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CAREC
Transport and
Trade Facilitation
Strategy 2020

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Abbreviations

ADB – Asian Development Bank
AEO – authorized economic operator
BCP – border crossing point
CAREC – Central Asia Regional Economic Cooperation
CBM – coordinated border management
CBTA – cross border transport agreement
CCC – Customs Cooperation Committee
CFCFA – CAREC Federation of Carrier and Forwarder Associations
CMU – corridor management unit
CPMM – corridor performance measurement and monitoring
DRC – designated rail corridor
kph – kilometers per hour
MDB – multilateral development bank
MTR – midterm review
NJC – national joint transport and trade facilitation committee
NSW – national single window
PRC – People's Republic of China
PPP – public–private partnership
RKC – Revised Kyoto Convention
SPS – sanitary and phytosanitary
TA – technical assistance
TSCC – Transport Sector Coordinating Committee
TTFS – Transport and Trade Facilitation Strategy

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

Foreword

Transport and trade facilitation form the backbone of the Central Asia Regional Economic Cooperation (CAREC) Program. Since 1997, the CAREC Program has been a catalyst for high-priority regional transport and trade projects, with CAREC-related transport and trade initiatives to date totaling $18 billion. These investment-led initiatives have played a significant role in facilitating economic growth, market development, and regional integration of CAREC countries.

In 2013, the midpoint of the Transport and Trade Facilitation Strategy (TTFS) covering the period from 2008 to 2017 was reached. With the assistance of the Asian Development Bank (ADB), the CAREC countries have prepared and adopted the refined TTFS for 2014–2020 (TTFS 2020), with a renewed sense of unity and a clear path forward.

The TTFS 2020 is anchored on a more integrated approach to improving transport and logistics infrastructure, and promoting trade and transport facilitation. Given the vast geographic expanse of Central Asia, and the consequential demand for connectivity including access to gateways, regional cooperation in transport and trade facilitation will require greater attention and focus. To increase trade with countries outside the region, CAREC will have to extend its corridors to gateways, and implement an enhanced approach to efficient corridor management. New investments will be needed to develop long-distance multimodal transport services connecting road and rail links with logistics center nodes.

The TTFS 2020 has emphasized policy and institutional reforms—the "software" that supports the infrastructure "hardware"—to maximize the impact of both past and future investments. This includes the harmonization of regulations, procedures, and standards for cross-border movement of goods and people, in addition to implementing an enhanced approach to more efficient border management. The importance of knowledge management and partnership has also been duly recognized in the TTFS 2020.

The endorsement of the TTFS 2020 by the ministers at the 12th Ministerial Conference, in 2013, was an important turning point for transport and trade facilitation in the region. The CAREC partners acknowledge the challenges that lie ahead as the program further matures. A fresh infusion of resources is needed, and support from the private sector will be vital as the CAREC Program progresses toward its envisaged goals and outcomes.

In the years to come, ADB looks forward to deepening its engagement with the CAREC countries in their development journey to 2020 and beyond. Our commitment remains strong, inspired by the continued firm resolve of the CAREC countries and development partners.

Takehiko Nakao
President
Asian Development Bank

Preface

Preparation of the refined Transport and Trade Facilitation Strategy (TTFS 2020) for the Central Asia Regional Economic Cooperation (CAREC) Program commenced in November 2012. The TTFS 2020 was developed through a comprehensive review of the original TTFS, progress made from 2008 to date, and extensive country consultations. These consultations included field visits to all 10 CAREC countries; engaging with development partners, potential private sector stakeholders, freight forwarders' associations, and logistics services providers; and meetings with members of the CAREC Transport Sector Coordinating Committee (TSCC) and Customs Cooperation Committee (CCC).

During the midterm review and subsequent strategy refinement, the governments of all 10 CAREC countries provided the study team with extensive support, cooperation, data, and other inputs. In particular, the members of the TSCC and CCC reviewed the stock-take report and assisted in guiding the direction and final preparation of the TTFS 2020 through their constructive comments, cooperation, and consensus building. The TTFS 2020 was endorsed by all 10 CAREC countries at the 12th CAREC Ministerial Conference, held in Astana, Kazakhstan, in October 2013.

The strategy was prepared by Xiaohong Yang, director, Transport and Communications Division of the Central and West Asia Department (CWRD). Others who provided valuable inputs include John Standingford, David Hill, John Arnold, Sunil Mitra, Yuebin Zhang, Jeff Procak, Maria Cristina Lozano Astray, Loreli De Dios, and Oleg Samukhin.

Overall guidance was provided by Hong Wang, deputy director general of CWRD; Vicky C. L. Tan, director, Regional Cooperation and Operations Coordination Division of CWRD; and Ying Qian, director of the East Asia Public Management, Finance and Regional Cooperation Division. Tyrrell Duncan, director, East Asia Transport and Communications Division, and practice leader (transport) provided valuable insights and support.

We appreciate the quality peer reviews by Dong Soo Pyo, Olly Norojono, Pradeep Srivastava, Fergal Trace, Nicolas Crissot, Ronald Antonio Butiong, Rosalind McKenzie, Myo Thant, Haruya Koide, Prianka Seneviratne, Balabhaskara Bathula, Narendra Singru, Susan Lim, Zheng Wu, Muriel Ordoñez, Nana Soetantri, Jiangbo Ning, Maria Virginita Capulong, Saad Paracha, and Zaigham Naqvi. Special thanks to Maureen Mamayson, Maria Corazon Cecilia Sison, Maria Cecilia Villanueva, Glenda Jurado, Manuel Camagay, and Charles Felix Simbillo, who provided excellent conference and administrative support.

It is my sincere hope that the TTFS 2020, which aims to more efficiently and comprehensively achieve the goal of establishing competitive economic corridors, will accelerate the pace of implementation of the CAREC Program from 2013 until 2020, and result in the envisaged regional economic development benefits and impacts.

Klaus Gerhæusser
Director General
Central and West Asia Department

Executive Summary

The Central Asia Regional Economic Cooperation (CAREC) Transport and Trade Facilitation Strategy (TTFS) was refined to account for recent changes in the CAREC Program, particularly expanded membership and the new strategic framework (CAREC 2020) that have transpired since the strategy was adopted in 2008. The refined strategy also reflects lessons learned during the initial phase of implementation. It aims to achieve more efficiently and comprehensively the goals of establishing competitive corridors; facilitating the movement of goods and people through these corridors; and providing sustainable, safe, and user-friendly transport and trade networks. The refined strategy will provide continuity in the development of corridor infrastructure, while shifting the focus toward improving the quality of logistics services and increasing the level of connectivity. For infrastructure, there is a new emphasis on rail for long-distance freight movements. For services, the refined strategy emphasizes the need for connectivity between the six CAREC corridors and major seaports which serve as gateways providing access to the global markets.

The refined strategy also stresses the importance of extending and completing the six strategic multimodal corridors, which are strategically located, and are expected to handle the major share of future transport and trade growth in the region. Once fully funded, established, and operational, the CAREC corridors will deliver services that will be important for national and regional competitiveness, productivity, employment, mobility, and environmental sustainability.

Trade between CAREC countries is expected to increase as a share of their total trade, but the dominant share will remain with countries outside the CAREC region. Interest in the use of CAREC corridors for transit movements between East Asia and Europe is expected to grow, but the majority transit traffic will continue to be movements that originate or terminate in CAREC countries. The dominant mode of freight transport within the CAREC region is road transport, whereas the dominant mode for external trade and transit is rail.

The 108 projects (32 ongoing and 76 new) have an estimated total cost of $38.8 billion. The majority of ongoing projects are road improvements. New investment in railways includes track construction and renewal, as well as double tracking, improvements in signalization, upgraded communications equipment, and electrification. Investments in logistics focus on connections between rail and road transport at intermodal rail yards, and the rail and maritime interface at seaports.

The refined strategy aims to achieve the goals embodied in the CAREC 2020: expand trade and improve competitiveness. The shift of emphasis in the refined strategy is focused on sustainability and quality of service, as reflected in new initiatives that will:

(i) increase network sustainability through maintenance and road safety efforts;
(ii) facilitate trade through better-coordinated border management, improved physical infrastructure, greater use of information and communication technology and risk management, and modernization of sanitary and phytosanitary inspection procedures;
(iii) develop designated rail corridors for uninterrupted, long-distance movements of non-bulk cargo;
(iv) establish distribution hubs based on intermodal connections and introduce value-added logistics; and
(v) improve the efficiency of international transit corridors by providing connections to seaports through the establishment of corridor management units (CMUs).

These initiatives will be supported through technical assistance and capital investment. A total of 24 new technical assistance (TA) projects have been proposed in addition to 24 ongoing ones. About half of the new TA projects will target roads and railways, with initiatives focusing on road maintenance and safety to ensure the quality of the network. These new TA projects will also include operational support for the introduction of block train operations on designated rail corridors providing connections within the CAREC countries and between the CAREC region and its neighbors. Trade facilitation accounts for another 20% of the new TA projects, most of which are continuations of earlier efforts to facilitate the overland movement of goods and vehicles across borders. There will also be funding for the development of CMUs for transit corridors linking the CAREC countries with seaports. The CMUs will support the coordination of efforts to develop infrastructure, harmonize regulations, and facilitate transport along their corridors.

All of the TA projects in the refined strategy will require the strengthening of relationships between public and private stakeholders in order to foster greater coordination of services and enhanced communication among stakeholders. These efforts differ from infrastructure investments in that they will support a process of continuous improvement and troubleshooting in response to constantly changing circumstances. They will also involve enduring efforts to achieve improvements in the quality of service. Overall, all of the initiatives included in the refined strategy are intended to improve services from, and sustainability of, investments made, in addition to being aligned with the CAREC 2020.

Efforts to develop public–private partnerships (PPPs), especially for developing and maintaining road infrastructure, have had little success so far. However, there is a growing awareness of the need for these partnerships to expand and contribute to maintaining the road network. Expanding the use of PPPs is a gradual process that requires a long-term political commitment, a sound and predictable legal and regulatory environment, and an appropriate institutional framework.

The role of the private sector in the provision of rail and waterborne transport services along the CAREC corridors is growing but so far

there has been little private sector involvement in intermodal cargo transfers. Private sector involvement in both is needed, and is expected to increase with the shift of emphasis toward quality of services.

The milestones and indicators used in the original strategy were largely unquantifiable. Those that were quantifiable lacked reliable sources of data and had no baseline references for purposes of comparison. The refined strategy has an improved results-based framework. To monitor the effectiveness of the priority list of projects, a new set of performance indicators has been introduced. In addition to gauging the extent of development of road and rail networks, the results-based framework will also monitor the setting up and operating of new facilities and institutions supporting trade and transport facilitation. Identifying and capturing additional data on trade logistics service provision requires a coordinated effort to strengthen and expand the data currently being collected as part of the CAREC Program's corridor performance measurement and monitoring.

The CAREC Institute will undertake regular monitoring of progress toward realizing the goals in the refined results-based framework, and will facilitate the sharing of knowledge among CAREC countries once the physical institute is established and operational.

Chapter 1
Introduction

The Central Asia Regional Economic Cooperation (CAREC) Transport Sector Coordinating Committee (TSCC) and Customs Cooperation Committee (CCC) have been implementing a joint Transport and Trade Facilitation Strategy (TTFS). The TTFS was endorsed by the CAREC countries in 2007.[1] The TTFS aims to support the CAREC Program's goal of development through cooperation by upgrading, constructing, and rehabilitating key corridors across the region and by simplifying and harmonizing the regulations that govern cross-border transport and trade. The TTFS included a time-bound Implementation Action Plan that was endorsed by the CAREC countries in 2008.[2] The action plan prioritized investments and technical assistance (TA) projects, provided measurable performance indicators, and specified the key results.

The TTFS stipulated that a midterm review (MTR) be carried out during 2012–2013 to optimize implementation over the remaining period (2014–2020). In addition, the MTR of the TTFS and Implementation Action Plan was needed to harmonize the TTFS with the CAREC 2020,[3] and to specify the CAREC corridors in the two new participating countries: Pakistan and Turkmenistan. The TSCC meeting held in Manila in June 2012 endorsed the MTR, which consisted of two parts: Part 1, a comprehensive stock-take of the implementation progress of the TTFS and Implementation Action Plan; and Part 2, refinement of the TTFS and Implementation Action Plan (the refined strategy) based on the findings of the stock-take and to ensure harmonization with CAREC 2020.

The MTR was initiated in 2012 and completed in 2013. During 2012–2013, consultations were conducted with the CAREC partners through TSCC and CCC meetings in addition to separate intensive country consultations with sector and country experts. Agreements were reached on the TTFS with respect to experiences to date and lessons learned, implementation challenges, and corrective actions for future implementation. These are all presented in the refined strategy.

The refined strategy recalls the essential process of building confidence and credibility in the early years of TTFS implementation and how mutual trust gradually generated CAREC-

[1] Joint Ministerial Statement of the Sixth Ministerial Conference on Central Asia Regional Economic Cooperation (CAREC). Dushanbe, Tajikistan. 2–3 November 2007.
[2] Joint Ministerial Statement of the Seventh Ministerial Conference on CAREC. Baku, Azerbaijan. 19–21 November 2008.
[3] ADB. 2012. *A Strategic Framework for the Central Asia Regional Economic Cooperation Program 2011–2020.* Manila.

related transport and trade initiatives worth a total of $18 billion to date.[4] However, there have also been shortcomings and setbacks that, if not addressed, could affect CAREC Program performance during 2014–2020. These are described in section 2 of this report, "Stock-Take of CAREC Transport and Trade Facilitation Achievements." Lessons learned can help translate future efforts into concrete results at the output and outcome levels as measured through the refined results-based framework.

The implications of key global and regional developments for the refined strategy are examined in section 3, "Global and Regional Developments." As global trade and investment flows recover and rebalance in the aftermath of the 2008 financial crisis, great potential opportunities are emerging for the CAREC region to prosper through a much more integrated approach to improving transport and trade facilitation. This section details some of the main external and internal challenges that the CAREC Program must overcome to fulfill this potential.

Section 4, "Refined Transport and Trade Facilitation Strategy 2020," identifies the priority projects and updates the CAREC corridor alignments in light of the latest traffic and trade-flow projections and the recent accession of Pakistan and Turkmenistan to the CAREC Program. The integration of hard (physical infrastructure) and soft (trade and transport facilitation) aspects will be strengthened, with greater focus on multimodal transport and logistics development. The refined strategy has an improved results-based framework and confirms the status of priority projects.

Section 5, "Implementation Action Plan," proposes institutional arrangements for implementing the refined strategy. It is envisaged that the period from 2014 to 2020 will witness more efficient business processes through the system of national joint committees and sector focal points. Among the collective recommended actions of the refined strategy is to encourage more dialogue between the public and the private sectors, and promoting better coordination and synergy among the multilateral institutions involved in project preparation and financing. As the CAREC transport networks move toward a highly integrated network, more consideration will be given to optimizing not only investments and TA projects, but also enhancements of policy measures and capacity building.

[4] CAREC-approved cumulative project portfolio.

Chapter 2

Stock-Take of CAREC Transport and Trade Facilitation Achievements

As part of the 2012–2013 MTR, a stock-take analysis was undertaken to provide an independent evaluation of the progress made since 2008 in implementing the TTFS.[5]

A. Summary of the Stock-Take Report

1. Transport

The stock-take analysis conducted extensive consultations with transport and trade facilitation officials of the CAREC countries and other stakeholders.[6] The analysis was composed of two parts: an assessment of the achievements during 2008–2013 and a review of the key issues and challenges for 2014–2020. The analysis used three metrics as evaluation criteria: (i) project completion; (ii) performance milestones; and (iii) corridor performance, which either directly or indirectly related to the performance milestones and indicators in the 2008 TTFS results-based framework.

