff estimates.

\$5.3 billion.⁷ Sixty-five TA projects with an estimated cost of \$68.5 million will undertake feasibility studies for potential investments or provide advisory support for planning, technical knowledge transfer, and institutional capacity development. A summary of the projects is shown in table 1. A results framework for the Strategy and lists of the investment and TA projects by country including CAREC corridor maps with investment projects are in appendixes 1 and 2, respectively.

The Action Plan focuses on the following three areas:

Competitive Transport Corridor Development and Management

The Action Plan will develop, manage, and maintain the identified CAREC corridors by addressing four major constraints:

- fragmented regional transport networks and deteriorating infrastructure,
- high transport costs and long travel time,
- limited intra-regional and transit trade, and
- insufficient funding for maintenance.

This will be achieved through 52 investment projects with an estimated cost of \$19.9 billion and 20 TA projects with an estimated cost of \$15.7 million. The investment projects include 34 new projects (about \$15.2 billion) and 18 ongoing projects (about \$4.7 billion).

Trade Facilitation

The Action Plan will support customs reforms and modernization, effective functioning of the national transport and trade facilitation committees (or similar organizations), regional logistics development, and

⁷ The ongoing projects are those that the governments of CAREC countries are implementing, and the new projects are those that the governments of CAREC countries have either committed to after endorsing the transport and trade facilitation strategy (the Strategy) at the 6th Ministerial Conference (November 2007), or those recently programmed.

Table 2: Financing Plan for Ongoing and New Investments (\$ billion)

Source	Ongoing	New	Total
CAREC governments	2.6	2.4	5.0
Development partners	1.7	4.9	6.6
Private sector	0.1	5.1	5.2
Financing gap	0.9	3.4	4.3
Total	5.3	15.8	21.1

CAREC = Central Asia Regional Economic Cooperation.
Source: ADB staff estimates.

private sector participation. There are 10 investment projects with an estimated cost of \$1.2 billion (six new projects for \$600.0 million and four ongoing projects for \$600.0 million) and 40 TA projects have an estimated cost of \$48.2 million.

Sustainability Enhancement

The Action Plan will minimize the negative environment and social impacts during the development of the CAREC corridors, and facilitate movement of people across borders. The Action Plan includes five TA projects with an estimated cost of \$4.6 million.

Financing Plan

The governments of CAREC countries finance about 49% of the cost of the ongoing projects, followed by external financing (32%) and the private sector (2%). CAREC countries are actively pursuing external financing to fill the remaining financing gap. Their governments are expected to provide \$2.4 billion to finance 15% of the cost of the new investments during 2008–2017. External development partners including ADB, EBRD, IsDB, and World Bank are expected to cover 31% (\$4.9 billion) of the cost of the new investments, and the private sector is expected to finance 32% (\$5.1 billion). The financing gap of \$3.4 billion (about 22%) will be filled through annual consultations among CAREC countries, development partners, and the private sector during the implementation period. A preliminary financing plan for the ongoing and new investment projects is shown in table 2. The financing plan will be updated, as necessary, during the implementation period.

Major Investment Projects during 2008–2012

Thirty-nine investment projects totaling \$14.0 billion have been programmed for 2008–2012. Among these 39 investment projects, five major projects, amounting to \$9.2 billion, will focus on the following segments of the CAREC corridors required for immediate improvement.

Corridor 1

Corridor 1b (Kazakhstan Road Segment) runs from Korgas at the People’s Republic of China (PRC) border to Zhaisan at the Russian Federation border via Almaty and Shymkent. The total cost is estimated at \$6.6 billion for a total length of 2,237 km. ADB, European Bank for Reconstruction and Development (EBRD), Islamic Development Bank (IsDB), Japan International Cooperation Agency (JICA), and World Bank plan to assist the Government of Kazakhstan improve the segment. Public–private partnership (about \$2.2 billion) is expected in conjunction with EBRD technical assistance (about \$2.3 million). The project started in 2009 for the targeted completion by 2012. Rehabilitation of this segment, together with the planned improvement of border crossing at Korgas and the ongoing development of the high-tech logistics centers in Almaty and Aktobe, as well as the Khorgas Global Logistics Center in Xinjiang, PRC, will facilitate trade between Europe and East Asia. In addition, Corridor 1c (Kyrgyz Road Segment), which runs from Bishkek to Torugart at the PRC border, is an important transport route linking the Kyrgyz Republic and other Central Asian countries to the PRC. The total cost of improving this segment is estimated at \$300

million. ADB and IsDB will help finance the project. The Export–Import Bank of China is also considering the possibility of participation in financial support for the project.

Corridor 2 (Azerbaijan Railway Segment)

The railway line from Baku to Beyuk Kesik at the Georgia border along Corridor 2 carries a significant volume of transit cargo of oil and oil products from Kazakhstan and Turkmenistan to European markets. The total cost of the project is estimated at \$1.8 billion. The Government of Azerbaijan started upgrading the railway line in 2008 with support of the World Bank. ADB and EBRD are considering financing this railway line. This, together with the ongoing improvement of the CAREC 2 road segment and border crossing at Beyuk Kesik, will increase the transport capacity of Corridor 2 in the country.

Corridor 4 (Mongolia Segment)

Corridor 4a, connecting Yarant at the PRC border to Ulaanbaishint at the Russian Federation border via Hovd, will link the western region of Mongolia to both the PRC and the Russian Federation, facilitating the flow of passengers and goods among the three countries. The total cost of Corridor 4a development is estimated at \$200 million. ADB will help finance the project by providing grants and exploring cofinancing resources. Development of Corridor 4a is expected to be completed by 2014. In May 2008, JICA approved a concessional loan of about \$280 million to finance the construction of a new international airport in Ulaanbaatar. ADB is helping develop logistics centers within the country, including those along Corridor 4.

Monitoring Results

The results of the implementation of the Action Plan will be closely monitored. A performance monitoring system will be developed to establish baseline information on the movement of people and goods along the CAREC corridors, identify bottlenecks, and propose actions to solve them. The performance monitoring will cover assessments of infrastructure, customs, and other trade and/or transport regulations and procedures, and logistics services. This will be undertaken by three methods: time/cost–distance

analysis along selected corridors, time-release analysis at border points, and logistics performance analysis along selected corridors.

Based on consultations with CAREC countries during February–March 2008 and a thorough assessment, six subcorridors (i.e., 1b, 2a, 3b, 4b, 5, and 6c), out of a total of 13 subcorridors, were selected for pilot performance monitoring. The pilot performance monitoring started in 2009.

The national joint transport and trade facilitation committee (NJC) or a similar organization in each CAREC country will oversee performance measurement and monitoring activities. The NJC or a similar organization will include representatives of all government agencies in charge of transport, trade, and border-crossing activities (e.g., ministries of transport, trade, economy; customs departments; and agencies in charge of quarantines, sanitary and phytosanitary standards, product standards, security, and immigration); and freight forwarders associations and logistics service providers.

An association of freight forwarders or logistics service providers in each CAREC country will be engaged to collect the data required for the time/cost–distance analysis of these subcorridors every quarter. Using the collected data and with ADB assistance, the NJC will undertake the time/cost–distance analysis, review the results, evaluate the constraints, and take corrective actions. Based on the results of the time/cost–distance analysis, the NJC will periodically authorize time-release assessments of particular border points and logistics performance assessments. ADB will finance performance-monitoring activities and will help strengthen the capacity of the NJC (or a similar organization) in each CAREC country.

Implementation Arrangements

With ADB support, a regional joint transport and trade facilitation committee (RJC) will be established to manage the implementation of the Action Plan, in coordination with NJCs or similar organizations. The Transport Sector Coordinating Committee (TSCC) will be responsible for transport activities of the Action Plan, and the Customs Cooperation Committee (CCC) will focus on customs cooperation activities. The NJCs or similar organizations will report the results of the

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performance monitoring analysis to RJC, TSCC, and CCC at least annually. Until the RJC and NJCs or similar organizations start to function, ADB will directly administer integrated trade facilitation activities of the Action Plan. Such implementation arrangements will be reviewed regularly and will be adjusted, as necessary, to ensure the successful execution of the Action Plan.

With support of development partners, RJC, TSCC, and CCC will annually review the progress of the Action Plan, and will report the results to the senior officials' meetings and ministerial conferences. A midterm review of the Action Plan will be conducted during 2013–2014. The midterm review will refine the Action Plan, as necessary, for its effective implementation in the remaining period.



Dushanbe-Karamik road, Tajikistan, CAREC Corridor 3b and Corridor 5



Samarkand bazaar, Uzbekistan, CAREC Corridor 2, Corridor 3a, Corridor 6a and Corridor 6b

Appendix 1

CAREC Transport and Trade Facilitation Strategy Results Framework

Table A1

Goal	Objective	Key Constraints	Outcome	Milestones/Indicators
Goal 1: Establishment of competitive corridors across the Central Asia Regional Economic Cooperation (CAREC) region	Development of selected CAREC corridors to improve connectivity and reduce transport costs	Low transit and intraregional trade volumes	Increased transit and intra-regional trade through improved access to external markets	Increased transit trade volume via CAREC corridors to 2% of trade between Europe and East Asia by 2012 and 5% by 2017, from less than 1% (about 34 million tons in 2005)
			Shortened travel time	Increased intra-regional trade volume by 25% by 2012 and by 50% by 2017, from the 2005 level (about 32 million tons)
		Prolonged travel time	Increased efficiency and reliability of transport along CAREC corridors	Reduced time for border crossing along CAREC corridors by 50% by 2012 and by further 30% by 2017, compared with 2007
		Fragmented regional transport networks and deteriorating infrastructure	Increased maintenance budget allocation and private sector participation	75% of the CAREC corridors improved by 2012 and 100% by 2017, compared with 64% in 2007 The conditions of all CAREC road corridors lower than international roughness index of four
	Insufficient funding for maintenance with limited private sector participation		Increased routine maintenance budget to at least \$1,000/kilometer/year in real terms by 2017 Increased private sector participation in maintenance by 20% by 2012 and 50% by 2017	

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Table A1 continued

Goal	Objective	Key Constraints	Outcome	Milestones/Indicators
Goal 2: Facilitation of movement through corridors and across borders	Customs reforms and modernization, joint transport and trade facilitation, and development of regional logistics services	Excessive delays at CAREC borders	Improved efficiency in customs operations with risk management and increased transit trade	Reduced time for border crossing by 50% by 2012 and by another 30% by 2017, compared with 2007
		Limited coordination among relevant government agencies	Improved coordination among government agencies	Effective functioning of the national transport and trade committee or a similar organization in each CAREC country by 2012
		Fragmented and inefficient logistics industry	Improved logistics industry in the region	Increased number of logistics centers based on an integrated multimodal network by 50% by 2012 and 100% by 2017, compared with 2007
Goal 3: Development of sustainable, safe, and user-friendly transport and trade networks	Achievement of sustainability, safety, and user-friendliness for CAREC transport and trade networks	Aging vehicle fleet and increasing pollution	Reduced pollution	Increased number of transport equipment with the international standards by 30% by 2012 and 50% by 2017, compared with 2007
		High road accident rate and high civil aviation risks	Reduced road accidents	Reduced road accidents by 20% by 2012 and 50% by 2017, compared with 2007
			Improved air safety	Reduced air accidents and air control mistakes by 20% by 2012 and 50% by 2017, compared with 2007
		Limited movement of people across borders	Reduced visa restrictions	Increased number of people crossing borders

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Appendix 2

Investment and Technical Assistance Projects by Country and CAREC Corridor Maps

Table A2.1: List of Investment Projects by Country

No.	Project Title	Cost (\$ million)	Implementation Period
1	AFG IP 1: Qaisar–Bala Murghab Road ^a	55.0	Ongoing to 2009
2	AFG IP 2: Bala Murghab–Leman Road ^a	180.0	Ongoing to 2011
3	AFG IP 3: Leman–Armalick Road	30.0	2009–2010
4	AFG IP 4: Pul-e-Khumri–Doshi Road ^a	10.0	Ongoing to 2009
5	AFG IP 5: Naibabad–Hairatan Road ^a	10.0	Ongoing to 2010
6	AFG IP 6: Rehabilitation of Regional Airports, Phase II	32.1	2012–2017
7	AZE IP 1: East–West Highway Improvement ^a	1,250.0	Ongoing to 2015
8	AZE IP 2: Railway Trade and Transport Facilitation	1,750.0	2008–2011
9	AZE IP 3: Acquisition of High Capacity Ferries and Ro/Ros by Caspian Sea Shipping	69.0	2010–2013
10	PRC IP 1: Xinjiang Regional Road Improvement (Korla–Kuqa)	594.0	2008–2012
11	PRC IP 2: Road Construction (Jinghe–Ala Shankou) ^a	70.0	Ongoing to 2009
12	PRC IP 3: Lianyungang–Khorgas Expressway (Guozhigou and Qin Shui He) ^a	393.0	Ongoing to 2010
13	PRC IP 4: Jinghe–Yining–Khorgas Railway ^a	875.0	Ongoing to 2009
14	PRC IP 5: Double Tracking: Wuxi–Jinghe Rail Line ^a	394.0	Ongoing to 2009
15	PRC IP 6: Electrification: Urumqi–Ala Shankou Rail Line ^a	190.0	Ongoing to 2009
16	PRC IP 7: Xinjiang Airport Development ^a	372.5	Ongoing to 2015
17	PRC IP 8: Khorgas Global Logistics Center ^a	100.0	Ongoing to 2010
18	KAZ IP 1: Astana–Karaganda Road Rehabilitation	1,000.0	2009–2012
19	KAZ IP 2: Almaty–Kapchagay Road Rehabilitation	580.0	2009–2011
20	KAZ IP 3: Aktau–Beyneu Road Rehabilitation	550.0	2009–2012
21	KAZ IP 4: Rehabilitation of Western Europe–Western PRC Transit Corridor ^b	6,561.0	2009–2012
22	KAZ IP 5: Electrification: Almaty–Aktogay Railway Section	243.0	2009–2011
23	KAZ IP 6: Electrification: Dostyk–Aktogay Railway Section	134.0	2009–2011
24	KAZ IP 7: Electrification: Aktogay–Mointy Railway Section	250.0	2009–2011
25	KAZ IP 8: Construction of Korgas–Zhetygen Rail Line	742.0	2008–2011
26	KAZ IP 9: Expansion of Shymkent, Semey, and Kokchetau Airports	163.0	2009–2011
27	KAZ IP 10: Expansion of Aktau Port ^a	347.5	Ongoing to 2014

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Table A2.1 continued

No.	Project Title	Cost (\$ million)	Implementation Period
28	KGZ IP 1: Bishkek–Torugart Road Rehabilitation	300.0	2009–2014
29	KGZ IP 2: Southern Transport Road Rehabilitation (Osh–Sary Tash–Irkeshtan) ^a	170.0	Ongoing to 2011
30	KGZ IP 3: Reconstruction of Taraz–Talas–Suusamyр Road ^a	31.8	Ongoing to 2012
31	KGZ IP 4: CAREC Regional Road Corridor Improvement (Sary Tash–Karamik)	39.5	2009–2012
32	KGZ IP 5: Electrification of Bishkek–Balykchy Railway	100.0	2015–2017
33	KGZ IP 6: Track Rehabilitation (Chaldovar–Balykchy)	65.0	2011–2014
34	KGZ IP 7: Equipment Purchase for Wagon Repair and Maintenance Facility	4.0	2011–2012
35	KGZ IP 8: Rehabilitation of Osh Airport	40.0	2011–2012
36	KGZ IP 9: Kyrgyz Air Traffic Control Capacity Enhancement	4.5	2009–2013
37	MON IP 1: Western Regional Road	200.0	2008–2011
38	MON IP 2: Ulaanbaatar–Russian Border Road Rehabilitation	120.0	2010–2013
39	MON IP 3: Modernization of the Mongolia Railway	189.0	2008–2013
40	MON IP 4: Improvement of Olgiy and Hovd Airports	25.0	2009–2010
41	MON IP 5: New International Airport in Ulaanbaatar	280.0	2010–2015
42	MON IP 6: Customs Modernization ^a	6.8	Ongoing to 2010
43	MON IP 7: Establishment of Altanbulag Free Trade Zone	90.0	2010–2011
44	MON IP 8: Improvement of Tsaganuur Free Trade Zone	30.0	2010–2011
45	MON IP 9: Establishment of Zamyn–Uud Free Trade Zone	100.0	By 2015
46	TAJ IP 1: Dushanbe–Kyrgyz Border Road Rehabilitation, Phase II ^a	39.5	Ongoing to 2009
47	TAJ IP 2: Dushanbe–Kyrgyz Border Road Rehabilitation, Phase III ^a	85.5	Ongoing to 2013
48	TAJ IP3: Dushanbe–Khujand–Chanak–Uzbeki Border Road ^a	150.0	Ongoing to 2011
49	TAJ IP 4: Kurgan Tyube–Dusti–Nizhni Pianj Road Rehabilitation ^a	90.0	Ongoing to 2010
50	TAJ IP 5: Dushanbe–Tursunzade–Uzbek Border Road	100.0	2010–2012
51	UZB IP 1: CAREC Regional Road Improvement	173.5	2009–2011
52	UZB IP 2: Regional Railway	50.0	2011–2015
53	UZB IP 3: Acquisition of New Locomotives	25.0	2009–2010
54	UZB IP 4: Electrification: Kashi–Tashguzar Baisun–Kumgurgan Section	180.0	2011–2014
55	UZB IP 5: Electrification: Samarkand–Navoi and Samarkand–Kashi Sections	185.0	2011–2014
56	UZB IP 6: Electrification: Navoi–Bukhara and Bukhara–Kashi Sections	195.0	2011–2014
57	UZB IP 7: Electrification: Navoi–Uchkuduk Section	180.0	2011–2014
58	REG IP 1: Border Crossing Point Infrastructure and Investment ^a	500.0	Ongoing to 2017
59	REG IP 2: Enhancements of IT Systems at Customs	5.0	2011
60	REG IP 3: Border Post Improvements and Joint Border Processing	200.0	2009–2017
61	REG IP 4: Trade and Industrial Logistics Centers with Information Exchange System	150.0	2011–2014
62	REG IP 5: Customs Modernization and Infrastructure Development ^a	22.8	Ongoing to 2009