The stock-take analysis evaluated 80 completed and ongoing projects against the milestones prescribed in the TTFS.[7] This portfolio of projects totaled $16 billion in expenditures, of which 44% was allocated to roads, 43% to railways, 2% to ports, 8% to aviation, and 3% to logistics. The People's Republic of China (PRC) accounted for a major share of TTFS expenditure, and it is the only country in which all the projects in the TTFS Action Plan were completed. The PRC's share of expenditures was especially large in the railway (49%) and aviation (73%) subsectors. If the PRC's projects are excluded, the share of expenditures devoted to roads rises to 58%, the railway share falls to 35%, and the aviation share falls to 3%.

Fifty projects focused on construction of roads and railways along the six CAREC corridors, in which the linear progress in kilometers (km) could be measured. Most of the 30 nonlinear projects concerned nodes in the network: border crossing points (BCPs), logistics centers,

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5 Based on the MTR, this document provides an update of the Transport and Trade Facilitation Strategy (TTFS), which is referred to as "the refined strategy."

6 Egis International et al. 2013. *CAREC: Midterm Review of the TTFS and Implementation Action Plan. Stock-Take Report.* Manila: Asian Development Bank.

7 The review included the 62 CAREC projects originally listed in Appendix 2.1 of the 2008 TTFS, as well as projects added later and medium-term priority projects whose implementation had started by the end of 2012. Although some projects had been proposed as medium-term priority projects, not all of these projects were formally included in the TTFS Implementation Action Plan or included in biannual progress reports. Additionally, in cases when a project had both linear and nonlinear components, each component was counted as a separate project for evaluation purposes.

ports, and airports. There were also projects that entailed the procurement of equipment and rolling stock. Aside from enhancing connectivity, these nonlinear nodes played a key complementary role in improving the performance of existing or planned linear projects.

Project completion is an important indicator. Of the 80 projects, 33 were completed and 47 were ongoing by the end of 2012. Out of the 47 ongoing projects, 37 were classified as overdue.[8] The overdue projects accounted for 3,551 km of roads (44% of the total program), 2,193 km of railways (36%), and 12 nonlinear projects (40%). A review of overdue projects reveals a wide range of reasons for delay. Some projects had difficulties due to the performance of contractors, others faced cost overruns. However, the majority of overdue projects were delayed by problems in project preparation, including changes in priorities at the national level and the complexities of setting up a project requiring external financing.

In 2010, the Kyrgyz Republic and Tajikistan signed CAREC's first cross border transport agreement (CBTA), which in addition to harmonizing and easing requirements for facilitating increased transport and trade between the two countries, also contained provisions for membership expansion. A protocol for the accession of Afghanistan was later signed by the three countries concerned, and the possibility of further membership expansion is under study. Meanwhile, the 2012 Ministerial Conference in Wuhan, PRC endorsed an action plan for the pursuit of pragmatic, corridor-based, and results-driven transport facilitation arrangements, and concurred on a "pilot" implementation of the recommended approach along selected CAREC corridors.

2. Trade Facilitation

Trade facilitation focuses on increasing the volume of international trade by reducing the cost, time, and uncertainty of transporting goods across borders to consumers. The trade facilitation program has focused hitherto on two components: customs cooperation and modernization and integrated trade facilitation.

Achievements in customs cooperation and modernization included the:

(i) accession to the Revised Kyoto Convention (RKC)[9] by five countries;
(ii) automation of customs functions with the provision of information and communication technology, simplification and harmonization of customs procedures, and application of risk management procedures;
(iii) pilot-testing of joint customs control in two pairs of countries through adoption of a unified cargo manifest and the gradual move toward mutual recognition of inspection results; and
(iv) accession to the TIR Convention[10] by nine countries for regional transit, and capacity building programs for customs officials and training of trainers for customs training institutes in the region.

[8] An overdue project is one that was originally scheduled for completion by the end of 2012, but as of the time of data collection for the stock-take analysis was still ongoing or had not yet started.
[9] The Revised Kyoto Convention entered into force on 3 February 2006.
[10] The full name is "Customs Convention on the International Transport of Goods under Cover of TIR Carnets."

Achievements in integrated trade facilitation included:

(i) progress toward the development of national single window (NSW) facilities. Azerbaijan has put its NSWs into operation, while other countries, including Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan are at various stages of developing their NSWs;

(ii) the assessment of sanitary and phytosanitary (SPS) practices in the region and formation of a working group to map out cooperation areas;

(iii) establishment of a system to collect and analyze CAREC corridor performance measurement and monitoring (CPMM) data, and publication of quarterly and annual reports since 2009;

(iv) founding of the CAREC Federation of Carrier and Forwarder Associations (CFCFA), which includes many CPMM partners, to promote private sector participation; and

(v) the launching of various work programs pertaining to trade facilitation from the private sector perspective.

3. Results-Based Framework

The overall conclusion of the stock-take report was that implementation of the TTFS has been satisfactory, but outcomes have not matched expectations in all cases.[11] The results-based framework of the TTFS had defined 13 milestones and indicators to be used in measuring the performance of the CAREC Program. For those milestones and indicators that could be measured, the results to date are positive:

(i) The share of the volume (tonnage) of the transit trade moving between Europe and East Asia on the CAREC corridors did not reach the target of 2%. However, the volume of intra-regional trade (trade among CAREC countries) increased by 49%,[12] far exceeding the original target of a 25% increase.[13]

(ii) An estimated 3,855 km of roads were improved; which when added to the existing 15,360 km of roads assessed to be in good condition in 2008, equates to a total of 19,215 km of good roads, or 80% of the entire network, exceeding the established target of 75% by 2012.[14]

(iii) While not fully quantified, observations and data suggest vastly increased volumes of traffic and numbers of people crossing international borders in the CAREC region.

(iv) An estimated 3,407 km of railway were constructed, double-tracked, or electrified under the TTFS program (although 60% of this amount was accounted for in the PRC alone).

[11] The review included the original 62 CAREC projects listed in Appendix 2.1 of the 2008 TTFS, as well as medium-term priority projects whose implementation had started by the end of 2012. For cases in which a project had both linear and nonlinear components, each component was counted as a separate project for evaluation purposes.

[12] Excluding energy imports of the PRC.

[13] The original target aimed at increasing the intra-regional trade volume from 32 million tons in 2005 to 40 million tons by 2017.

[14] This may overstate overall network road condition due to ongoing deterioration of some road sections that had been rated in good condition as of 31 December 2007.

An analysis of the CPMM data since 2010 shows that while average speeds on specific completed project roads increased, overall improvement in corridor performance was mixed. For road traffic on the six corridors as a whole, between 2010 and 2012, the average cost of crossing a border fell from $186 to $157, but the average crossing time increased from 8.7 hours to 10.9 hours. The average speed attained by trucks increased from 35.2 kilometers per hour (kph) to 37.8 kph, but if delays are taken into account, the average speed was reduced from 23.5 kph to 22.9 kph, mainly due to waiting time or delays at BCPs.

It will take more time and more coherent and relentless efforts at both the national and regional levels to transform outputs into significant outcomes, including significant reductions in costs and transit times at all BCPs and on all corridors.

B. Lessons Learned and Operational Imperatives

The implementation of the TTFS has contributed to the achievement of national development goals, through observable and satisfactory outputs in the form of transport infrastructure and trade facilitation measures. While acknowledging the progress made between 2008 and 2012, significant challenges remain to be overcome to achieve the envisaged targets of the CAREC Program by 2020. The major lessons learned from the first phase of implementing the TTFS are summarized below.

(i) One clear lesson is that implementing physical infrastructure projects is easier than implementing soft facilitation measures. In particular, measures aimed at reducing border crossing delays are complex and difficult to implement. The impact of delays is greatest for routes that cross multiple borders, since the delays are concatenated. A key challenge in the next phase will be to adopt a more integrated approach to transport and trade facilitation in order to achieve efficiency improvements that will complement the physical ones.

(ii) In terms of customs reform, extensive legal, procedural, institutional, and technological improvements in customs administration have been introduced throughout the region. Efforts to pilot-test joint customs control are showing positive results, but more needs to be done. To reduce delays and informal costs at BCPs, further improvements in border management will be necessary, particularly greater coordination between customs and other border control agencies.

(iii) For trade facilitation interventions, it takes more time and continued efforts to transform outputs into outcomes, such as significant reductions in costs and transit times at BCPs and along corridors. Trade facilitation is multidimensional and complex, and presents challenges for institutional coordination. It needs consistent and persistent efforts involving policies, systems, and institutions by all concerned stakeholders. Improvements in the business environment and in governance are especially crucial in achieving trade facilitation outcomes.

(iv) Sustaining institutional changes requires a long-term commitment from the national governments of the

CAREC countries. There is a need for countries to revitalize and strengthen their national joint transport and trade facilitation committees (NJCs), which are critical for the effective coordination and implementation of CAREC transport and trade trade-facilitation initiatives at the national level.

(v) There was growth in both intra-regional and extra-regional trade (trade with non-CAREC countries), but the volume of trade was well below the assessed potential. There are many reasons for this, but a lack of progress in developing long-haul competitive transport services along CAREC corridors is perceived as one of the main constraints. Further railway development in the region therefore needs to address both institutional and infrastructural deficiencies.

(vi) There was a strong focus on linear infrastructure. Nonlinear infrastructure was not entirely neglected, but greater attention to it will be necessary in order to overcome bottlenecks and promote the development of long-haul multimodal transport and logistics services that are competitive with respect to cost, time, and reliability.

(vii) Major road rehabilitation works are continuing on the CAREC corridors, but most countries in the region face challenges in maintaining their existing networks. CAREC countries urgently need to establish a sound approach to road maintenance. Improvements are needed in prioritizing, selecting and scheduling of maintenance works, ensuring adequate financing, and implementing an effective approach to executing maintenance works.

(viii) Adequate human resources are required for ensuring effective implementation and results monitoring. A systematic capacity building program needs to be developed.

(ix) Most of the milestones and indicators in the results-based framework of the TTFS have the following shortcomings: (1) they were mostly qualitative, with no basis for objective assessment; (2) when quantitative, no reliable source of data could be found; (3) there were no baseline data for use in gauging project outcomes or impacts; and (4) there was no obvious linkage or way to determine if a quantifiable change in an outcome indicator was attributable to the TTFS outputs.

(x) The stock-take analytical processes were hampered by incomplete and inaccurate data, particularly on trade and traffic. Data deficiencies also impacted the effective evaluation of project outcomes and corridor performance.

(xi) The private sector played an insignificant role in implementing the TTFS, mainly because of limited experience on the part of the public sector and insufficient risk assessment by the private sector. The establishment of the CFCFA in 2010 was an important step forward, but much remains to be done to foster an environment that expands the involvement of the private sector in the CAREC Program.

Significant resources have been mobilized through the strong commitment and collective approach of governments, participating multilateral institutions, bilateral donors, and the private sector. However, there is still a

large financing gap in financing for ongoing and newly proposed projects. Accelerating implementation of the refined strategy requires more resource mobilization. The CAREC Program will continue to be a powerful platform from which to marshal resources through a more dynamic partnership between the public and the private sectors, better coordination and synergy among the multilateral institutions involved in the program, and through the engagement of a wider group of stakeholders across the region.

Chapter 3

Global and Regional Developments

A. Key Global and Regional Developments

The CAREC Program is operating in a regional and global environment that is changing rapidly and substantially. When the TTFS was adopted in 2008, the global financial crisis had just begun, yet CAREC economies were still registering positive real gross domestic product (GDP) growth rates averaging 5.6% per annum between 2007 and 2011.[15] Since the adoption of the TTFS, there have been two major global and regional developments.

First, although total CAREC extra-regional trade dropped between 2008 and 2009, mirroring the widespread drop in world trade, it had recovered to the 2008 level by 2011. Extra-regional trade has been larger than intra-regional trade in terms of both value and volume,[16] but intra-regional trade has the potential to grow once barriers to the cross border movement of goods and people are removed. Between 2008 and 2012, the value of intra-regional trade in food products, minerals, and textiles doubled. Between 2001 and 2011, both intra-regional and extra-regional trade values grew by an average of 21% per annum. Both intraregional and extra-regional trade will grow further as a result of continued improvements in the enabling environment for private sector participation and realization of opportunities from each country's comparative advantage.

The TTFS emphasized the use of the east–west transit routes, identifying and specifying them as CAREC corridors, for trade between East Asia and Europe,[17] but ocean shipping lanes and the Trans-Siberian Railway are becoming more attractive. To some extent, CAREC Corridors 1a, 1b, 4b, 6b, and 6c are feeders into the Trans-Siberian Railway, and are expected to benefit from the railway's continuing development. However, given regional economic and membership developments, an adjustment in emphasis is needed, giving as much importance to north–south and intra-regional links as with the east–west corridors between East Asia and Europe. The accession of Pakistan and Turkmenistan has facilitated this rebalancing.

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[15] This is excluding the PRC. The real gross domestic product of the PRC grew by an average of 10.5% per year between 2007 and 2011.

[16] Intra-regional trade has been a low proportion of total trade, rising only from 5.5% to 6.7% between 2002 and 2012.

[17] The new leadership of the PRC has stated its intention to move the country's economic center of gravity toward its central and western provinces; promote domestic consumption; and move up the value chain, shedding low value-added activities. This policy provides huge potential opportunities for the other CAREC countries.

Second, a customs union was formed among Belarus, Kazakhstan, and the Russian Federation in 2010. The union constitutes the first binding regional trade agreement among countries that were part of the former Soviet Union, as evidenced by members' strong adherence to the union's commitments. A common external tariff was introduced and customs controls along their common internal borders were removed. As a result, intra-union trade has grown much faster than trade between union and non-union countries in the region, and to some extent has displaced it.

B. Implications for the CAREC Transport and Trade Facilitation Program

Due to these global and regional developments, some of the key assumptions and parameters of CAREC regional trade, as well as the associated transport and trade facilitation needs, have changed since the TTFS was originally formulated in 2007. These changes include the (i) need to extend corridors to effectively link with ports and onward transport beyond the CAREC region, (ii) importance of developing north–south corridors, (iii) increased attractiveness of rail transport relative to other modes, (iv) importance of transport logistics development, and (v) the need for greater progress in achieving streamlined and efficient border control.

Intracontinental trade. Trade between CAREC countries and their partners is sizeable, and would benefit from more efficient land links with hinterland centers and logistics hubs. Europe, the Russian Federation, PRC, and India account for a major portion of the CAREC countries' trade in goods within Eurasia. Therefore, direct routes are particularly desirable, as they would translate into more transit traffic through Central Asia. Improving connectivity among CAREC countries—and between CAREC countries and non-CAREC trading partners—is essential for reducing trade costs and enhancing competitiveness.

Railway development. Railways can offer a more efficient option than roads for long distance movements, particularly for bulk and unitized cargo or low value density goods, which are important products of CAREC countries for domestic market consumption or export.[18] At present, the dominant mode of transport for freight tonnage within the CAREC region is by road. However, rail is the dominant mode (80%) for both export and transit needs. Moreover, container block trains[19] have been found to be more competitive in terms of time relative to sea transport, and in terms of cost relative to air transport.[20]

Most countries in the region now face quality and technology deficiencies in their railway infrastructure, as well as large maintenance backlogs. Some face serious capacity bottlenecks

[18] Within the CAREC region, the most common commodities transported by rail are oil and oil products (30%), minerals and metals (e.g., coal, copper), construction materials, cotton, and general containerized items.
[19] Container block trains serve the Chongqing–Duisburg, Zhengzhou–Hamburg, and Wuhan–Pardubice routes.
[20] Preference for rail container transport has been bolstered by operational improvements in the CAREC Corridor 1 rail–land bridge between the PRC and the European Union (via Kazakhstan and the Russian Federation).

at key locations. This requires new railway links, improved rolling stock for container block trains and mixed trains, more consistent and efficient train operations, and better management of cross border rail links. The main CAREC rail corridors need to be further developed to create conditions for seamless train services between national rail systems.

Transport logistics. Logistics hubs, inland container depots, terminals, and various kinds of intermodal transfer points all facilitate the rerouting of transit cargo. These facilities play an important role in improving transport efficiency and in reducing transport costs for imports and exports. Logistics facilities and services that go beyond storage, warehousing, and transshipment to higher value-added activities will become indispensable to the region.

Efficient border and customs management. The continued integration of CAREC countries into the global economy partially depends on much greater progress on efficient border and customs management improvement, both at the borders and beyond the borders. Efficient border management involves effective risk management; coordinated border management; joint customs control; customs transit arrangements, including the provision of advanced information; the shifting of control to inland depots and logistics centers; and authorized economic operator (AEO) schemes. Required beyond the border enhancements include streamlined issuance of permits and licenses, standardized commercial and transport documents, NSWs, and a customs valuation and classification system.

Cross-border trade and transport facilitation agreements. The harmonization of border control procedures for people, cargo, and vehicles has been accomplished incrementally by the CAREC countries, primarily through the ratification of international conventions and bilateral agreements. Cross-border trade and transport arrangements in the CAREC region will be based increasingly on internationally recognized best practices, leading to seamless integration of CAREC corridors into global supply chain networks.

Chapter 4

Refined Transport and Trade Facilitation Strategy 2020

A. Strategic Objectives

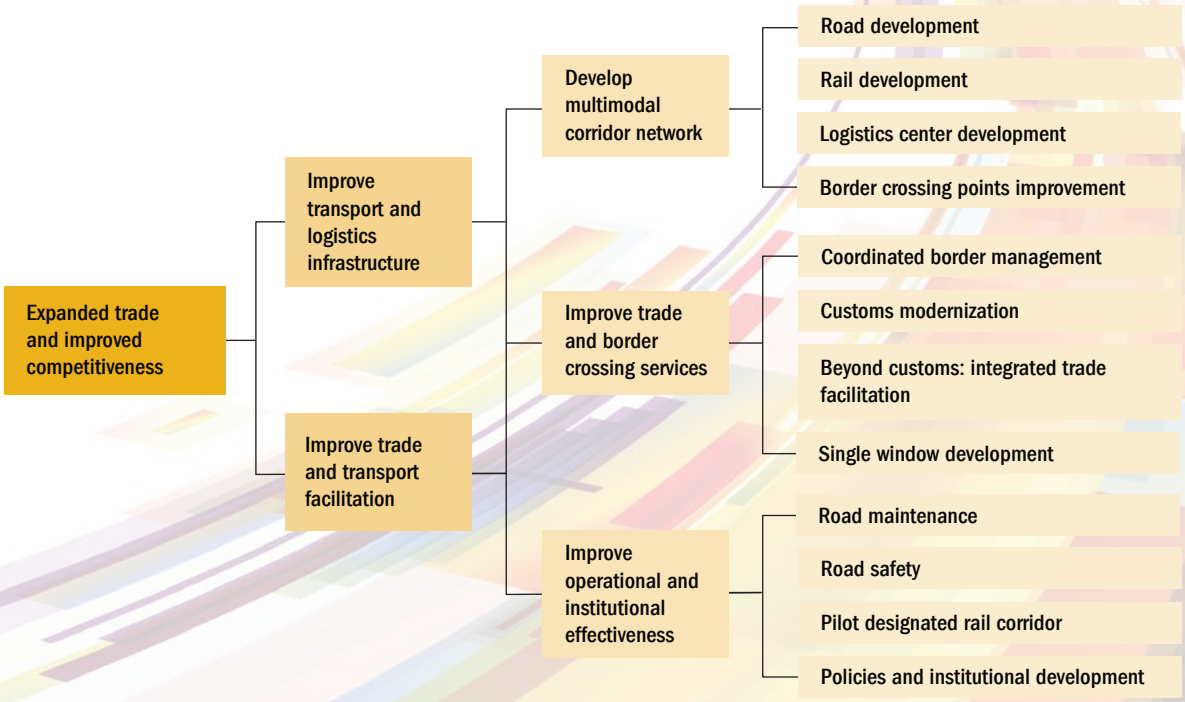
Impact. Inspired by the TTFS, CAREC 2020 established overall strategic objectives to guide the CAREC Program up to 2020, with a focus on expanding trade and improving competitiveness. In relation to these objectives, the originally stated impact of the TTFS—"to improve the region's competitiveness and expand trade among CAREC economies and with the rest of the world"—remains valid. This is consistent with the broader CAREC vision of regional cooperation among member countries to improve access to markets within the region and beyond, thereby leading to accelerated economic growth and shared prosperity—*Good Partners, Good Neighbors, and Good Prospects*.

Outcomes. Improvement in connectivity to markets requires the facilitation of movement of both goods and people across the borders between CAREC countries and with outside markets. This will enable increased intra-regional trade based on the proximity of the markets, and increased inter-regional trade with countries in Africa, East Asia, Europe, and the Middle East. The three goals of the original strategy remain highly relevant:

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

Operational frontier. The primary purpose of the refined strategy is to achieve the intended impact and outcomes of the original strategy and CAREC 2020 by taking into account the lessons learned from past performance as well as changing regional and global conditions. The stock-take identified the need for refinement of outputs, and a much more integrated approach to improving transport and logistics infrastructure and to promoting trade and transport facilitation. Similar to the original strategy, this includes capital investments in transport infrastructure facilities on corridors connecting CAREC countries and the provision of access to external gateways. In addition, the refined strategy also places greater emphasis on the harmonization of regulations, procedures, and standards for the cross border movement of goods and people, and a commitment to implementing more efficient border management. The logical structure presented graphically in Figure 1 is embedded in the refined strategy.

Figure 1 Impact, Approaches, and Priorities



Source: CAREC Secretariat.

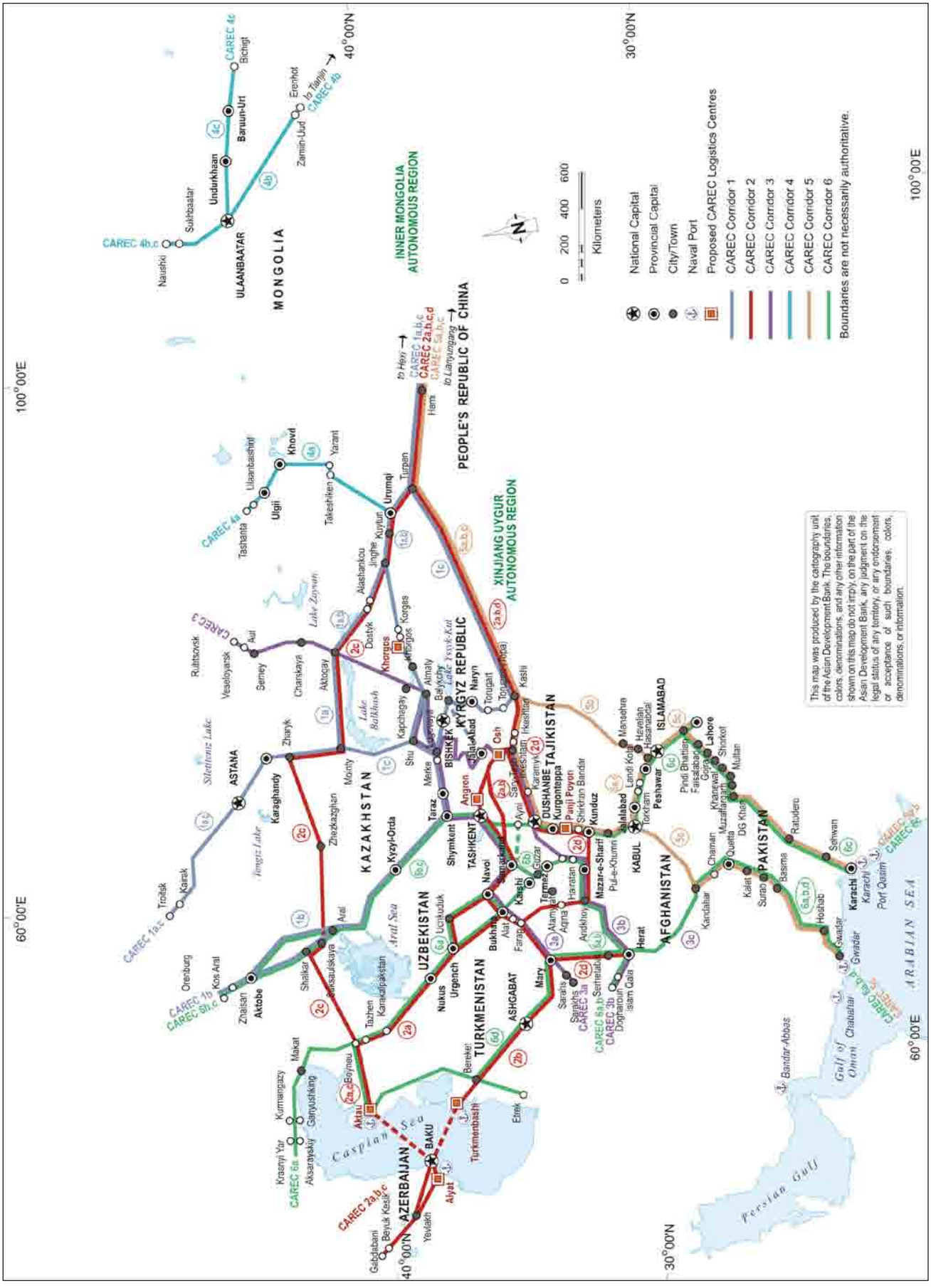
B. Operational Priorities

1. Develop Multimodal Corridor Network

Corridor extensions. The development of the CAREC core network of six corridors remains a priority. Some of the originally configured corridors remain incomplete, without connecting to ocean ports or intermodal logistics hubs. This limits their effectiveness in enabling increased trade flows. The refined strategy introduces selected corridor extensions. The associated Implementation Action Plan, presented in section V, describes the revised six corridors, which are collectively illustrated by Map 1. Map 2 highlights the new corridor extensions. The main features of the corridor extensions include the:

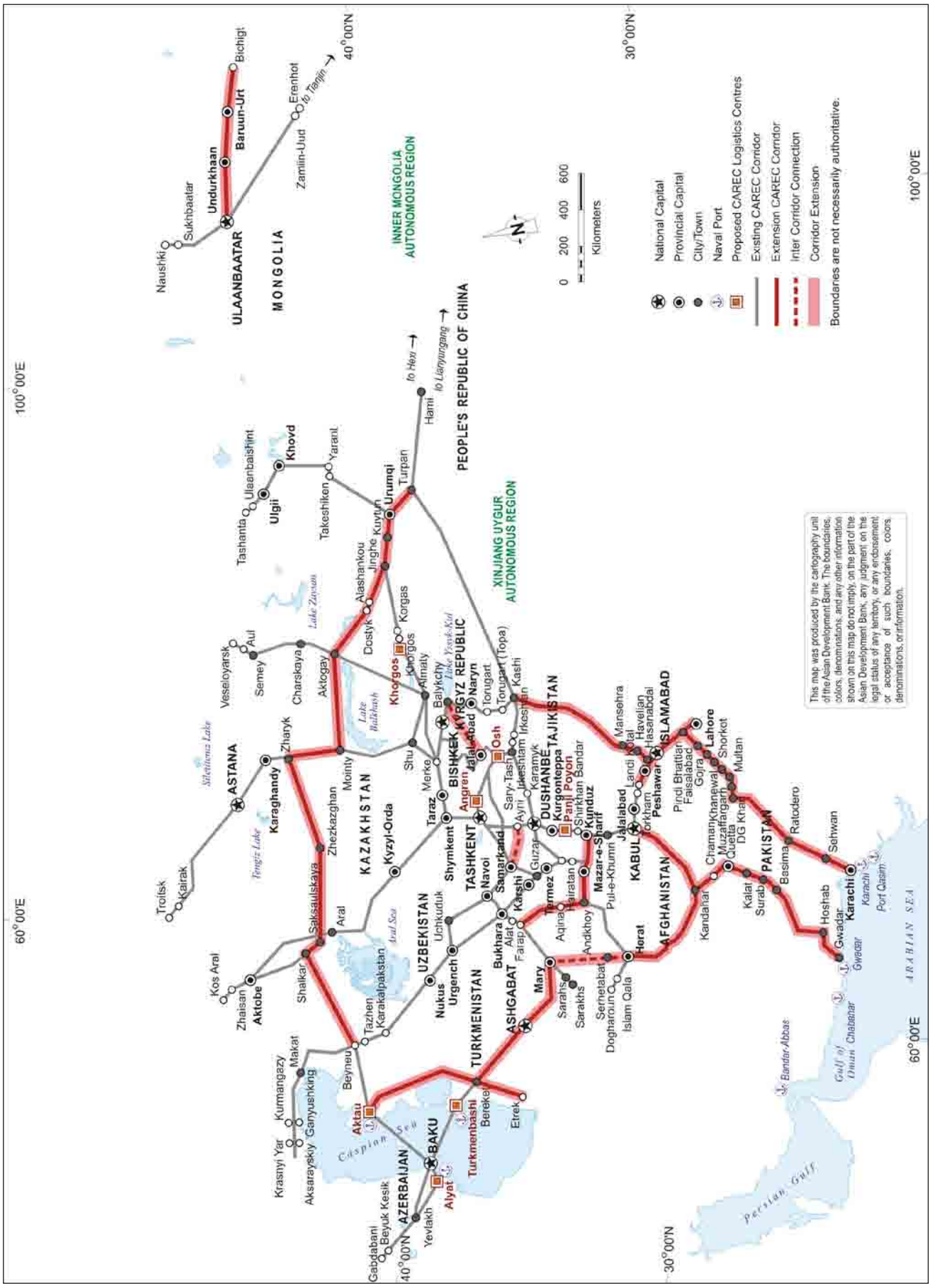
(i) development of connectivity with seaports located within and external to the CAREC region;
(ii) introduction of alternative routes to shorten journey distances along existing corridors;
(iii) development of missing links to increase geographic coverage and interconnectivity between corridors;
(iv) development of a rail network to serve the CAREC corridors, enabling them to realize the advantages of rail transport for long distance and bulk transport; and
(v) establishment of intermodal hubs to support more efficient distribution and collection of goods.

Map 1 CAREC Corridors: New Alignments



Source: CAREC Secretariat.

Map 2 Specific Corridor Extensions



Source: CAREC Secretariat.

Road development. The initial phase of the TTFS focused on the development of road infrastructure in the six CAREC corridors and on the reduction of barriers to cross border movements of goods and people. This effort is still ongoing, and the refined strategy will continue to improve and complete the road corridors with a view to improving connectivity and promoting trade and investment.

Railway development. Commercially oriented and operated railways can offer more efficient transport for long distance freight and bulk commodities. To promote competitiveness in international trade, the refined strategy supports developing regional railways serving the CAREC corridors. Investments will be provided to increase railway capacity, including new construction, track renewal, double tracking, improvements in signalization and communications, and electrification. Efforts will be made to improve railway operations through restructuring to put railway operators on a sound financial and commercial footing. Improvements in rail transport will require not only sufficient capacity to make possible the unimpeded movement of trains, but also the coordination of movements across borders and through neighboring countries to enable a scheduled movement from origin to destination. Given the large investments involved, the task of developing the CAREC railway network will continue well beyond the 2020 planning horizon.

Multimodal logistics hub development. Corridor performance measurement and monitoring (CPMM) has identified transshipment as a major cost and source of delays to users along CAREC corridors. Therefore, the refined strategy attaches a high priority to supporting the efficient transfer of cargo between transport modes, specifically, between rail and ocean carriers at gateway ports, and between rail and road at intermodal rail yards. Support will be provided to configure intermodal yards as logistics hubs, which will offer storage, consolidation, and deconsolidation services. These facilities will then serve as hubs for the collection and distribution of exports and imports. Support will focus especially on logistics hubs that are strategically located near principal centers of production and demand. This will encourage private sector participation in cargo handling and storage operations in the hubs and also in ports.

Border-crossing point improvements. The refined strategy will support better coordinated management of BCPs along selected CAREC corridors. This will include BCP improvements intended to increase physical throughput capacity, possibly including modern equipment, information and communication technology hardware and software, storage capacity, and passenger facilities. Expansion of the joint customs control (JCC) pilot initiatives to more pairs of BCPs, including using common forms and the sharing of x-ray inspection images, will be strengthened through mutual recognition of inspection results. This expansion aims at introducing joint customs operations where allowed under the CAREC countries' legal systems. In addition, efforts will be made to integrate customs and other border procedures. All these measures will improve traffic flow, free up additional throughput capacity, and reduce transit costs and times at BCPs.