AFG = Afghanistan, AZE = Azerbaijan, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, IT = information technology, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, MON = Mongolia, PRC = People's Republic of China, REG = regional, TAJ = Tajikistan, UZB = Uzbekistan.

^a Ongoing project.

^b Development of an integrated transport model for road and railroad infrastructure will be supported by ADB in conjunction with this project.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Table A2.2: List of Technical Assistance Projects by Country

No.	Project Title	Cost (\$ million)	Implementation Period
1	AFG TA 1: Preparing the Road Network III ^a	1.0	Ongoing to 2008
2	AFG TA 2: Salang Tunnel Expansion Feasibility Study	2.0	2011
3	AFG TA 3: Kabul–Jalalabad Road Feasibility Study	0.8	2009–2010
4	AFG TA 4: Transport Sector Planning (All Modes)	1.0	2011
5	AFG TA 5: Rail Feasibility Study (Shntikh–Herat)	0.6	2008–2009
6	AFG TA 6: Rail Feasibility Study (Hairatan–Mazare-e-Sharif–Herat and Shirkhan Bandar–Kunduz–Naibabad)	1.0	2009–2010
7	AFG TA 7: Rail Feasibility Study (Hairatan–Naibabad–Kabul–Torkham)	0.6	2010
8	AZE TA 1: Road Maintenance	0.8	2010
9	AZE TA 2: Feasibility Study for New Alyat Port	1.0	2010
10	PRC TA 1: Logistics Development and Capacity Building in Xinjiang Uygur Autonomous Region ^a	0.6	Ongoing to 2008
11	PRC TA 2: Regional Customs Cooperation (Joint Control and One-Stop Inspection)	0.4	2009
12	KAZ TA 1: Transport Sector Services Study	0.1	2011
13	KAZ TA 2: Coordinator for CAREC	0.1	2011–2012
14	MON TA 1: Rehabilitation of Regional Airports ^a	0.5	Ongoing to 2008
15	MON TA 2: Ulaanbaatar Intermodal Logistics Park Feasibility Study	0.85	2010
16	MON TA 3: Development Plan for Tsaganuur Free Trade Zone	0.3	2010
17	MON TA 4: Comprehensive Master Plan for Development of Zamyn-Uud	0.7	2009
18	MON TA 5: Regional Logistics Development ^a	0.5	2008–2009
19	TAJ TA 1: Transport Sector Master Plan ^a	0.8	Ongoing to 2008
20	TAJ TA 2: Vahdat–Yavan Railway Feasibility Study	0.6	2009
21	TAJ TA 3: Dushanbe–Kyrgyz Border Railway Feasibility Study	0.6	2013
22	TAJ TA 4: Kolkhazabad–Nizhni Pianj Railway	0.6	2011
23	TAJ TA 5: Electrification of Bekabad–Kanibadam Railway Feasibility Study	0.6	2011
24	UZB TA 1: Electrification of Tashkent–Angren Railway Feasibility Study	0.6	2011
25	UZB TA 2: Angren–Pap Railway Feasibility Study	0.6	2013
26	UZB TA 3: Upgrading the Bukhara Airport	0.6	2010
27	REG TA 1: Collaborative Regional Operations and Maintenance of Corridors	0.8	2011
28	REG TA 2: Equitable Road Maintenance User Charges and Cross Border Fees	1.0	2009–2011
29	REG TA 3: Facility and Process Improvements at Border Crossing Points	2.0	2009–2015
30	REG TA 4: Strengthening Capabilities of National Certification Agencies	1.0	2011–2012
31	REG TA 5: Product Certification Capability and Weighing Machine Standards	0.1	2011–2012
32	REG TA 6: CAREC Trade Portal	0.6	2011
33	REG TA 7: Assistance in Implementation of WCO Recommendations for Customs	3.0	2009–2011
34	REG TA 8: Coordinating Cargo Processing through a National Single Window	0.2	2010
35	REG TA 9: Simplified Transit Procedures	0.2	2009
36	REG TA 10: Regional Customs Training and Development	2.0	2011–2013
37	REG TA 11: Standardized Cargo Declaration and Other Harmonized Requirements	0.2	2010
38	REG TA 12: Strengthening Customs Guarantee Systems	0.3	2011

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Table A2.2 continued

39	REG TA 13: Development of Multimodal Transportation along CAREC Corridors	1.0	2013
40	REG TA 14: Development of Coordinated National Transport Policies ^a	1.7	Ongoing to 2009
41	REG TA 15: Periodic Survey of Measures Affecting the Movement of Goods	0.8	2010
42	REG TA 16: Establishment of a Third-Party Motor Vehicle Liability Insurance Regime	0.3	2011–2012
43	REG TA 17: International Road Transport Conventions and CAREC Road Transport Agreements	1.0	2010–2011
44	REG TA 18: Cross Border Agreements Among the PRC, KGZ, and TAJ	0.6	2008–2010
45	REG TA 19: Liability Insurance System for Transport Operators	0.1	2011–2012
46	REG TA 20: Supporting Management of Cross-Border Railway Operations	1.5	2010
47	REG TA 21: Reducing Transport Costs to Boost Trade	0.2	2012–2013
48	REG TA 22: Survey of Taxes and Charges Applicable to Transport and Trade	0.1	2011–2012
49	REG TA 23: Needs Assessment of Caspian Shipping Along CAREC Corridors	1.0	2010
50	REG TA 24: Needs Assessment of Central Asian Civil Aviation	3.0	2010–2012
51	REG TA 25: Emergency Compliance with ICAO Requirements	6.0	2010–2012
52	REG TA 26: Institutional Support for Transport and Trade Facilitation	6.0	2009–2016
53	REG TA 27: Corridor Performance Monitoring and Reporting	3.0	2008–2011
54	REG TA 28: Rail and Intermodal Transport Feasibility Study for PRC–KGZ–UZB ^b	0.6	2010
55	REG TA 29: Development of Logistics Centers and Rail Multimodal Hubs	3.0	2008–2010
56	REG TA 30: Development of Multimodal Transport Systems	0.2	2011
57	REG TA 31: Supply Chain Training Institute	0.5	2011
58	REG TA 32: Promote Containerization	1.0	2011
59	REG TA 33: PSP in Transport Development and Trade Facilitation	3.0	2009–2017
60	REG TA 34: Financing Renewal of Vehicle Fleets and Equipment	0.5	2011
61	REG TA 35: Common CAREC Approach to Road Vehicle Emission Standards	0.8	2010
62	REG TA 36: Regional Road Corridor Safety Auditing	0.8	2010
63	REG TA 37: Training of CAREC Experts in Aviation Safety Oversight to ICAO Standards	2.0	2009–2011
64	REG TA 38: Developing Inter-Country Bus Services	0.5	2013
65	REG TA 39: Facilitating Border Crossing for Drivers, Traders, and Migrant Workers	0.5	2011

AFG = Afghanistan, AZE = Azerbaijan, CAREC = Central Asia Regional Economic Cooperation, ICAO = International Civil Aviation Association, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, MON = Mongolia, PRC = People's Republic of China, PSP = private sector participation, REG = regional, TA = technical assistance, TAJ = Tajikistan, UZB = Uzbekistan, WCO = World Customs Organization.

^a Ongoing project.