2. Improve Trade and Border-Crossing Services

Customs reforms and modernization. Support will be given to the adoption of new

simplified customs codes that are harmonized with international standards. This will cover the whole spectrum of customs functions, from the registration of traders to the filing of import declarations, valuation, classification and assessment of duties, physical inspections, and the administration of trade agreements' rules of origin. Five CAREC countries have acceded to the Revised Kyoto Convention (RKC), and the five others are at various stages of the accession process. Technical and peer-to-peer assistance will be organized to complete the accession of the remaining five CAREC countries to the RKC and to improve post-accession compliance. The target is to have at least eight CAREC countries acceded to the RKC by 2020.

Coordinated border management (CBM). In tandem with the physical improvement of CAREC corridor BCPs, more in-depth work is required to strengthen risk management systems at BCPs in order to expedite the clearance of legitimate shipments while maintaining appropriate border control by identifying high-risk cargo. This will allow the AEO programs in which approved traders—those with good compliance records and demonstrated high-quality compliance history from previous physical inspections—will be able to obtain the release of their cargo with minimal customs intervention. In addition, more effective solutions for border management will be explored to coordinate and improve linkages between customs procedures and the systems of border control agencies. TA will be provided to review legal issues impeding CAREC countries from introducing CBM and risk management approaches. The target is to have CBM introduced at five pairs of BCPs along selected CAREC corridors.

Development of national single windows. Priority will be given to building upon initial investments to improve the functionality of selected NSWs. A critical area during 2014–2020 will be regional interconnectivity and interoperability. Information-sharing protocols will be needed to allow the NSWs to augment risk management efforts, support the expansion of AEO programs, enable mutual recognition of laboratory testing results for goods subject to sanitary and phytosanitary (SPS) measures, etc. The target is to have at least three NSW facilities established in CAREC countries by 2020.

Beyond customs: integrated trade facilitation. Increased cross border trade and transit activity heighten the need to modernize SPS measures so that they ensure food safety for consumers and prevent the spread of pests or disease among animals and plants. SPS reform and modernization constitute part of the ongoing trade facilitation agenda: regional initiatives to harmonize and upgrade SPS measures and their application could potentially facilitate the trade of agriculture produce, meat, and dairy products beyond the CAREC region. TA and investment projects will support the SPS program in at least five countries, in line with international standards.

3. Improve Operational and Institutional Effectiveness

Road maintenance. The refined strategy attaches importance to providing adequate maintenance of CAREC road corridors to ensure that they deliver the intended level of road service quality. Measures will be taken to help increase government budgets, and set up road funds and road tolling to ensure adequate maintenance funding. Support will

be provided for asset management systems to help in prioritizing and implementing road maintenance and conducting comprehensive road condition surveys and traffic counts to provide reliable baseline data to develop a results-based road maintenance strategy for the corridors. Performance-based contracts will be expanded to at least three CAREC countries.

Road safety. Enhancing road safety is a priority since traffic fatalities in the CAREC countries cost an estimated 1%–2% of the region's GDP.[21] It is economically and socially beneficial to invest in improving the safety of the region's roads, vehicles, and road users. Support will be provided for road safety management capacity; safe approaches to the design, construction, operation and maintenance of road infrastructure; road safety performance measures; and mobilizing resources for road safety measures. Every new road project under the CAREC Program will incorporate appropriate road safety features. Country specific needs will be identified and a regional strategy will be developed.

Introduction of designated rail corridors. To increase the reliability and attractiveness of railway service to shippers, designated rail corridors (DRCs) will be introduced. The objective is to create the conditions for seamless, uninterrupted train service. This will require a high degree of cooperation and harmonization. The DRCs will provide priority-pathed services over specific routes, with trains entering and exiting the routes at specific locations and at scheduled times. The trains will operate according to fixed performance norms while on the routes. The DRCs will be used for international and intra-regional freight services, primarily for containers. The DRCs will facilitate efficient transfers between systems that use different rail gauges. Some corridors already have rail infrastructure, but others will require additional capacity planned and constructed beyond 2020. Several routes will be selected as DRCs. One or more proposed DRCs will be implemented as a demonstration project to demonstrate viability and benefits, thereby encouraging wider adoption by CAREC countries in the future (Appendix 4).

Policies and institutions. More attention and resources will be given to sector policy work and capacity building. Project-related capacity of CAREC countries in the transport sector will be further strengthened. This will include (i) transport program planning from a regional perspective, (ii) project design and implementation, and (iii) results monitoring. The CAREC Transport Sector Coordinating Committee (TSCC) and Customs Cooperation Committee (CCC) will identify priority requirements for policy advice, capacity building, knowledge sharing, and analytical work. They will also facilitate consensus-building based on the principle of cooperation in decision making. TA and knowledge products will be provided to support operational priorities in the refined strategy. The CAREC Institute's capacity development programs will help address these needs.[22]

[21] World Health Organization (WHO). 2013. *Global Road Safety Report*.
[22] www.carecprogram.org/index.php?page=carec-institute

Chapter 5

Implementation Action Plan

A. Key Results Milestones and Indicators

The updated results-based framework is presented in Appendix 1. It provides a basis for assessing the implementation performance of the refined strategy. This assessment will take place continuously, culminating in a major review in 2020. The following main output indicators and milestones are to be achieved by 2020:

(i) 7,800 km of road construction and/or improvements completed;
(ii) 70% of the total CAREC road corridor network (29,350 km, including new extensions) built or improved by 2020;
(iii) 1,800 km of railway track built and 2,000 km renovated, electrified, or signalized;
(iv) eight CAREC countries to have acceded to the RKC;
(v) CBM established at five pairs of BCPs;
(vi) three NSW facilities set up;
(vii) regional SPS cooperation programs in line with international standards established in five countries;
(viii) five regional multimodal logistics centers established and operational;
(ix) five BCPs improved;
(x) successful completion of maintenance-related projects, and three performance-based maintenance contracts initiated;
(xi) road safety features successfully integrated into new CAREC road projects;
(xii) secretariats for NJCs established in three CAREC countries;
(xiii) one or more corridor management units (CMUs) established for selected pilot corridors; and
(xiv) at least six transport and trade facilitation capacity building activities conducted annually.

B. Priority Investment and Technical Assistance Projects

Full achievement of the refined strategy's goals and objectives will require the successful completion of already committed investment projects and of new investment projects and TAs. The refined strategy includes 108 investment projects, with a total estimated cost of $38.8 billion, and 48 TA projects, with an estimated total cost of $74.6 million.

Of the 108 investment projects, 76 are new projects with an estimated cost of $21.4 billion. These complement the 32 ongoing projects with an estimated cost of $17.4 billion (Table 1). The average size of the new projects is smaller because they include smaller scale projects such as the construction of logistics centers and BCP

Table 1 Summary of Investment Projects ($ billion)

	Ongoing	New	Total
By Cost Estimates			
Road	11.4	13.2	24.6
Railway	4.1	6.1	10.2
Airport and Civil Aviation	0.5	0.9	1.4
Port and Shipping	1.0	0.1	1.1
Logistics	0.0	0.2	0.2
Trade Facilitation	0.4	0.9	1.3
Total	**17.4**	**21.4**	**38.8**
By Number of Projects			
Road	3	35	38
Railway	2	15	17
Airport and Civil Aviation	10	5	15
Port and Shipping	15	2	17
Logistics	0	6	6
Trade Facilitation	2	13	15
Total	**32**	**76**	**108**

Source: CAREC Secretariat.

improvements. It is proposed that 48 TA projects undertake studies for potential investments or provide advisory support for planning, technical knowledge transfers, and institutional capacity development. A summary of the investment and TA projects is presented in Appendix 2.

Road sector projects will continue to account for the majority of the ongoing transport projects. This is due to (i) an overhang of ongoing road projects, many of them overdue; and (ii) road investments in new corridor extensions in Pakistan. However, road projects will account for a reduced overall share of the new proposed projects (Figure 2).

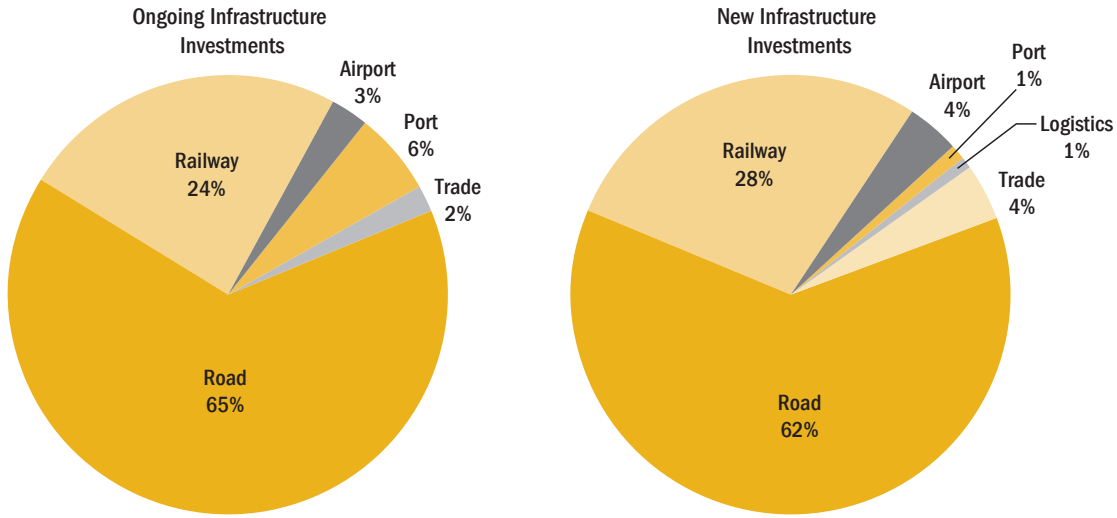
C. Corridor Changes and Investment Projects

The refined strategy incorporates an updating of the CAREC transport corridors to include necessary corridor extensions, missing links, and railway service for long distance freight and bulk commodities. The most important corridor changes and major associated investment projects are summarized below.

1. Corridor 1: Europe–East Asia

Corridors 1 and 2 fulfill the east–west transit function. Corridor 1 runs from PRC westward to Europe. From Turpan (PRC) it bifurcates, and the northern branch bifurcates again before reaching the Kazakhstan border, but all branches eventually go north into the Russian Federation.

Figure 2 Comparative Summary of Ongoing and New Investment Projects per Subsector



Source: CAREC Secretariat.

Table 2 Summary of Technical Assistance Projects ($ million)

	Ongoing	New	Total
By Cost Estimates			
Road	8.1	10.0	18.1
Railway	0.0	21.1	21.1
Airport and Civil Aviation	0.0	0.0	0.0
Port and Shipping	0.0	4.5	4.5
Logistics	0.0	0.0	0.0
Trade Facilitation	21.3	0.6	21.9
Public–Private Partnership	0.0	7.0	7.0
Social/Environmental	0.0	2.0	2.0
Total	**29.4**	**45.2**	**74.6**
By Number of Projects			
Road	8	4	12
Railway	0	12	12
Airport and Civil Aviation	0	0	0
Port and Shipping	0	3	3
Logistics	0	0	0
Trade Facilitation	16	1	17
Public–Private Partnership	0	2	2
Social/Environmental	0	2	2
Total	**24**	**24**	**48**

Source: CAREC Secretariat.

A number of important road projects are planned or ongoing on Corridor 1. The biggest in terms of cost and length is KAZ IP 4, which entails the rehabilitation of multiple road sections totaling over 2,450 km. This is 40% complete, with most of the funding coming from the Asian Development Bank (ADB). Another major road project will improve the Almaty–Khorgos road, with funding from the International Bank for Reconstruction and Development, while a toll road project from Astana to Karaganda is ongoing.

There are four new projects on Corridor 1 in Kazakhstan, all of which reflect the increased emphasis on trade facilitation and logistics. Three will improve BCPs at Dostyk (road and rail) and Khorgos (road). The fourth will develop a major logistics center at Khorgos. In addition, there are three projects to electrify 988 km of railway along Corridor 1. In the Kyrgyz Republic, the rehabilitation of the Bishkek–Torugart road is 50% complete, with funding from the Export–Import Bank of China. Additionally, with five railway projects involving electrification, rehabilitation, and repair facilities, the plans for completing Corridor 1 reflect the shifts in investment from road to railway articulated by the refined strategy.

2. Corridor 2: Mediterranean–East Asia

This is the most extensive corridor. Although its eastern extremity is in Turpan (PRC) and its western extremity is in Baku, multiple branches pass through 7 of the 10 countries. In the original network, this was the only corridor passing through Azerbaijan and Turkmenistan. The extended network includes two new railway links:

(i) Corridor 2c will connect Beyneu (Kazakhstan) to Turpan (PRC) once the planned connection between Saksaulskaya and Zhezkazghan (KAZ IP 13) is completed. Border crossing points at Dostyk (Kazakhstan) for both road vehicles and trains will also be improved, and the section in Kazakhstan between Mointy and Dostyk will be electrified.

(ii) Corridor 2d from Sary-Tash (Kyrgyz Republic) through Tajikistan and Afghanistan, joining Corridor 2b in Turkmenistan. Three Afghanistan projects—AFG IP 11.1, AFG IP 12, and AFG IP 101—are included in the Implementation Action Plan associated with the refined strategy.

The significance of Corridor 2c lies partly in its intended use by the Silk Wind trans-Caspian container block-train service linking the PRC to Turkey and, with the opening of the Bosphorus Tunnel, to Europe. Major road upgrading is already under way in Turkmenistan's section of Corridor 2b, included as TKM IP 104 in the action plan. Turkmenbashi port is already being modernized and expanded, and a logistics center at the port is included in the action plan. A major rail link is planned between Andijan (Uzbekistan) and Kashi (PRC), through the Kyrgyz Republic and within the original corridor. However, the alignment is yet to be decided, and the financial and economic feasibility is yet to be established. This is regarded as a longer-term project that is unlikely to be completed by 2020.

3. Corridor 3: Russian Federation–Middle East and South Asia

This is the only corridor for which most of the investments in the implementation action plan are allocated to the railway sector. The majority of the projects will be in Afghanistan, completing the rail link between Andkhoy and Shirkhan Bandar, which will connect Tajikistan with Turkmenistan through Afghanistan (see Corridor 2 on the maps). There will likely be railway extensions linking Afghanistan with Turkmenistan as well, and ADB is expected to provide part of the required financing. Substantial railway projects are also planned for Kazakhstan (intended for funding by a concessionaire), the Kyrgyz Republic, and Uzbekistan (with funding from the Export–Import Bank of China). Within Kazakhstan, a toll road project on the Almaty–Kapchagay road section is ongoing. Other projects in the implementation action plan include the construction of the Bishkek–Osh road, cofinanced by ADB and the Eurasian Development Bank, a logistics center at Osh, and improvements in the BCPs at Konysbaeva (Kazakhstan), Karamyk (Kyrgyz Republic), and Alat (Uzbekistan). Lastly, ADB is financing the reconstruction of the last section of Afghanistan's national ring road between Qaisar and Laman.

4. Corridor 4: Russian Federation–East Asia

This corridor crosses Mongolia, linking the Russian Federation, to the north, with the PRC, to the south and east. The northern section connects with Corridor 1 in Urumqi and with Corridors 2 and 5 via Urumqi in Turpan. The main development in Corridor 4 will be the Western Regional Road, covering a total of 748 km, while three railway support projects are expected to be completed in 2014.

The eastern section of Corridor 4 is separated from the rest of the six CAREC corridors. It connects the Russian Federation with the PRC through Ulaanbaatar. A 448 km road project is planned along the new extension, which starts from Ulaanbaatar, passes through Bichigt (Mongolia), and then enters the PRC, where it extends to the Jinzhou port.