^b Includes traffic forecast and economic assessment of the PRC–KGZ–UZB railway.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Table A2.3: CAREC Corridor 1: Europe–East Asia

CAREC 1a		CAREC 1b		CAREC 1c	
Country	Route	Country	Route	Country	Route
RUS	Troisk (rail and road)	RUS	Orenburg	RUS	Troisk (rail and road)
KAZ	Kairak (rail and road)	KAZ	Kos Aral (rail) Novomarkovka (Sagarchin) (road)	KAZ	Kairak (rail and road)
	Kostanai		Zhaisan (rail and road)		Kostanai
	Astana		Aktobe		Astana
	Karaganda		Kyzyl-Orda		Karaganda
	Mointy		Shymkent		Mointy
	Aktogay		Taraz		Shu
	Dostyk (rail and road)		Almaty		Merke (rail)
PRC	Ala Shankou (rail and road)	PRC	Korgas (road)	KGZ	Chaldovar (rail)
	Kuytun		Khorgos (road)		Bishkek
	Urumqi		Jinghe		Balykchy
	Turpan		Kuytun		Naryn
	Hexi		Urumqi		Torugart (road)
			Turpan	PRC	Torugart(Topa) (road)
			Hexi		Kashi
					Kuqa
					Turpan
					Hexi

CAREC=Central Asia Regional Economic Cooperation, KAZ=Kazakhstan, KGZ=Kyrgyz Republic, PRC=People's Republic of China, RUS=Russian Federation.

Source: ADB. 2008. CAREC Transport and Trade Facilitation Strategy Report (Final Report). Manila.

Table A2.4: Investment Projects in CAREC Corridor 1

- PRC IP 1: Xinjiang Regional Road Improvement (Korla–Kuqa)
- PRC IP 2: Road Construction (Jinghe–Ala Shankou)^a
- PRC IP 3: Lianyungang–Khorgas Expressway (Guozhigou and Qin Shui He)^a
- PRC IP 4: Jinghe–Yining–Khorgas Railway^a
- PRC IP 5: Double Tracking: Wuxi–Jinghe Rail Line^a
- PRC IP 6: Electrification: Urumqi–Ala Shankou Rail Line^a
- PRC IP 7: Xinjiang Airport Development^a
- PRC IP 8: Khorgas Global Logistics Center^a
- KAZ IP 1: Astana–Karaganda Road Rehabilitation
- KAZ IP 4: Rehabilitation: Western Europe–Western PRC Transit Corridor^b
- KAZ IP 6: Electrification: Dostyk–Aktogay Railway Section
- KAZ IP 7: Electrification: Aktogay–Mointy Railway Section
- KAZ IP 8: Construction of Korgas–Zhetygen Rail Line
- KAZ IP 9: Expansion of Shymkent, Semey, and Kokchetau Airports
- KGZ IP 1: Bishkek–Torugart Road Rehabilitation
- KGZ IP 5: Electrification: Bishkek–Balykchy Railway Section
- KGZ IP 6: Track Rehabilitation (Chaldovar–Balykchy)
- KGZ IP 7: Equipment Purchase for Wagon Repair and Maintenance Facility
- KGZ IP 9: Kyrgyz Air Traffic Control Capacity Enhancement

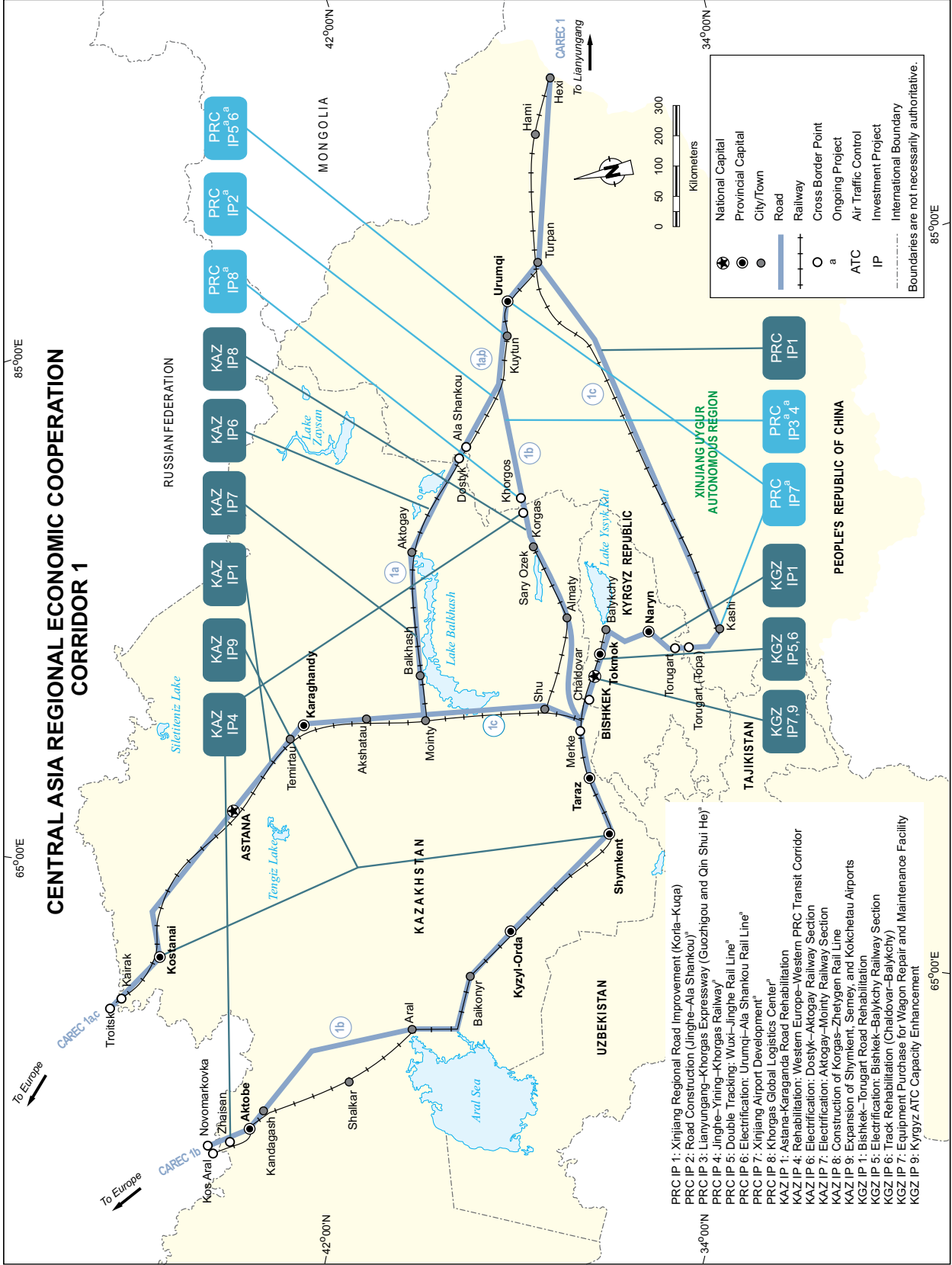
CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, PRC = People's Republic of China.

^a Ongoing project.

^b Development of an integrated transport model for road and railroad infrastructure will be supported by ADB in conjunction with this project.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Map A2.1: Central Asia Regional Economic Cooperation (CAREC) Corridor 1



KAZ = Kazakhstan, KGZ = Kyrgyz Republic, PRC = People's Republic of China. Source: Asian Development Bank.

Table A2.5: CAREC Corridor 2: Mediterranean–East Asia

CAREC 2a		CAREC 2b	
Country	Route	Country	Route
GEO	Gabdabani (rail) and Red Bridge (road)	GEO	Gabdabani (rail) and Red Bridge (road)
AZE	Beyuk Kesik (rail) and Red Bridge (road)	AZE	Beyuk Kesik (rail) and Red Bridge (road)
	Agstafa		Agstafa
	Yevlakh		Yevlakh
KAZ	Baku (port)	TKM	Baku
	Aktau (port)		Turkmenbashi
UZB ^a	Beyneu (rail) Tazhen (road)	UZB ^a	Ashgabat
	Karakalpakya (rail and road)		Farap (rail and road)
	Nukus		Alyat (rail and road)
	Navoi		Bukhara
	Samarkand		Navoi
	Djizzak		Samarkand
TAJ ^a	Bekabad (rail)	TAJ ^a	Djizzak
	Nau (rail)		Bekabad (rail)
	Khujand		Nau (rail)
UZB ^a	Kanibadam (rail)	UZB ^a	Khujand
	Suvanobad (rail)		Kanibadam
	Kokland		Suvanobad
	Andijan		Kokland
KGZ	Savay/Karasu (rail and road)	KGZ	Andijan
	Kara Suu (rail and road)		Savay/Karasu (rail and road)
	Osh		Kara Suu (rail and road)
	Gulcha		Osh
	Sary Tash		Gulcha
PRC	Irkeshtan (road)	PRC	Sary Tash
	Yierkeshitan (road)		Irkeshtan (road)
	Kashi		Yierkeshitan (road)
	Turpan		Kashi
	Hexi		Turpan
			Hexi

AZE = Azerbaijan, CAREC = Central Asia Regional Economic Cooperation, GEO = Georgia, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, PRC = People's Republic of China, TAJ = Tajikistan, TKM = Turkmenistan, UZB = Uzbekistan.