5. Corridor 5: East Asia–Middle East and South Asia

The most far-reaching changes to the corridor network will affect Corridor 5, which links the PRC with South Asia and the Middle East. With Pakistan's accession to the CAREC Program, it is now possible to continue the corridor to the Arabian Sea. This will be achieved with three extensions totaling 4,526 km:

(i) An extension of the road corridor in Pakistan from Torkham to Peshawar and then south to the ports of Karachi and Qasim via the M1–M4 (meaning M1, M2, M3, and M4), N-55, and other components of the north–south national corridor on the west side of the Indus River.

(ii) An extension south from Kashi (PRC) to Hasanabdal (near Islamabad) via the Karakoram Highway. Construction of a new section of this road is under way with PRC funding.

(iii) An extension southwest from Kabul on the ring road through Kandahar to the BCP at Chaman (Afghanistan), on to Quetta (Pakistan), through reconstructed sections of road in Balochistan province of Pakistan, and then to the port of Gwadar in Pakistan.

Four projects under the new implementation action plan have been identified to rehabilitate and upgrade the road from Torkham to Karachi, at a total estimated cost of $1.2 billion. The United States Agency for International Development (USAID) is funding the Peshawar–Torkham section, while ADB is funding the Faisalabad–Gojra section (M4). On the Afghanistan side of the border, the Kabul–Jalalabad road is already being reconstructed with ADB support, and the roads to and through Kandahar have been reconstructed. An additional project will expand and upgrade the BCPs at Torkham, Wagha, and Chaman.

Corridor 5 also runs through Tajikistan, where five projects will develop and improve road and rail links to Afghanistan, and will construct a logistics center on the border at Panji Poyon. The Japan International Cooperation Agency is supporting one of these projects: the Sehwan-Ratodero expressway section (N55).

6. Corridor 6: Europe–Middle East and South Asia

Corridor 6 connects the Russian Federation with South Asia and the Middle East. For almost the whole of its length, it is conjoined to other corridors (Corridors 1, 2, 3, and 5), so the main projects affecting Corridor 6 have already been mentioned above. The most significant changes to Corridor 6 will be railway projects in northern Afghanistan and road projects in Pakistan providing connectivity to Arabian Sea ports.

A new rail corridor extension is planned, which will connect Kazakhstan with Turkmenistan. The new railway line is being built with some ADB support for one section and Islamic Development Bank support for another section. It will run 800 km, from Aktau Port (Kazakhstan) to Etrek (Turkmenistan) on the Turkmenistan–Iran border, and will intersect with the Turkmen railway network in Bereket.

From Bereket, the new corridor will extend through Ashgabat and then pass through Mary, overlapping with Corridor 2. It will next proceed south, crossing into Afghanistan and overlapping, continuing to overlap with Corridor 2 along the ring road to Herat. From Herat, the corridor will follow Afghanistan's ring road to Kandahar, reaching the BCP at Chaman, entering Pakistan, and eventually ending in Gwadar, on the Arabian Sea. To complete the extension of Corridor 6 in Pakistan, a number of road projects are planned for implementation between 2014 and 2020 (Appendix 2).

D. Sustainability Enhancement

Under Rio+20, the United Nations Conference on Sustainable Development, held in 2012, eight multilateral development banks (MDBs)[23] released a voluntary commitment to sustainable transport, drawing attention to the essential role that sustainable transport plays in sustainable development. The eight MDBs are expected to provide more than $175 billion in loans and grants for developing countries during 2014–2024 to help develop more sustainable transport systems. The MDBs are expected to publish their first progress report by the end of 2014, outlining progress over the first year of the commitment.

[23] African Development Bank, Asian Development Bank, CAF–Development Bank of Latin America, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, Islamic Development Bank, and the World Bank.

Global concerns about climate change, energy use, environmental impacts, and limits to financial resources for transportation infrastructure indicate the need for new approaches to planning, designing, constructing, operating, and maintaining transportation systems. The CAREC Program will mainstream climate adaptation measures into its operations. These will include making climate adaptation adjustments to engineering specifications, alignments, and master planning, incorporating associated environmental measures, promoting green freight and logistics, and adjusting maintenance and contract scheduling.

Over the past decade, the CAREC Program has incorporated safeguards to protect people and the environment from the adverse effects of its projects. The introduction and application of safeguards for transport projects by development partners has helped CAREC countries to reassess the adequacy and improve their own domestic policies and legal provisions for providing social and environmental protection, as well as their monitoring and enforcement arrangements. In CAREC countries, this process is still ongoing, and CAREC projects could further influence it in the future.

The incorporation of social and environmental considerations will continue to be an important feature of ADB transport operations. In terms of specific interventions, particular attention will be given to both stand-alone projects and regional TA programs, in order to address the issues of road safety, social and environmental safeguards; and to reduce the potential contribution of new roads to the transmission of HIV/AIDS.

In addition to safeguards, an assessment of social, gender, and poverty issues during the formulation of transport and trade sector operations could lead to the inclusion of special measures or complementary project components. These measures and components will be designed to ensure that poor females and other disadvantaged groups benefit from the project; and certain social impacts will be monitored.

E. Financing Plan

Out of the total $38.8 billion cost of the program, about $5.6 billion has already been invested in ongoing projects. The balance of $33.2 billion will require the equivalent of approximately $4.74 billion of investments annually over the 7-year period, 2014–2020. As shown in Table 3, a total of $34.2 billion is expected to be committed by CAREC governments and development partners. Another $1.0 billion is expected to come from the private sector, but that is not ensured. The remaining $2.8 billion represents uncommitted funding. These figures are based on the financing plans for ongoing projects provided to ADB by CAREC countries and on the anticipated financing plan by ADB and other development partners for new investment projects.

It is expected that the governments, including state-owned enterprises, will be the major contributors to closing this funding gap. Private investment will be sought, but experience has shown that most projects in the CAREC transport sector are public goods and thus are unattractive to private investors. The projected level of funding from this source is equivalent to 5% of the new projects.

Full implementation of the action plan will also depend on increased allocations from

Table 3 Committed and Indicative Financing Plan ($ billion)

Source	Ongoing	New	Total
CAREC Governments	8.5	11.8	20.3
Development Partners	6.1	7.8	13.9
Private Sector	0.8	1.0	1.8
Uncommitted Funding	2.0	0.8	2.8
Total	**17.4**	**21.4**	**38.8**

CAREC = Central Asia Regional Economic Cooperation.
Source: CAREC Secretariat.

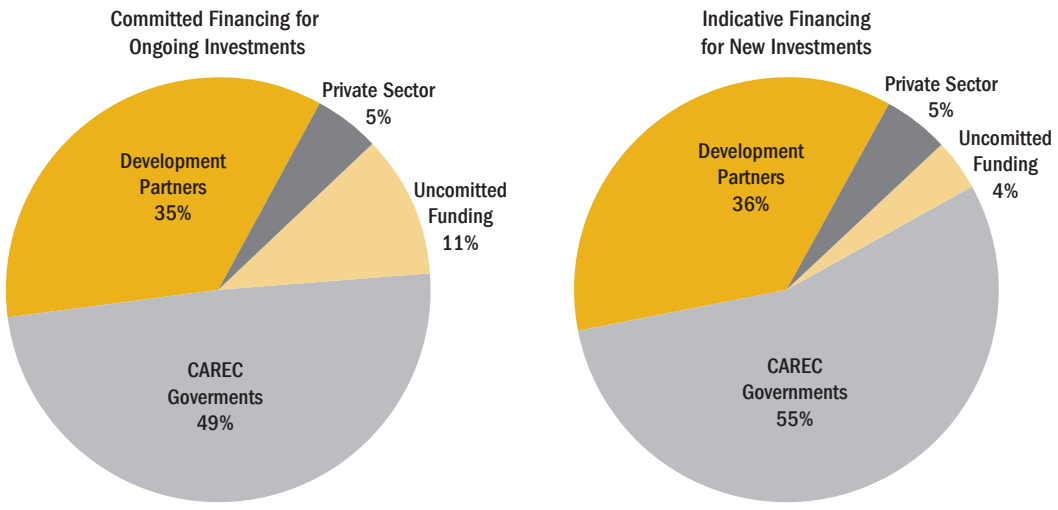
development partners. They contributed about 13% of the capital cost of the projects that have already been completed, or 30% if the PRC is excluded.

The TA program is estimated at $10.7 million per year. This has been reduced to match the scale of funding expected to be available from the development partners. It does not represent the full extent of TA funding that may be required. In addition, it is intended that (i) the CAREC Institute will facilitate the sharing of knowledge among the CAREC countries, reducing the need for externally funded resources; and (ii) as initial TA projects are completed, especially in the fields of railway system development, road safety, and private sector participation, the value of using TA to support the refined strategy will be demonstrated, and will thereby pave the way for increased TA funding in the second half of the implementation period.

F. Implementation Arrangements

The Transport Sector Coordinating Committee (TSCC) and Customs Cooperation Committee (CCC) will be jointly responsible for monitoring the implementation of the refined strategy,

Figure 3 Committed and Indicative Financing



CAREC = Central Asia Regional Economic Cooperation.
Source: CAREC Secretariat.

with support and guidance from the CAREC Secretariat. The TSCC and CCC have met regularly since 2008, and have received reports on the progress of the Transport and Trade Facilitation Strategy (TTFS). However, improvements are required in the (i) establishment and staffing of the envisaged CAREC institutions, (ii) capacity and functionality of these institutions, and (iii) the interface and coordination between national and regional institutions within the CAREC framework for the purpose of improving data collection and implementation.

National joint transport and trade facilitation committees. The NJCs were envisaged to operationalize cross-border transport agreements, support national data collection, and assist in the reporting of progress toward TTFS implementation. However, with the exception of selected CAREC countries, the NJCs have either not been constituted or, where established, have not evolved as intended. With commitments from the CAREC countries, and support from the Secretariat and the CAREC Institute, more robust NJCs will be established on the basis of a well-defined terms of reference.

Corridor management units. Multimodal corridor management units (CMUs) will be responsible for the long-term sustainability of corridors. They will coordinate national efforts to develop corridor infrastructure (expansion, rehabilitation, upgrading); harmonize regulations affecting trade and transport facilitation, as well as enforcement procedures; and introduce technology for monitoring the movement of transport carriers and their cargo through the corridors. They will facilitate efficient cross border movements of people and goods, enable policies for transport and trade, and identify solutions to avoid delays in fulfilling commitments under the refined strategy. The CMUs will have offices and staff located in one country along corridor. They will each establish a working committee that will report to the TSCC and CCC. The membership of each working committee will represent all the countries along the associated corridor, and each committee will liaise and coordinate with the NJCs. One CMU will be piloted for a selected CAREC corridor before CMUs for the other corridors are established.

Joint TSCC and CCC meetings. The TSCC will remain responsible for transport and logistics activities, while the CCC will continue to be responsible for customs cooperation and trade facilitation activities. With the participation of development partners, joint TSCC and CCC meetings will be held to review the progress in implementing the refined strategy, and the results will be reported at the Senior Officials' Meetings and Ministerial Conferences. The CAREC Federation of Carrier and Forwarder Associations (CFCFA) will be invited to participate at the joint meetings.

CAREC Institute. A significantly wider role is envisaged for the CAREC Institute once physically established and operational. Central to this role will be creating, storing, and disseminating knowledge, mainly through research, training, and the compilation of information of common interest to all CAREC countries. The CAREC Institute's areas of focus will be (i) collection and publication of traffic, trade, and macroeconomic data for assessing progress toward the CAREC Program's goals; (ii) research into specific topics such as standardization of vehicles and the rules governing their movement across borders, railways, road maintenance and safety, and public–private partnerships (PPPs); and (iii) research on the transition from transport

corridors to economic corridors. As such, the CAREC Institute will be given a specific mandate to undertake the regular monitoring of progress toward realizing the goals refined in the results-based framework.

Monitoring and evaluation. There will be a further strengthening of monitoring and evaluating to align with the refined strategy. Results-based performance indicators have been developed with inputs from the TSCC and CCC (Appendix 1). The TSCC and CCC will jointly monitor the implementation of the refined strategy, and the CAREC Program's progress toward its outputs and outcomes. The CFCFA and corridor performance measurement and monitoring (CPMM) programs will be further strengthened to cover both outputs and outcomes. The CAREC Institute capacity development programs will help countries mainstream results monitoring into government monitoring and evaluation systems.

G. Resource Mobilization and Coordination Arrangements

The CAREC countries will include priority projects in their respective national development plans. These projects will be funded either from internal resources or from the mobilization of external financing. For their part, multilateral institutions will commit to continue providing financial and technical support for CAREC projects, including the exploration of other resources earmarked for regional projects, and they will closely coordinate with each other. In addition to the normal performance-based allocations for eligible CAREC countries, ADB and the World Bank have concessional facilities designed to support regional projects. Multilateral institutions will also help CAREC countries generate private sector interest through various instruments, and encourage their participation in CAREC projects. The involvement of other development partners, within the parameters of CAREC's strategic goals, will be welcomed.

Financing regional projects is a challenging process.[24] PPPs for financing priority projects will be pursued. As an initial step, the possibility of establishing a CAREC regional project development facility to help prepare potential PPP projects and mobilize private sector interest will be explored. TA resources will be provided in setting up this facility; addressing the institutional structure, operational mechanism, and funding requirements of the facility. Once established the facility will support specific transactions by identifying, screening, and evaluating potential projects under the PPP mode, and by completing the PPP design through to financial closure.

The refined strategy will be implemented in close coordination with other regional cooperation initiatives. The CAREC Secretariat will encourage proactive information sharing with other regional groupings through, among others, consultations, and the CAREC Program website, etc. The offices of the CAREC national and sector focal points will also coordinate closely with counterparts from other regional cooperation organizations within their respective countries. The results of such activities will be reported at the Senior Official Meetings through the TSCC and CCC meetings.

[24] ADB. 2009. *Infrastructure for a Seamless Asia.* Manila.

APPENDIX 1

CAREC Transport and Trade Facilitation Strategy Results-Based Framework

Impact	Outcome	Outcome Milestones/ Indicators	Data Sources	Outputs	Output Milestones/ Indicators	Data Sources
Expanded trade and improved competitiveness	Competitive corridors established across the CAREC region	By 2020, inter-regional trade volume increases by five times (over the 2005 baseline: $7,961 million) Speed with delay (SWD) to travel 500 km on CAREC corridor section increases by 30% to 30 km per hour by 2020 (over the 2010 baseline: 23.5 km per hour)	Direction of Trade Statistics, IMF CAREC CPMM quarterly and annual reports	Multimodal corridor network developed	Completed 7,800 km of expressways or national highways (built or improved) by 2020 Proportion of total CAREC road corridor built or improved: 70% Completed 1,800 km (new constructions) of railways by 2020 Completed 2,000 km of railway track (renovation, electrification, or signalization) by 2020 Five multimodal logistics center operational by 2020 Completed at least five BCPs in the region improved by 2020	CAREC TSCC periodic reports CAREC TSCC periodic reports
	Efficient movement of goods and people facilitated through CAREC corridors and across borders	Typical (defined as "mean" in CPMM) time taken to clear a BCP decreases by 35% to 5.7 hours by 2020 (over the 2010 baseline: 8.7 hours) Cost incurred at a BCP clearance decreases by 20% to $149 by 2020 (from the 2010 baseline: $186)	CAREC CPMM quarterly and annual reports National customs service reports	Trade and border-crossing services improved	Eight CAREC countries acceded to the Revised Kyoto Convention by 2020 (2010 baseline: five) JCC and CBM implemented at five pairs of BCPs along selected CAREC corridors by 2020 (2010 baseline: 1 for JCC and 0 for CBM)	World Customs Organization reports CAREC CCC periodic reports

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Impact	Outcome	Outcome Milestones/ Indicators	Data Sources	Outputs	Output Milestones/ Indicators	Data Sources
					Three national single window facilities established in CAREC countries by 2020 (2010 baseline: one) Regional SPS cooperation programs in line with international standards implemented in five CAREC countries by 2020 (2010 baseline: 0)	National Customs Service Reports
	Sustainable, safe, and user-friendly transport and trade networks developed in the CAREC region	60% of the six CAREC road corridors with international roughness index of less than 4 meters per km by 2020	Road condition survey	Enhanced operational and institutional effectiveness	CAREC road maintenance-related investment and technical assistance projects successfully completed Three performance-based maintenance contract programs initiated by 2020	Project Completion Reports
		A regional road safety strategy prepared by 2017 and its targets achieved by the CAREC countries by 2020	CAREC TSCC periodic reports		Successful integration of road safety features into each CAREC road project	Project Completion Reports
		NJCs established and functioning to support and sustain integrated transport and trade facilitation initiatives	CAREC CCC and TSCC periodic reports		NJC secretariats established in three CAREC countries (2010 baseline: one) One or more CMUs established, using selected pilot corridors by 2020 (2010 baseline: one)	CAREC TSCC and CCC periodic reports
		Transport and trade facilitation capacity strengthened	CAREC Institute, CCC, CFCFA, and TSCC periodic reports		At least six transport and trade-facilitation capacity-building activities conducted annually (2010 baseline: five)	

BCP = border-crossing point, CAREC = Central Asia Regional Economic Cooperation, CBM = coordinated border management, CCC = Customs Cooperation Committee, CFCFA = CAREC Federation of Carrier and Forwarder Associations, CPMM = corridor performance measurement and monitoring, IMF = International Monetary Fund, km = kilometer, JCC = joint customs control, NJC = National Joint Transport and Trade Facilitation Committee, SPS = sanitary and phytosanitary, TSCC = Transport Sector Coordinating Committee.

Source: CAREC Secretariat.

APPENDIX 2

Priority Investment and Technical Assistance Projects

Table A2.1 List of Investment Projects by Country

No.	Country	IP No.	Project Title	Cost ($ million)	Implementation Period
1	AFG	IP 1	Qaisar–Bala Murghab Road	397	2011–2016
2	AFG	IP 3	Laman–Armalick Road	38	2011–2013
3	AFG	IP 4	Pul-e-Khumri–Doshi Road	18	2013–2014
4	AFG	IP 8	Construction of Kabul–Jalalabad Road	195	2011–2013
5	AFG	IP 9	Rozanak/Ghorian–Herat Railway Line Construction (Iran–Afghanistan)	125	2011–2013
6	AFG	IP 11.1	Construction of Shirkhan Bandar–Kunduz–Kholam–Naibabad–Andkhoy–Herat Railway	956	2015–2018
7	AFG	IP 12	Construction of Aqina–Andkhoy Railway (Turkmenistan–Afghanistan)	75	2012–2015
8	AFG	IP 101	Construction of Turkmenistan Border–Herat Railway	242	2014–2016
9	AFG	IP 102	Salang Road Tunnel	480	2014–2017
10	AFG	IP 103	Rehabilitation of Mazar-e-Sharif–Kunduz Road	83	2015–2016
			Subtotal	**2,609**	
11	AZE	IP 1	East–West Highway (M2 Improvement and Expansion to Four Lanes) (Yevlakh–Ganja, Gazakh Border)	1,250	2011–2016
12	AZE	IP 2	Railway Trade and Transport Facilitation	995	2011–2014
13	AZE	IP 3	Acquisition of High Capacity Ferries and Ro/Ros by Caspian Sea Shipping	69	2010–2015
14	AZE	IP 4	Construction of Baku International Sea Trade Port Complex (Alyat)	750	2011–2015 (Phase 1)
15	AZE	IP 5	Hajygabul–Yevlakh and Ganja–Qazakh Roads	1,479	2012–2017
16	AZE	IP 101	LC Baku Port at Alyat	50	2015–2018
			Subtotal	**4,593**	

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Table A2.1 *Continued*

No.	Country	IP No.	Project Title	Cost ($ million)	Implementation Period
17	KAZ	IP 1	Astana–Karaganda Road Rehabilitation	904	2013–2015
18	KAZ	IP 2	Almaty–Kapchagay (Kapshagai) Road Rehabilitation	434	2013–2015
19	KAZ	IP 3	Aktau–Beyneu Road Rehabilitation (MFF CAREC Corridor 2: Mangystau Oblast Section)	1,212	2010–2015
20	KAZ	IP 4	Rehabilitation of Western Europe–Western PRC Transit Corridor (Aktubinskaya Oblast, Kazakhstan, to Xinjiang, PRC)	5,360	2009–2015
21	KAZ	IP 5	Electrification of Almaty–Aktogay Railway Section	984	2015–2018
22	KAZ	IP 6	Electrification of Dostyk–Aktogay Railway Section	510	2015–2019
23	KAZ	IP 7	Electrification of Aktogay–Mointy Railway Section	736	2015–2020
24	KAZ	IP 10	Expansion of Aktau Port	278	2006–2014
25	KAZ	IP 13	Construction of New Railway Line Zhezkazghan–Saksaulskaya	1,978	2012–2016
26	KAZ	IP 17	Shymkent–Tashkent Road	378	2012–2015
27	KAZ	IP 101	Almaty–Khorgos Road	1,068	2013–2015
28	KAZ	IP 102	BCP Improvement for Road Vehicles at Dostyk	8	2014–2015
29	KAZ	IP 103	BCP Improvement for Trains at Dostyk	300	2015–2017
30	KAZ	IP 104	BCP Improvement for Road Vehicles at Khorgos	8	2014–2015
31	KAZ	IP 105	BCP Improvement for Road Vehicles at Tazhen	8	2014–2015
32	KAZ	IP 106	BCP Improvement for Road Vehicles at Konysbaeva	3	2014–2015
33	KAZ	IP 107	LC Aktau Port	31	2015–2017
34	KAZ	IP 108	LC Khorgos	85	2014–2016
			Subtotal	**14,285**	
35	KGZ	IP 1	Bishkek–Torugart Road Rehabilitation	397	2010–2015
36	KGZ	IP 4	Electrification of Lugovaya–Bishkek (Alamedin) Railway	250	2011–2016
37	KGZ	IP 5	Rehabilitation of Balykchy–Chaldovar–Lugovaya Railroad	66	2011–2015
38	KGZ	IP 6	Equipment Purchase for Wagon Repair/Maintenance Facility for Rail	18	2013–2014
39	KGZ	IP 7	Reconstruction of Osh International Airport	105	2011–2014
40	KGZ	IP 8	Kyrgyz ATC System Capacity Enhancement	25	2014–2015
41	KGZ	IP 9	Rehabilitation of Bishkek–Osh Road	192	2014–2020
42	KGZ	IP 11	Construction of the Northern Bypass Road (Bishkek–Kara-Balta)	150	2014–2017
43	KGZ	IP 102	North–South Road: Balykchy–Kochkor–Aral–Kazarman–Jalal-Abad	850	2014–2022
44	KGZ	IP 104	BCP Improvement for Road Vehicles at Karamyk	8	2014–2015
45	KGZ	IP 105	LC Osh	9	2014–2016
			Subtotal	**2,070**	
46	MON	IP 1	Western Regional Road Development (PRC Border at Yarant–Khovd–Ulgii–Ulaanbaishint)	145	2005–2014
47	MON	IP 2	Regional Road Development (Construction of Altanbulag-Ulaanbaatar-Zamiin-Uud)	126	2006–2014
48	MON	IP 5	Construction of New International Airport in Ulaanbaatar	320	2009–2016
49	MON	IP 10	Access Road to the New International Airport in Ulaanbaatar	110	2013–2015

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Table A2.1 *Continued*

No.	Country	IP No.	Project Title	Cost ($ million)	Implementation Period
50	MON	IP 11	Western Regional Road Development Phase 2 MFF—Bayan Ulgii and Khovd Aimags (provinces)	318	2012–2018
51	MON	IP 12	Railway Rolling Stock Maintenance Depot	59	2014–2015
52	MON	IP 13	Railway Centralized Traffic Control Center	38	2014–2016
53	MON	IP 14	Ulaanbaatar City Railway Passenger Station	36	2015–2016
54	MON	IP 101	Undurkhaan (AH32)–Baruun-Urt–Bichigt–Huludao/Chifeng–Jinzhou Road	269	2011–2016
			Subtotal	**1,421**	
55	PAK	IP 101	Realignment of Karakoram Highway at Hunza due to Attabad Lake Overflow, N-35	281	2012–2016
56	PAK	IP 103	Karachi–Hub-Dureji–Sehwan–M-7 (250 km), New Alignment, 6-Lane Motorway	1,050	2013–2017
57	PAK	IP 104	Sehwan–Ratodero, N-55 (Expressway, 199 km)	351	2013–2016
58	PAK	IP 105	Ratodero–Dera Ghazi (DG) Khan, N-55 (Expressway, 200 km)	600	2013–2016
59	PAK	IP 110	Peshawar–Torkham, N-5	150	2013–2015
60	PAK	IP 111	Gwadar–Hoshab (M8)	550	2016–2020
61	PAK	IP 115	BCP Expansion and Upgrading at Torkham, Wagah and Chaman	100	2014–2017
62	PAK	IP 116.1	M-4 (Section 2 Gojra–Shorkot (4-Lane Motorway)	200	2013–2016
63	PAK	IP 116.2	M-4 (Section 3–Shorkot–Khanewal (4-Lane Motorway, including bridges over Ravi and Sidhnai Rivers)	250	2013–2016
64	PAK	IP 118	M-4 (Section 1 Faisalabad–Gojra 4-Lane Motorway)	170	2013–2017
65	PAK	IP 119	Lahore–Peshawar Railway Rehabilitation	665	2013–2016
66	PAK	IP 120.1	Hoshab–Surab (N85 and N25)	450	2016–2020
67	PAK	IP 120.2	Surab–Kalat (N85 and N25)	100	2016–2021
68	PAK	IP 121	E-35 (Section 1 Hasanabdal–Havelian) 4-Lane Expressway	150	2015–2017
69	PAK	IP 122	E-35 (Section 1 Havelian–Mansehra) 4-Lane Expressway	200	2015–2017
70	PAK	IP 123	M-4 (Section 4 Khanewal–Multan) 4-Lane Motorway	150	2016–2017
71	PAK	IP 124	N-70 Muzaffargarh–DG Khan Section (Upgrading of Existing Road to 4-Lane Dual Carriageway)	150	2017–2017
			Subtotal	**5,567**	
72	TAJ	IP 4	Kurgonteppa–Dusti–Panji Poyon Road Rehabilitation	76	Ongoing to 2014
73	TAJ	IP 7	Dushanbe–Tursunzade–Uzbekistan Border Road (62 km)	131	2010–2015
74	TAJ	IP 8	Reconstruction of some sections of Dushanbe–Kurgonteppa–Dangara–Kulyab Road (243.3 km)	550	2012–2015
75	TAJ	IP 9	Vahdat–Yavan Railway Construction (New)	200	2012–2015
76	TAJ	IP 10	Construction of Railway Line of Kolkhozabad–Dusti–Panji Poyon–Afghan Border (50 km)	90	2015–2018
77	TAJ	IP 11	Construction of Ayni–Panjakent to Uzbekistan Border (114 km)	136	2012–2015
78	TAJ	IP 101	LC Panji Poyon	8	2014–2016
79	TAJ	IP 102	CAREC Corridors 3 and 5 Enhancement Project	89	2014–2017
			Subtotal	**1,280**	

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Table A2.1 *Continued*

No.	Country	IP No.	Project Title	Cost ($ million)	Implementation Period
80	TKM	IP 101	Construction of Dashoguz–Shasenem–Gazojak Railway	490	2013–2015
81	TKM	IP 102	Construction of Atamyrat–Ymamnazar–Aqina Railway	297	2012–2013
82	TKM	IP 103	LC Turkmenbashi	42	2015–2017
83	TKM	IP 104	Reconstruction of Ashgabat–Turkmenbashi Highway	900	2012–2017
84	TKM	IP 105	CAREC Maritime Transport Corridor Development	50	2013–2017
			Subtotal	**1,779**	
85	UZB	IP 3	Acquisition of New Cargo and Passenger Locomotives	122	Ongoing to 2014
86	UZB	IP 4	Electrification of Karshi–Termez Railway Section	388	2012–2017
87	UZB	IP 16	First MFF: CAREC Corridor 2 Road Investment Program (Phase 2)	739	2010–2016
88	UZB	IP 17	Electrification of Marokand–Karshi Railway Section	208	2011–2016
89	UZB	IP 18	Electrification of Marokand–Navoi–Bukhara Railway Section	586	2014–2018
90	UZB	IP 19	Reconstruction of Landing Strip in Andijan Airport	16	2010–2013
91	UZB	IP 24	Reconstruction and Modernization of M39	243	2011–2015
92	UZB	IP 26	Construction of Hangar for Boeing-787	40	2014–2015
93	UZB	IP 27	Reconstruction of Airport Complex in Termez Airport	6	2014–2015
94	UZB	IP 30	Second MFF: Second CAREC Corridor 2 Road Investment Program (Phase 3)	600	2011–2017
95	UZB	IP 31	Acquisition and Standardization of Uzbekistan Airway Aircraft	815	2007–2016
96	UZB	IP 32	Reconstruction R87 Guzar–Chim Kukdala	114	2012–2015
97	UZB	IP 33	Construction of Centralized Filling Station in Navoi Airport	35	2013–2014
98	UZB	IP 101	BCP Improvement for Road Vehicles at Yallama	0	2014–2016
99	UZB	IP 102	BCP Improvement for Road Vehicles at Alat	5	2014–2016
100	UZB	IP 103	BCP Improvement for Road Vehicles at Daut-Ata	2	2014–2016
101	UZB	IP 104	LC Angren (Extension)	25	2014–2016
102	UZB	IP 105	Third MFF: Third CAREC 2 Road Investment Program	312	2014–2021
			Subtotal	**4,256**	
103	REG	IP 1	Regional Improvement of Border Services 1: Border Crossing Point Improvement and Single Window Development	61	Ongoing to 2017
104	REG	IP 2	Customs IT Systems Enhancements	100	Ongoing to 2017
105	REG	IP 4	Trade and Industrial Logistics Centers with Information Exchange System	300	Ongoing to 2014
106	REG	IP 101	Regional Improvement of Border Services 2	155	2013–2018
107	REG	IP 102	Regional Improvement of Corridor Efficiency	176	2013–2018
108	REG	IP 103	Regional Upgrade of SPS Measures for Trade	176	2013–2018
			Subtotal	968	
			Total	**38,829**	

AFG = Afghanistan, ATC = Air Traffic Control, AZE = Azerbaijan, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, IT = information technology, LC = Logistics Center, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, MON = Mongolia, PAK = Pakistan, PRC = People's Republic of China, Ro/Ros = roll on/roll off, REG = regional, SPS = sanitary and phytosanitary, TAJ = Tajikistan, TKM = Turkmenistan, UZB = Uzbekistan.

Sources: CAREC Secretariat.