^a Alternative road runs from Djizzak through Tashkent and Andijan to Osh.

Source: ADB. 2008. CAREC Transport and Trade Facilitation Strategy Report (Final Report). Manila.

Table A2.6: Investment Projects in CAREC Corridor 2

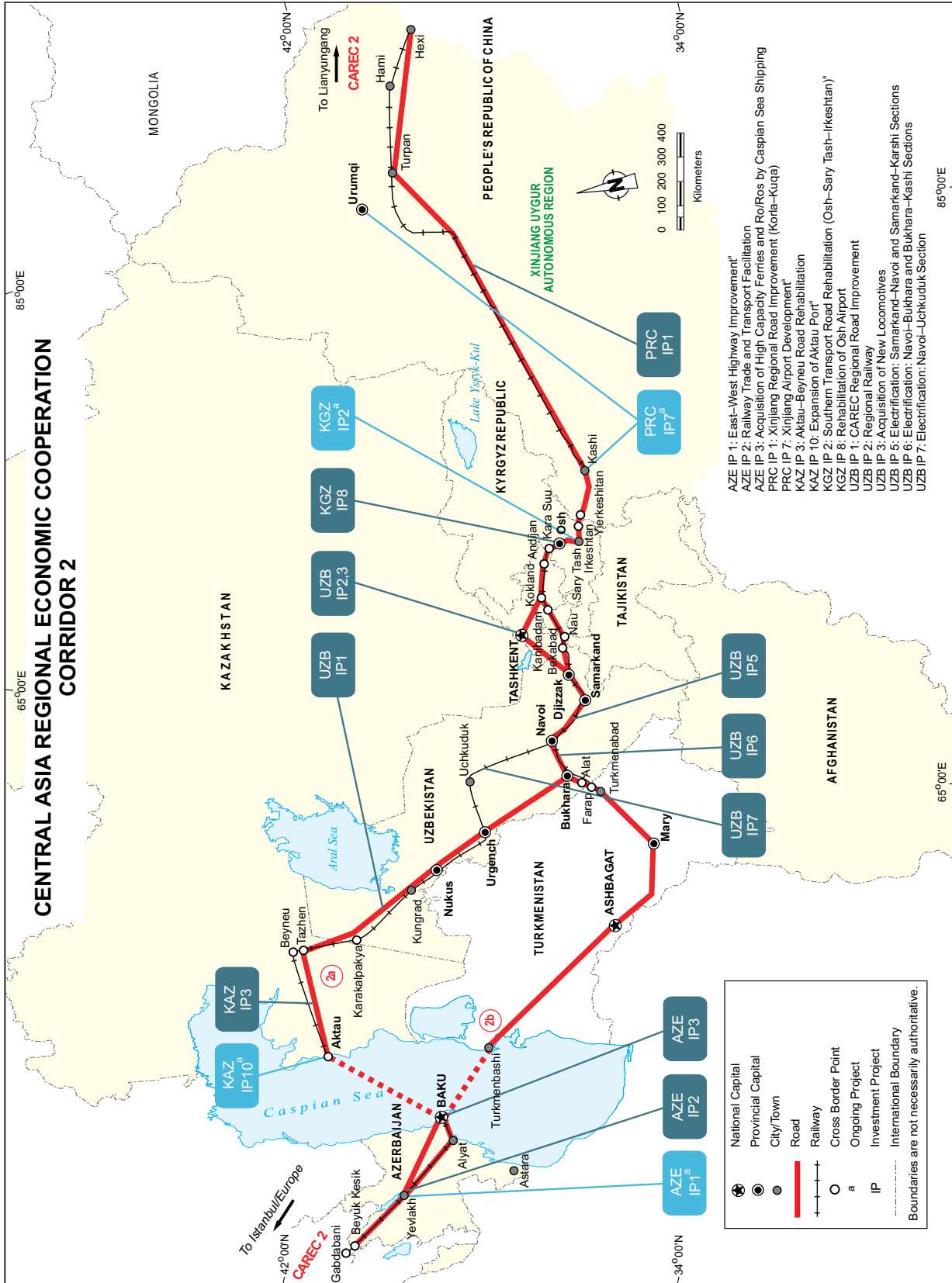
AZE IP 1: East–West Highway Improvement ^a
AZE IP 2: Railway Trade and Transport Facilitation
AZE IP 3: Acquisition of High Capacity Ferries and Ro/Ros by Caspian Sea Shipping
PRC IP 1: Xinjiang Regional Road Improvement (Korla–Kuqa)
PRC IP 7: Xinjiang Airport Development ^a
KAZ IP 3: Aktau–Beyneu Road Rehabilitation
KAZ IP 10: Expansion of Aktau Port ^a
KGZ IP 2: Southern Transport Road Rehabilitation (Osh–Sary Tash–Irkeshstan) ^a
KGZ IP 8: Rehabilitation of Osh Airport
UZB IP 1: CAREC Regional Road Improvement
UZB IP 2: Regional Railway
UZB IP 3: Acquisition of New Locomotives
UZB IP 5: Electrification: Samarkand–Navoi and Samarkand–Karshi Sections
UZB IP 6: Electrification: Navoi–Bukhara and Bukhara–Karshi Sections
UZB IP 7: Electrification: Navoi–Uchkuduk Section

AZE = Azerbaijan, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, PRC = People’s Republic of China, UZB = Uzbekistan.

^a Ongoing project.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Map A2.2: Central Asia Regional Economic Cooperation (CAREC) Corridor 2



AZE = Azerbaijan, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, PRC = People's Republic of China, UZB = Uzbekistan.
Source: Asian Development Bank.

Table A2.7: CAREC Corridor 3: Russian Federation–Middle East and South Asia

CAREC 3a		CAREC 3b	
Country	Route	Country	Route
RUS	Rubtsovsk	RUS	Rubtsovsk
	Veseloyarsk (rail and road)		Veseloyarsk (rail and road)
KAZ	Aul (rail and road)	KAZ	Aul (rail and road)
	Semey		Semey
	Charskaya		Charskaya
	Aktogay		Aktogay
	Almaty		Almaty
	Merke		Merke (rail)
	Taraz		KGZ
	Shymkent	Kara Balta	
	Arys	Osh	
	Saryagash (rail) and Zhibek Zholy (road)	Gulcha	
	UZB	Keles (rail) and Gisht Kuprik (road)	UZB
Tashkent		Karamik (road)	
Syrdaryinskaya		Karamik (road)	
Djizzak		TAJ	Dushanbe
Samarkand			Tursunzade
Navoi			Pakhtaabad (rail and road)
Bukhara			Saryasia (rail and road)
Alyat (rail and road)			Shargun
TKM	Farap (rail and road)	UZB	Termez
	Mary		Airatom (rail and road)
	Sarabs		Hairatan (rail and road)
IRN	Sarakhs	AFG	Mazare-e-Sharif
			Herat
			Islam Qila (road)
			IRN

AFG = Afghanistan, CAREC = Central Asia Regional Economic Cooperation, IRN=Iran, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, RUS = Russian Federation, TAJ = Tajikistan, TKM = Turkmenistan, UZB = Uzbekistan.

Source: ADB. 2008. CAREC Transport and Trade Facilitation Strategy Report (Final Report). Manila.