Table A2.2 List of Technical Assistance Projects by Country

Cluster, Country, and TA Number			Project Title	Subsector	Cost ($ million)	Implementation Period
Designated Railway Corridors						
1	REG	TA 101	Economic Analysis of DRCs	Railway	1.0	2014–2016
2	REG	TA 102	Support for Operational Planning for Each DRC-High Level Operational Plan, Common Technical Standards and Approach to Signaling, Telecommunications and Power, and Key Performance Indicators	Railway	4.0	2015–2018
3	REG	TA 103	Governance, Legislative, Insurance, Safety Requirements; and Financial, and Accounting Standards for DRCs	Railway	1.4	2016–2017
4	REG	TA 104	Common Institutional and Organizational Rail Practices for DRCs	Railway	2.0	2016–2017
5	REG	TA 105	Project Management for DRC 10	Railway	2.0	2017–2020
6	PAK	TA 106	Framework for an Independent Railway System in Pakistan	Railway	2.0	2017–2020
7	PAK	TA 107	Pilot Project for a Semi-Autonomous Section of the Pakistan Railway Network	Railway	1.5	2017–2020
				Subtotal	**13.9**	
Public–Private Initiatives						
8	REG	TA 111	Promoting PPP in Supply Chain and Multimodal Transport	PPP	2.0	2015–2017
9	REG	TA 112	Regional Project Development Facility to Prepare Potential PPP	PPP	5.0	2014–2020
10	REG	TA 113	Assessment of DRC Rolling Stock Requirements, Management, and Ownership	Railway	3.0	2015–2017
				Subtotal	**10.0**	
Corridor Management						
11	REG	TA 121	Corridor Management Unit	Port	2.5	2014–2020
12	REG	TA 122	Working with Private Sector in Trade Facilitation (Phase 2: CFCFA Strengthening and CPMM)	Trade	2.0	Ongoing to 2017
13	REG	TA 123	Preparing the Improvement of Corridor Efficiency	Trade	1.5	Ongoing to 2017
14	REG	TA 124	Introducing Elements of Sustainable Transport into National Transport Systems	SocEnv	1.0	2014–2016
				Subtotal	**7.0**	
Trade Facilitation						
15	MON	TA 131	Integrated Master Plan for Zamiin-Uud BCP	Trade	0.6	2014–2016
16	REG	TA 132	Promoting Cooperation in SPS Measures	Trade	0.5	Ongoing to 2017
17	REG	TA 133	Preparing the Regional Improvement of Border Services 2	Trade	1.0	Ongoing to 2017
18	REG	TA 134	Preparing the Regional Upgrade of SPS Measures for Trade	Trade	1.5	Ongoing to 2017
19	REG	TA 135	Regional Interoperability of National Single Windows	Trade	1.0	Ongoing to 2017
20	REG	TA 136	Facilitation of Border Crossing for Drivers, Traders, and Migrant Workers	SocEnv	1.0	2014–2016
21	REG	TA 137	Options for Regional Transit in the CAREC Region	Trade	1.5	Ongoing to 2017
22	REG	TA 138	Coordinated Border Management for Results in CAREC Program	Trade	1.3	Ongoing to 2015
23	REG	TA 139	Aligning Customs Trade Facilitation Measures with Best Practices in CAREC Program	Trade	1.3	Ongoing to 2015
24	REG	TA 140	Joint Control of Transboundary Animal Disease in the PRC and Mongolia	Trade	0.5	Ongoing to 2015
25	REG	TA 6497	Capacity Building for Regional Integrated Trade and Facilitation	Trade	2.8	Ongoing
26	REG	TA 7353	CAREC: Working with the Private Sector in Trade Facilitation	Trade	3.2	Ongoing

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Table A2.2 *Continued*

Cluster, Country, and TA Number			Project Title	Subsector	Cost ($ million)	Implementation Period
27	REG	TA 8153	Policies for Industrial and Service Diversification in Asia in the 21st Century	Trade	0.5	Ongoing
28	REG	TA 8323	Trade Finance Capacity Development, Phase 2	Trade	3.0	Ongoing
29	PAK	TA 8405	Regional Improving Border Services Project	Trade	0.8	Ongoing
				Subtotal	**18.6**	
Transport Facilitation						
30	REG	TA 141	Harmonization of Vehicle Size and Weight Regulations in CAREC Countries	Road	2.0	2014–2015
31	REG	TA 142	Operational Research on Intermodal Services in the Caspian Sea	Port	1.0	2014–2015
32	REG	TA 143	Regional Rail Gauge Impact Assessment	Railway	0.5	2014–2015
33	REG	TA 8160	CAREC: Midterm Review of the Transport and Trade Facilitation Strategy and Implementation Plan	Road	1.7	Ongoing
34	REG	TA 8148	Enhancing Coordination of the CAREC Program	Road	3.0	Ongoing
35	AZE	TA 8071	Second Road Network Development Program	Road	0.2	Ongoing
36	KAZ	TA 8068	CAREC Corridor 3 (Shymkent–Tashkent Road) Rehabilitation Project	Road	0.2	Ongoing
37	KGZ	TA 8107	CAREC Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4	Road	1.0	Ongoing
38	PAK	TA 8406	Provincial Road Improvement Project	Road	0.7	Ongoing
39	TAJ	TA 8052	Roads Improvement Project	Road	0.8	Ongoing
40	TAJ	TA 8373	Preparing the CAREC Corridors 3 and 5 Enhancement Project	Road	0.5	Ongoing
				Subtotal	**11.6**	
Road Safety and Maintenance						
41	REG	TA 151	Road Maintenance Management	Road	3.0	2014–2017
42	REG	TA 152	Country-Specific Road Safety Programs	Road	3.0	2014–2017
				Subtotal	**6.0**	
Other Infrastructure						
43	REG	TA 161	Improvement for Private Ro/Ro Services in the Caspian Sea	Port	1.0	2014–2015
44	AFG	TA 162	Agreement on Gauge/s and Rolling Stock Requirements for Afghanistan Network	Railway	1.5	2014–2016
45	AFG	TA 163	Negotiating O&M Contract for Hairatan–Mazer-e-Sharif Railway	Railway	0.2	2013–2014
46	AFG	TA 164	Implementation of the Afghanistan National Railway Plan (ANRP)	Railway	2.0	2014–2017
				Subtotal	**4.7**	
Other Infrastructure Related						
47	REG	TA 171	Developing Regional Cooperation Programs for the PRC and Mongolia (Phase 3)	Trade	0.8	Ongoing to 2017
48	REG	TA 172	Development of CAREC Member Countries Transport Policy and Master Plan	Road/ Railway	2.0	2014–2017
				Sub-total	**2.8**	
				Total	**74.6**	

AFG = Afghanistan, ANRP = Afghanistan National Railway Plan, AZE = Azerbaijan, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, CFCFA = CAREC Federation of Carrier and Forwarder Associations, CPMM = corridor performance measurement and monitoring, DRC = designated rail corridor, IP = investment project, IT = information technology, LC = Logistics Center, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, MON = Mongolia, O&M = operations and maintenance, PPP = public–private partnership, PRC = People's Republic of China, REG = regional, Ro/Ro = roll on/roll off, SPS = sanitary and phytosanitary, TAJ = Tajikistan, UZB = Uzbekistan.

Source: CAREC Secretariat.

APPENDIX 3

Updated CAREC Corridor Maps

Table A3.1 CAREC Corridor 1: Europe–East Asia

CAREC 1a		CAREC 1b		CAREC 1c	
Country/Route		Country/Route		Country/Route	
PRC	Hami/Hexi	PRC	Hami/Hexi	PRC	Hami/Hexi
	Turpan		Turpan		Turpan
	Urumqi		Urumqi		Kashi
	Kuytun		Kuytun		Torugart/Topa (road) - BCP
	Jinghe		Jinghe	KGZ	Torugart - BCP
	Alashankou (rail and road) - BCP		Khorgos (road) - BCP		Naryn
KAZ	Dostyk (rail and road) - BCP	KAZ	Korgas (road) - BCP/LC		Balykchy
	Aktogay		Almaty		Kochkor (extension)
	Mointy		Merke - BCP		Jalal-Abad (extension)
	Karaganda		Taraz		Bishkek
	Astana		Shymkent		Chaldovar - BCP
	Kostanai		Kyzyl-Orda	KAZ	Merke - BCP
	Kairak (rail and road) - BCP		Aktobe		Shu
RUS	Troitsk (rail and road) - BCP		Zhaisan (rail and road) - BCP		Mointy
		RUS	Kos Aral (rail) Novomarkovka (Sagarchin) (road) - BCP		Zharyk/Akshatau
					Karaganda
					Astana
					Kostanai
					Kairak (rail and road) - BCP
				RUS	Troitsk (rail and road) - BCP

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

Source: CAREC Secretariat.

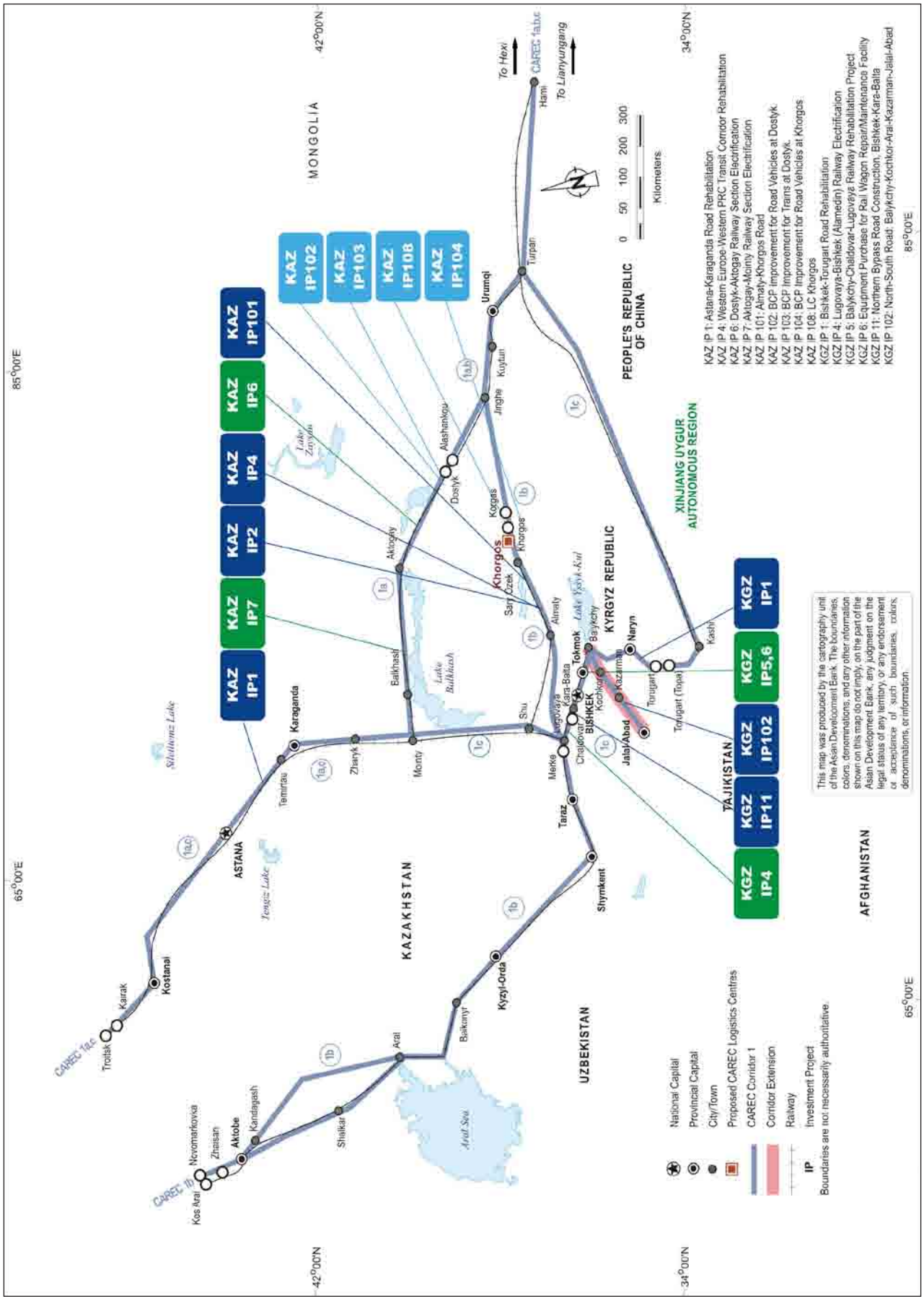
Table A3.2 Investment Projects in CAREC Corridor 1

KAZ	IP 1	Astana–Karaganda Road Rehabilitation
KAZ	IP 4	Rehabilitation of Western Europe–Western PRC Transit Corridor (Aktubinskaya Oblast, Kazakhstan, to Xinjiang, PRC)
KAZ	IP 6	Electrification: Dostyk–Aktogay Railway Section
KAZ	IP 7	Electrification: Aktogay–Mointy Railway Section
KAZ	IP 101	Almaty–Korgas Road
KAZ	IP 102	BCP Improvement for Road Vehicles at Dostyk
KAZ	IP 103	BCP Improvement for Trains at Dostyk
KAZ	IP 104	BCP Improvement for Road Vehicles at Khorgos
KAZ	IP 108	LC Khorgos
KGZ	IP 1	Bishkek–Torugart Road Rehabilitation
KGZ	IP 4	Electrification of Lugovaya–Bishkek (Alamedin) Railway
KGZ	IP 5	Balykchy–Chaldovar–Lugovaya Railroad
KGZ	IP 6	Equipment Purchase for Wagon Repair/Maintenance Facility for Rail
KGZ	IP 11	Construction of the Northern Bypass Road, Bishkek–Kara-Balta (60 km)
KGZ	IP 102	North–South Road Balykchy–Kochkur–Aral–Kazarman–Jalal-Abad

ATC = Air Traffic Center, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, LC = Logistics Center, PRC = People's Republic of China.

Source: CAREC Secretariat.

Map A3.1 Central Asia Regional Economic Cooperation (CAREC) Corridor 1



Source: CAREC Secretariat.

Table A3.3 CAREC Corridor 2: Mediterranean–East Asia

CAREC 2a		CAREC 2b		CAREC 2c		CAREC 2d	
Country/Route		Country/Route		Country/Route		Country/Route	
PRC	Hami/Hexi	PRC	Hami/Hexi	PRC	Hami/Hexi	PRC	Hami/Hexi
	Turpan		Turpan		Turpan		Turpan
	Kashi		Kashi		Urumqi		Kashi
	Yierkeshitan (road) - BCP		Yierkeshitan (road) - BCP		Kuytun		Yierkeshitan (road) - BCP
KGZ	Irkeshtam (road) - BCP	KGZ	Irkeshtam (road) - BCP		Jinghe	KGZ	Irkeshtam (road) - BCP
	Sary-Tash		Sary-Tash		Alashankou (rail and road) - BCP		Sary-Tash
	Osh - LC		Osh - LC	KAZ	Dostyk (rail and road) - BCP		Karamyk - BCP
	Kara-Suu (rail/road)		Kara-Suu (rail/road)		Aktogay	TAJ	Dushanbe
UZB	Kara-Suu/Savay (rail/road)		Kara-Suu/Savay (rail/road)		Mointy		Kurgonteppa
	Andijan (split)	UZB	Andijan (split)		Zharyk		Panji Poyon - LC/BCP
	Kokland - BCP		Kokland - BCP		Zhezkazghan	AFG	Shirkhan Bandar - BCP
TAJ	Kanibadam (rail) - BCP	TAJ	Kanibadam (rail) - BCP		Saksaulskaya		Kunduz
	Nau (rail) - BCP		Nau (rail) - BCP		Shalkar		Mazar-e-Sharif
UZB	Bekabad (rail) - BCP	UZB	Bekabad (rail) - BCP		Beyneu (rail) Tazhen (road) - BCP		Andkhoy
	Djizzak (convergence)		Djizzak (convergence)		Aktau - LC		Aqina
	Andijan (split)		Andijan (split)	AZE	Baku (port) - LC	TKM	Farap (rail/road) - BCP
	Angren - LC		Angren - LC		Yevlakh		Mary
	Tashkent		Tashkent		Agstafa	AFG	Herat
	Djizzak (convergence)		Djizzak (convergence)	GEO	Beyuk Kesik (rail) and Red Bridge (road) - BCP		
	Samarkand		Samarkand				
	Navoi (split)		Navoi (split)				
	Bukhara		Bukhara				
	Urgench (converge)		Alat - BCP				
	Navoi (split)	TKM	Farap - BCP				
	Uchkuduk		Mary				
	Urgench (converge)		Ashgabat				
	Nukus		Turkmenbashi - LC				
KAZ	Karakalpakstan (rail/road)	AZE	Baku (port) - LC				
	Beyneu (rail)/Tazhen (road) - BCP		Alyat - LC				
	Aktau - LC		Yevlakh				
AZE	Baku (port) - LC		Agstafa				
	Yevlakh		Beyuk Kesik (rail) and Red Bridge (road) - BCP				
	Agstafa	GEO	Gabdabani (rail) and Red Bridge (road) - BCP				
	Beyuk Kesik (rail) and Red Bridge (road) - BCP						
GEO	Gabdabani (rail) and Red Bridge (road) - BCP						

AFG = Afghanistan, AZE = Azerbaijan, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, GEO = Georgia, IP = investment project, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, LC = Logistics Center, PRC = People's Republic of China, TAJ = Tajikistan, TKM = Turkmenistan, UZB = Uzbekistan.