Table A2.8: Investment Projects in CAREC Corridor 3

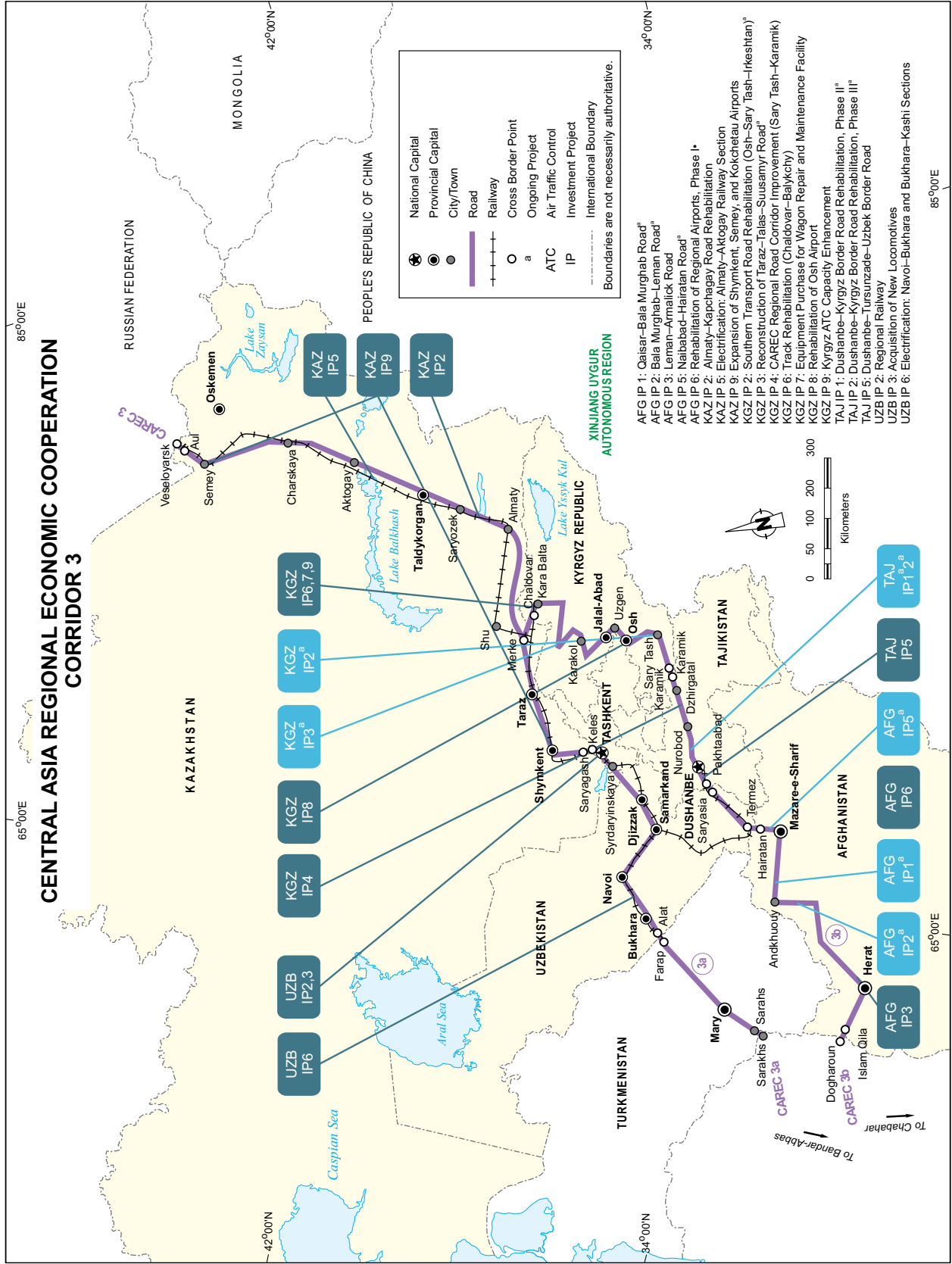
AFG IP 1: Qaisar–Bala Murghab Road ^a
AFG IP 2: Bala Murghab–Leman Road ^a
AFG IP 3: Leman–Armalick Road
AFG IP 5: Naibabad–Hairatan Road ^a
AFG IP 6: Rehabilitation of Regional Airports, Phase II
KAZ IP 2: Almaty–Kapchagay Road Rehabilitation
KAZ IP 5: Electrification: Almaty–Aktogay Railway Section
KAZ IP 9: Expansion of Shymkent, Semey, and Kokchetau Airports
KGZ IP 2: Southern Transport Road Rehabilitation (Osh–Sary Tash–Irkeshtan) ^a
KGZ IP 3: Reconstruction of Taraz–Talas–Suusamyр Road ^a
KGZ IP 4: CAREC Regional Road Corridor Improvement (Sary Tash–Karamik)
KGZ IP 6: Track Rehabilitation (Chaldovar–Balykchy)
KGZ IP 7: Equipment Purchase for Wagon Repair and Maintenance Facility
KGZ IP 8: Rehabilitation of Osh Airport
KGZ IP 9: Kyrgyz Air Traffic Control Capacity Enhancement
TAJ IP 1: Dushanbe–Kyrgyz Border Road Rehabilitation, Phase II ^a
TAJ IP 2: Dushanbe–Kyrgyz Border Road Rehabilitation, Phase III ^a
TAJ IP 5: Dushanbe–Tursunzade–Uzbek Border Road
UZB IP 2: Regional Railway
UZB IP 3: Acquisition of New Locomotives
UZB IP 6: Electrification: Navoi–Bukhara and Bukhara–Kashi Sections

AFG = Afghanistan, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, TAJ = Tajikistan, UZB = Uzbekistan.

^a Ongoing project.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Map A2.3: Central Asia Regional Economic Cooperation (CAREC) Corridor 3



AFG = Afghanistan, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, TAJ = Tajikistan, UZB = Uzbekistan.

Source: Asian Development Bank.

Table A2.9: CAREC Corridor 4: Russian Federation–East Asia

CAREC 4a		CAREC 4b	
Country	Route	Country	Route
RUS	Tashanta (road)	RUS	Naushki (rail and road)
MON	Ulaanbaishint/Tsagaannur (road)	MON	Sukhbaatar (rail and road)
	Olgiy		Ulaanbaatar
	Hovd		Zamyn-Uud (rail and road)
	Yarant (road)	PRC	Erenhot (rail and road)
PRC	Takeshikent (road)		
	Urumqi		

CAREC=Central Asia Regional Economic Cooperation, MON=Mongolia, PRC=People's Republic of China, RUS=Russian Federation.

Source: ADB. 2008. CAREC Transport and Trade Facilitation Strategy Report (Final Report). Manila.

Table A2.10: Investment Projects in CAREC Corridor 4

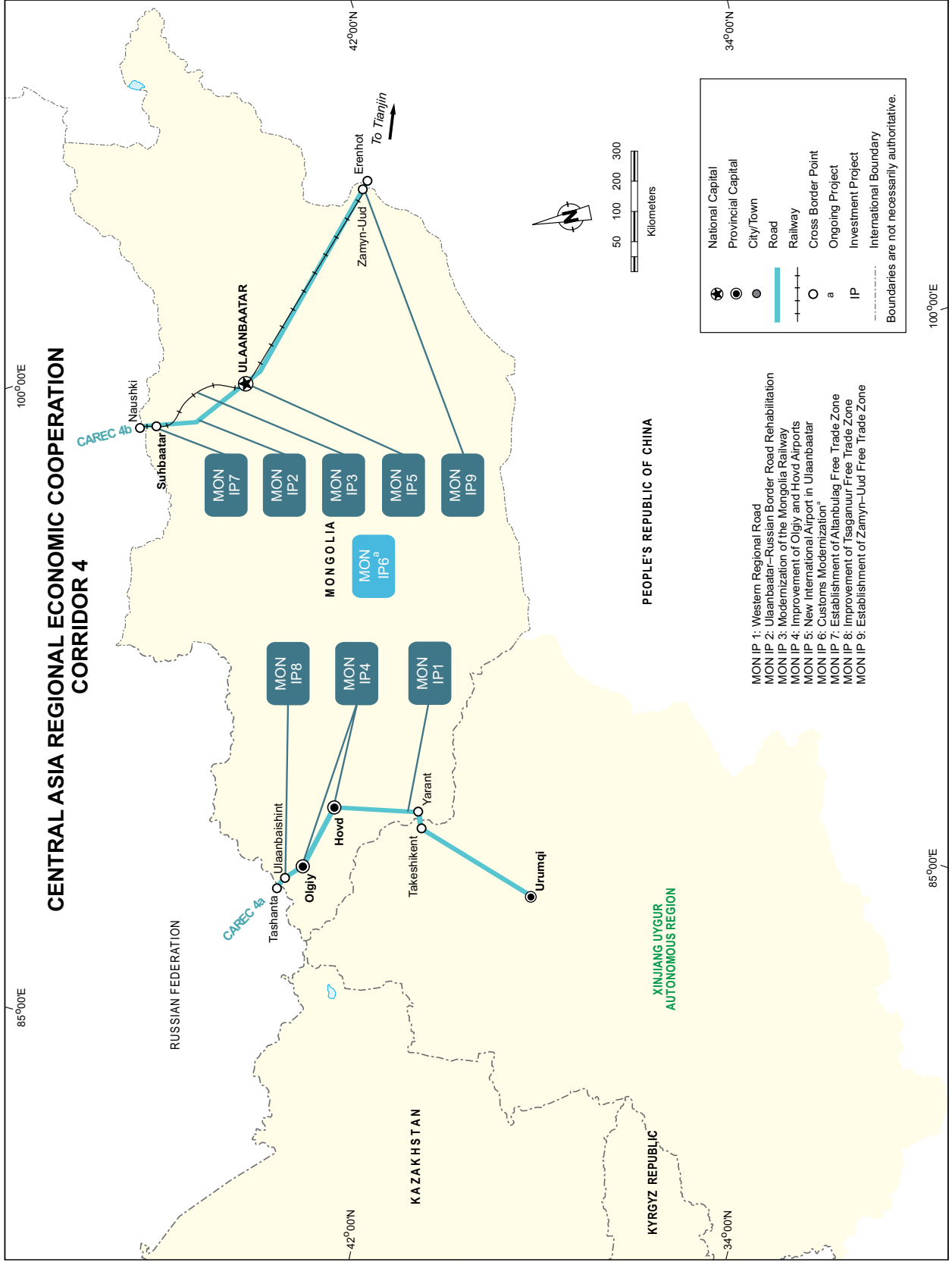
- MON IP 1: Western Regional Road
- MON IP 2: Ulaanbaatar–Russian Border Road Rehabilitation
- MON IP 3: Modernization of the Mongolia Railway
- MON IP 4: Improvement of Olgiy and Hovd Airports
- MON IP 5: New International Airport in Ulaanbataar
- MON IP 6: Customs Modernization^a
- MON IP 7: Establishment of Altanbulag Free Trade Zone
- MON IP 8: Improvement of Tsaganuur Free Trade Zone
- MON IP 9: Establishment of Zamyn–Uud Free Trade Zone

CAREC = Central Asia Regional Economic Cooperation, IP = investment project, MON = Mongolia.

^a Ongoing project.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Map A2.4: Central Asia Regional Economic Cooperation (CAREC) Corridor 4



MON = Mongolia.

Source: Asian Development Bank.

Table A2.11: CAREC Corridor 5: East Asia–Middle East and South Asia

CAREC 5	
Country Route	Route
PAK	Landi Kotal (road)
AFG	Torkham (road)
	Kabul
	Kunduz
	Shirkhan Bandar (road)
TAJ	Nizhni Pianj (road)
	Kurgan Tyube
	Dushanbe
	Karamik (road)
KGZ	Karamik (road)
	Sary-Tash
	Irkeshtan (road)
PRC	Yierkeshitan (road)
	Kashi
	Turpan
	Hexi

AFG = Afghanistan, CAREC = Central Asia Regional Economic Cooperation, KGZ = Kyrgyz Republic, PAK = Pakistan, PRC = People's Republic of China, TAJ = Tajikistan.

Source: ADB. 2008. CAREC Transport and Trade Facilitation Strategy Report (Final Report). Manila.

Table A2.12: Investment Projects in CAREC Corridor 5

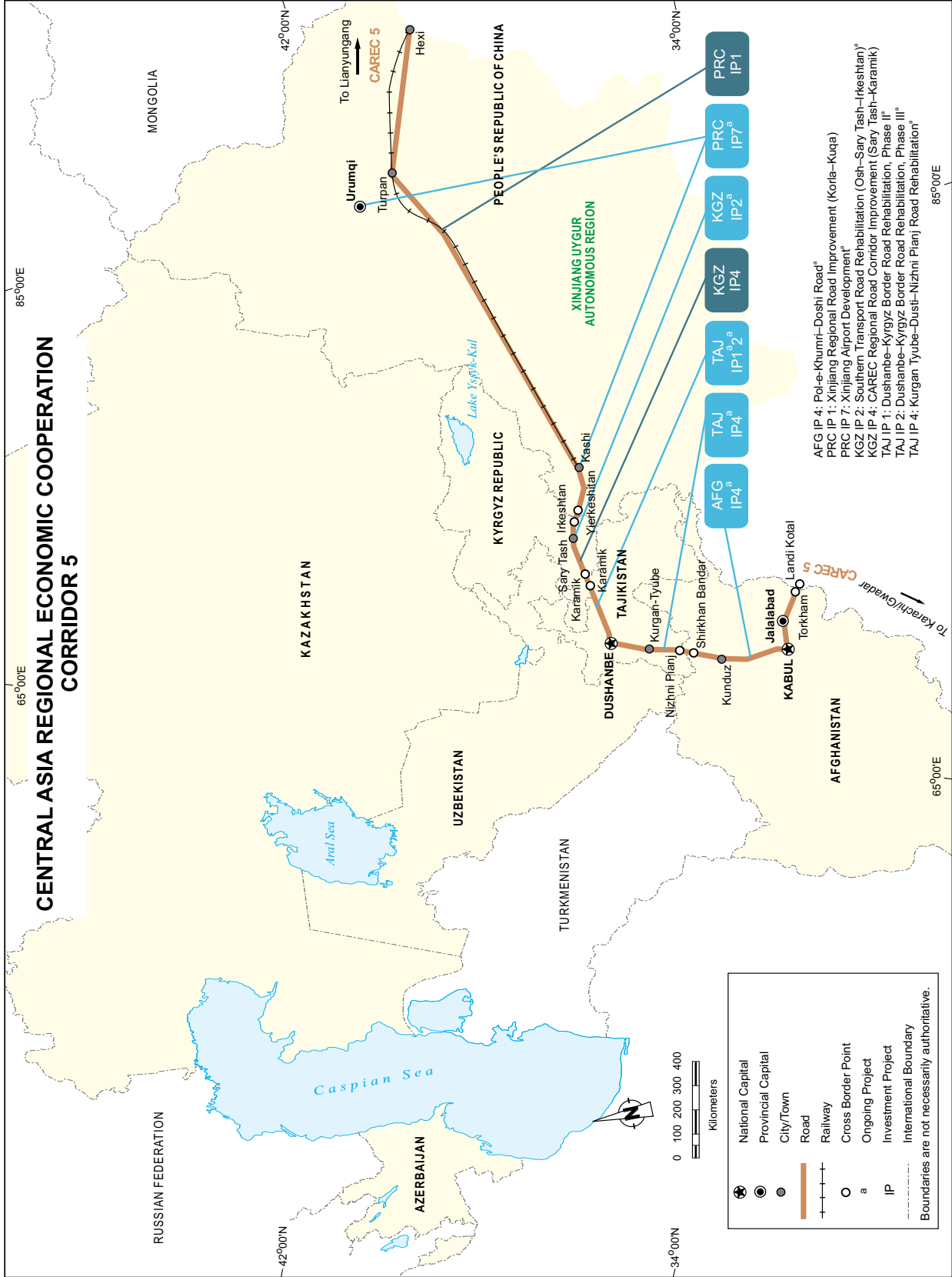
AFG IP 4: Pul-e-Khumri–Doshi Road^a
 PRC IP 1: Xinjiang Regional Road Improvement (Korla–Kuqa)
 PRC IP 7: Xinjiang Airport Development^a
 KGZ IP 2: Southern Transport Road Rehabilitation (Osh–Sary Tash–Irkeshtan)^a
 KGZ IP 4: CAREC Regional Road Corridor Improvement (Sary Tash–Karamik)
 TAJ IP 1: Dushanbe–Kyrgyz Border Road Rehabilitation, Phase II^a
 TAJ IP 2: Dushanbe–Kyrgyz Border Road Rehabilitation, Phase III^a
 TAJ IP 4: Kurgan Tyube–Dusti–Nizhni Pianj Road Rehabilitation^a

AFG = Afghanistan, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KGZ = Kyrgyz Republic, PRC = People's Republic of China, TAJ = Tajikistan.

^a Ongoing projects.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Map A2.5: Central Asia Regional Economic Cooperation (CAREC) Corridor 5



AFG = Afghanistan, KGZ = Kyrgyz Republic, PRC = People's Republic of China, TAJ = Tajikistan.

Source: Asian Development Bank.

Table A2.13: CAREC Corridor 6: Europe–Middle East and South Asia

CAREC 6a		CAREC 6b		CAREC 6c	
Country	Route	Country	Route	Country	Route
RUS	Aksarayskaya (rail) and Krasnyi Yar (road)	RUS	Orenburg	RUS	Orenburg
KAZ	Ganyushking (rail) and Kurmangazy (road)	KAZ	Kos Aral (rail) and Novomarkovka (road)	KAZ	Kos Aral (rail) and Novomarkovka (road)
	Atyrau		Zhaisan (rail and road)		Zhaisan (rail & road)
	Makat		Aktobe		Aktobe
UZB	Beyneu (rail) and Tazhen (road)	UZB	Kyzyl-Orda	UZB	Kandagash
	Karakalpakya (rail and road)		Shymkent		Shalkar
	Nukus		Saryagash (rail)		Kyzyl-Orda
	Bukhara		Keles (rail)		Shymkent
	Tashguzar		Tashkent		Saryagash (rail)
	Baisun		Syrdaryinskaya		Keles (rail)
	Kumkurgan		Djizzak		Tashkent
	Termez		Samarkand		Khavast
AFG	Airatom (rail and road)	AFG	Tashguzar	TAJ	Istaravshan
	Hairatan (rail and road)		Baisun		Ayni
	Mazare-e-Sharif		Kumkurgan		Dushanbe
	Herat		Termez		Kurgan Tyube
IRN	Islam Qila (road)	IRN	Airatom (rail and road)	AFG	Nizhni Pianj (road)
	Dogharoun (road)		Hairatan (rail and road)		Shirkhan Bandar (road)
	Bandar-Abbas		Mazare-e-Sharif		Kunduz
			Herat		Kabul
			Islam Qila (road)		Torkham (road)
			Dogharoun (road)		Landi Kotal (road)
	Bandar-Abbas	PAK	Peshawar		
			Karachi/Gwadar		

AFG=Afghanistan, CAREC = Central Asia Regional Economic Cooperation, IRN=Iran, KAZ=Kazakhstan, PAK=Pakistan, RUS=Russian Federation, TAJ=Tajikistan, UZB=Uzbekistan.

Source: ADB. 2008. CAREC Transport and Trade Facilitation Strategy Report (Final Report). Manila.

Table A2.14: Investment Projects in CAREC Corridor 6

AFG IP 1: Qaisar–Bala Murghab Road ^a
AFG IP 2: Bala Murghab–Leman Road ^a
AFG IP 3: Leman–Armalick Road
AFG IP 4: Pul-e-Khumri–Doshi Road ^a
AFG IP 5: Naibabad–Hairatan Road ^a
AFG IP 6: Rehabilitation of Regional Airports, Phase II
KAZ IP 4: Rehabilitation of Western Europe–Western PRC Transit Corridor ^b
TAJ IP 3: Dushanbe–Khujand–Chanak–Uzbeki Border Road ^a
TAJ IP 4: Kurgan Tyube–Dusti–Nizhni Pianj Road Rehabilitation ^a
UZB IP 1: CAREC Regional Road Improvement
UZB IP 2: Regional Railway
UZB IP 3: Acquisition of New Locomotives
UZB IP 4: Electrification: Kashi–Tashguzar Baisun–Kumgurgan Section
UZB IP 5: Electrification: Samarkand–Navoi and Samarkand–Kashi Sections
UZB IP 7: Electrification: Navoi–Uchkuduk Section

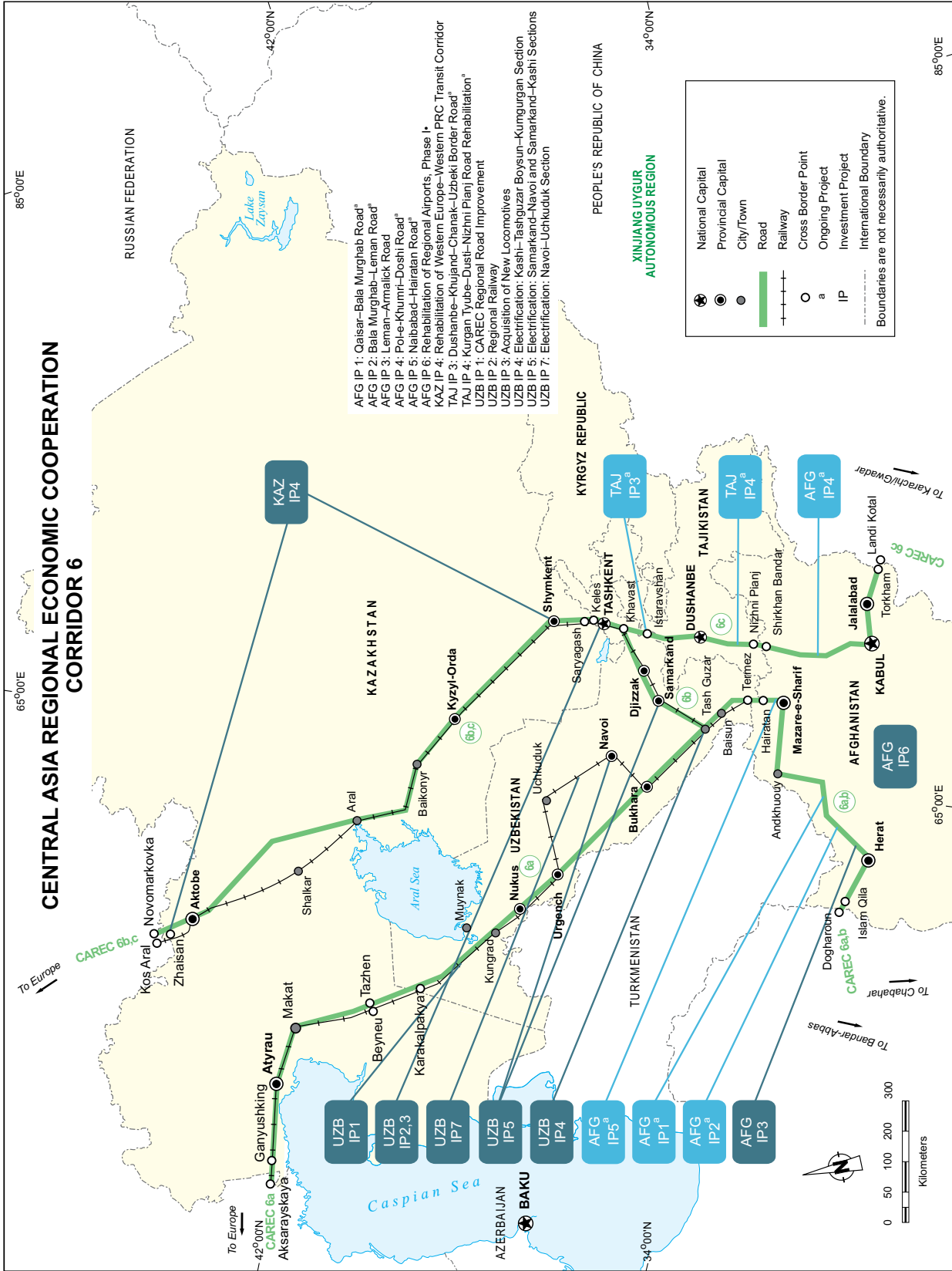
AFG = Afghanistan, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KAZ = Kazakhstan, TAJ = Tajikistan, UZB = Uzbekistan.

^a Ongoing project.

^b Development of an integrated transport model for road and railroad infrastructure will be supported by ADB in conjunction with this project.

Sources: CAREC Transport Sector Coordinating Committee Secretariat and Customs Cooperation Committee Secretariat.

Map A2.6: Central Asia Regional Economic Cooperation (CAREC) Corridor 6



AFG = Afghanistan, KAZ = Kazakhstan, TAJ = Tajikistan, UZB = Uzbekistan.

Source: Asian Development Bank.

Photographs

Cover: Ministry of Transport and Communications of the Kyrgyz Republic, Haruya Koide, and TERA International; 1: Ministry of Transport and Communications of the Kyrgyz Republic; 2: TERA International; 3: TERA International and Ministry of Transport and Communications of the Kyrgyz Republic; 5: Haruya Koide; 16: Haruya Koide and TERA International.

CAREC Transport and Trade Facilitation

Ongoing globalization has imposed challenges on the Central Asia Regional Economic Cooperation (CAREC) countries because of current transport and trade constraints. Thus, a transport and trade facilitation strategy and implementation action plan were prepared to develop an efficient transport and trade system, which is critical to sustain economic prosperity in the CAREC region for the next 10 years. This publication presents the major elements of the strategy and the action plan, both of which support broad-based activities comprising competitive corridor development and management, trade facilitation, and sustainability enhancement by improving infrastructure, management, and technology, focusing on the six major corridors of the CAREC region.

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