Source: CAREC Secretariat.

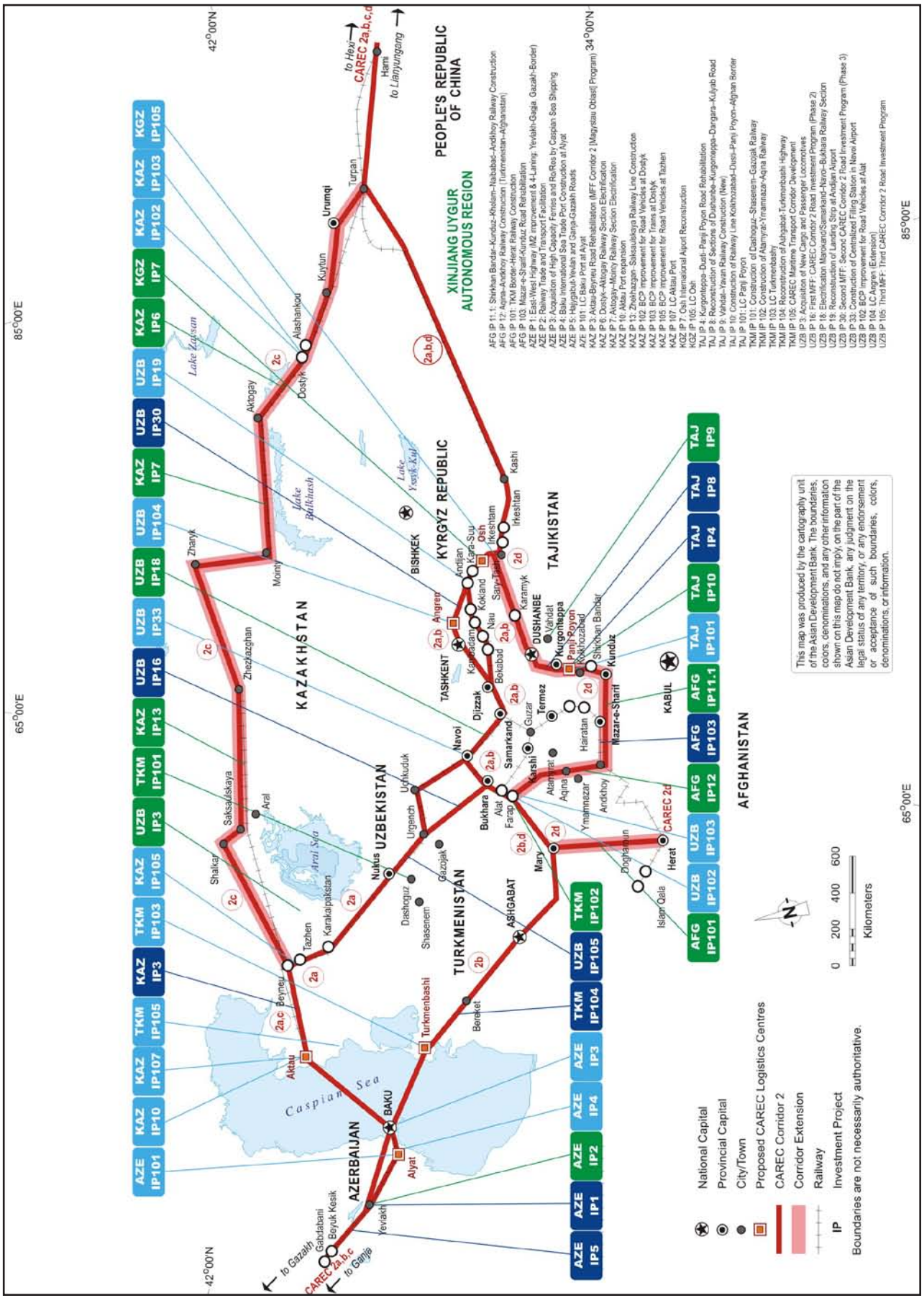
Table A3.4 Investment Projects in CAREC Corridor 2

AFG	IP 11.1	Construction of Railway Line of Shirkhan Bandar–Kunduz–Kholam–Naibabad–Andkhoy–Herat
AFG	IP 12	Aqina–Andkhoy Railway Construction (Turkmenistan–Afghanistan)
AFG	IP 101	TKM Border–Herat Railway Construction
AFG	IP 103	Mazar-e-Sharif–Kunduz Road Rehabilitation
AZE	IP 1	East–West Highway (M2 Improvement and Expansion to 4-Lanes) (Yevlakh–Ganja, Gazakh Border)
AZE	IP 2	Railway Trade and Transport Facilitation
AZE	IP 3	Acquisition of High Capacity Ferries and Ro/Ros by Caspian Sea Shipping
AZE	IP 4	Construction of Baku International Sea Trade Port Complex (Alyat)
AZE	IP 5	Hajygabul–Yevlakh and Ganja–Qazakh Roads
AZE	IP 101	LC Baku Port at Alyat
KAZ	IP 3	Aktau–Beyneu Road Rehabilitation (MFF CAREC Corridor 2 [Mangystau Oblast Section])
KAZ	IP 6	Electrification of Dostyk–Aktogay Railway Section
KAZ	IP 7	Electrification of Aktogay–Mointy Railway Section
KAZ	IP 10	Expansion of Aktau Port
KAZ	IP 13	Construction of New Railway Line Zhezkazghan–Saksaulskaya
KAZ	IP 102	BCP Improvement for Road Vehicles at Dostyk
KAZ	IP 103	BCP Improvement for Trains at Dostyk
KAZ	IP 105	BCP Improvement for Road Vehicles at Tazhen
KAZ	IP 107	LC Aktau Port
KGZ	IP 7	Reconstruction of Osh International Airport
KGZ	IP 105	LC Osh
TAJ	IP 4	Kurgonteppa–Dusti–Panji Poyon Road Rehabilitation
TAJ	IP 8	Reconstruction of Some Sections of Dushanbe–Kurgonteppa–Dangara–Kulyab Road (243.3 km)
TAJ	IP 9	Vahdat–Yavan Railway Construction (New)
TAJ	IP 10	Construction of Railway Line of Kolkhozabad–Dusti–Panji Poyon–Afghan Border (50 km)
TAJ	IP 101	LC Panji Poyon
TKM	IP 101	Construction of Dashoguz–Shasenem–Gazojak Railway
TKM	IP 102	Construction of Atamyrat–Ymamnazar–Aqina Railway
TKM	IP 103	LC Turkmenbashi
TKM	IP 104	Design and Construction of Ashgabat–Turkmenbashi Highway
TKM	IP 105	CAREC Maritime Transport Corridor Development
UZB	IP 3	Acquisition of New Cargo and Passenger Locomotives
UZB	IP 16	First MFF: CAREC Corridor 2 Road Investment Program (Phase 2)
UZB	IP 18	Electrification of Marokand–Navoi–Bukhara Railway Section
UZB	IP 19	Reconstruction of Landing Strip in Andijan Airport
UZB	IP 30	Second MFF: Second CAREC Corridor 2 Road Investment Program (Phase 3)
UZB	IP 33	Construction of Centralized Filling Station in Navoi Airport
UZB	IP 102	BCP Improvement for Road Vehicles at Alat
UZB	IP 103	BCP Improvement for Road Vehicles at Daut-Ata
UZB	IP 104	LC Angren (Extension)
UZB	IP 105	Third MFF: Third CAREC Corridor 2 Road Investment Program

AFG = Afghanistan, AZE = Azerbaijan, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, LC = Logistics Center, MFF = multitranche financing facility, PRC = People's Republic of China, Ro/Ro = roll on/roll off, TAJ = Tajikistan, TKM = Turkmenistan, UZB = Uzbekistan.

Source: CAREC Secretariat.

Map A3.2 Central Asia Regional Economic Cooperation (CAREC) Corridor 2



Source: CAREC Secretariat.

Table A3.5 CAREC Corridor 3: Russian Federation–Middle East and South Asia

CAREC 3a	
Country/Route	
RUS	Rubtsovsk
	Veseloyarsk (rail and road) - BCP
KAZ	Aul (rail and road) - BCP
	Semey
	Charskaya
	Aktogay
	Taldykorgan
	Kapchagay
	Almaty
	Merke - BCP
	Taraz
	Shymkent
	Saryagash/Yallama (rail) and Zhibek Zholy (road) - BCP
UZB	Keles (rail) and Gisht Kuprik (road) - BCP
	Tashkent
	Syrdaryinskaya
	Djizzak
	Samarkand
	Navoi
	Bukhara
	Alat (rail and road) - BCP
TKM	Farap (rail and road) -BCP
	Mary
	Sarahs
IRN	Sarakhs

CAREC 3b	
Country/Route	
RUS	Rubtsovsk
	Veseloyarsk (rail and road) - BCP
KAZ	Aul (rail and road) - BCP
	Semey
	Charskaya
	Aktogay
	Taldykorgan
	Kapchagay
	Almaty
	Merke - BCP
KGZ	Chaldovar (rail) - BCP
	Kara-Balta
	Bishkek
	Kordai (extension)
	Osh-LC
	Sary-Tash
	Karamyk (road) - BCP
TAJ	Karamyk (road) - BCP
	Dushanbe
	Tursunzade
	Pakhtaabad (rail and road) - BCP
UZB	Saryasia (rail and road) - BCP
	Termez/Airatom (rail and road) - BCP
AFG	Hairatan (rail and road) - BCP
	Mazar-e-Sharif
	Andkhoy
	Herat (split)
	Islam Qala (road) - (extension) BCP
IRN	Dogharoun (road) - (extension) BCP

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

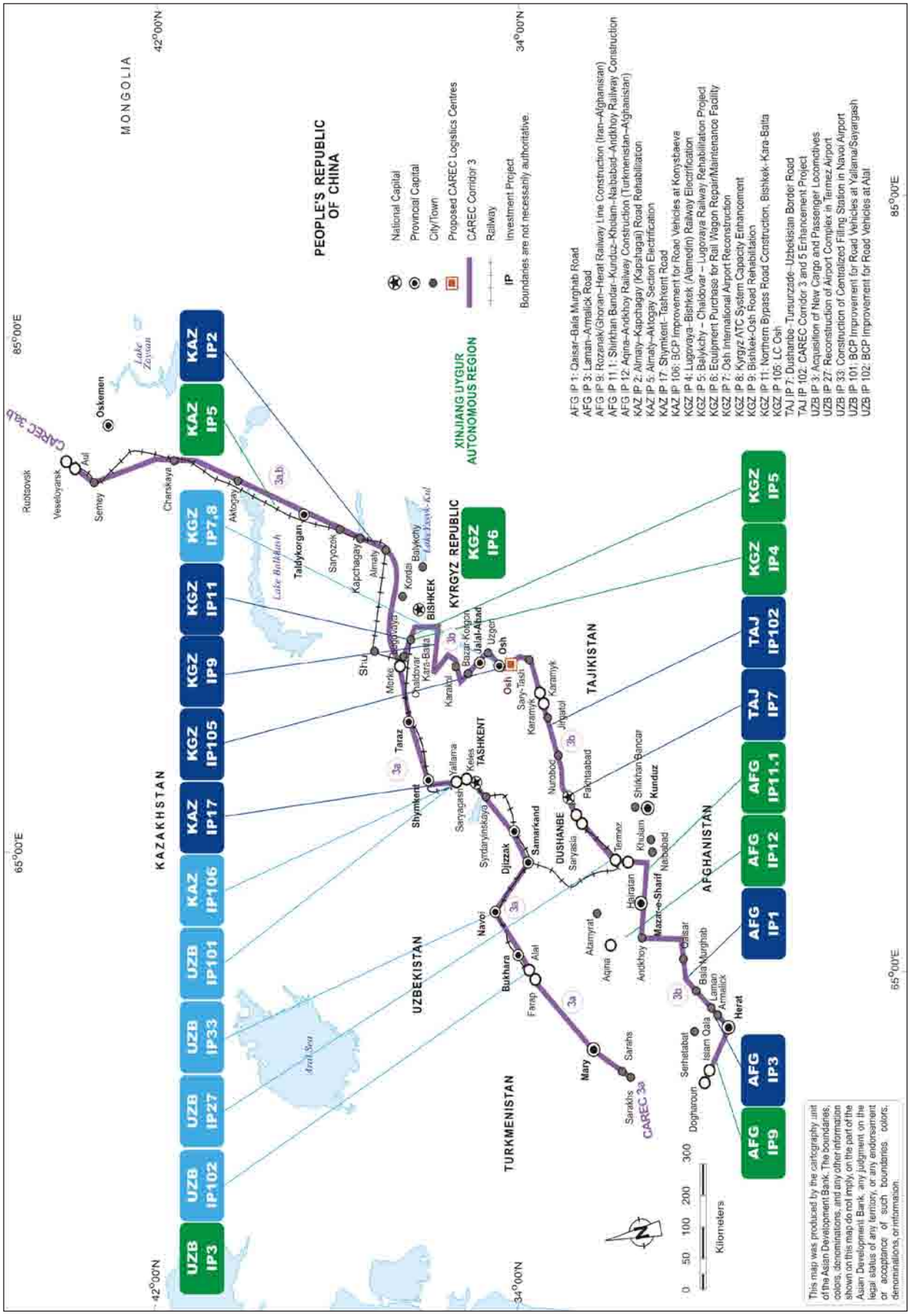
Table A3.6 Investment Projects in CAREC Corridor 3

AFG	IP 1	Qaisar–Bala Murghab Road
AFG	IP 3	Laman–Armalick Road
AFG	IP 9	Rozanak/Ghorian–Herat Railway Line Construction (Iran–Afghanistan)
AFG	IP 11.1	Construction of Shirkhan Bandar–Kunduz–Kholam–Naibabad–Andkhoy–Herat Railway
AFG	IP 12	Aqina–Andkhoy Railway Construction (Turkmenistan–Afghanistan)
KAZ	IP 2	Almaty–Kapchagay (Kapshagai) Road Rehabilitation
KAZ	IP 5	Electrification of Almaty–Aktogay Railway Section
KAZ	IP 17	Shymkent–Tashkent Road
KAZ	IP 106	BCP Improvement for Road Vehicles at Konysbaeva
KGZ	IP 4	Electrification of Lugovaya–Bishkek (Alamedin) Railway
KGZ	IP 5	Rehabilitation of Balykchy–Chaldovar–Lugovaya Railroad
KGZ	IP 6	Equipment Purchase for Wagon Repair/Maintenance Facility for Rail
KGZ	IP 7	Reconstruction of Osh International Airport
KGZ	IP 8	Kyrgyz ATC System Capacity Enhancement
KGZ	IP 9	Rehabilitation of Bishkek–Osh Road
KGZ	IP 11	Construction of the Northern Bypass Road, Bishkek–Kara-Balta
KGZ	IP 105	LC Osh
TAJ	IP 7	Dushanbe–Tursunzade–Uzbekistan Border Road (62 km)
TAJ	IP 102	CAREC Corridors 3 and 5 Enhancement Project
UZB	IP 3	Acquisition of New Cargo and Passenger Locomotives
UZB	IP 27	Reconstruction of Airport Complex in Termez Airport
UZB	IP 33	Construction of Centralized Filling Station in Navoi Airport
UZB	IP 101	BCP Improvement for Road Vehicles at Yallama
UZB	IP 102	BCP Improvement for Road Vehicles at Alat

AFG = Afghanistan, ATC = Air Traffic Control, BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, IP = investment project, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, LC = Logistics Center, TAJ = Tajikistan, UZB = Uzbekistan.

Source: CAREC Secretariat.

Map A3.3 Central Asia Regional Economic Cooperation (CAREC) Corridor 3



Source: CAREC Secretariat.

Table A3.7 CAREC Corridor 4: Russian Federation–East Asia

CAREC 4a		CAREC 4b		CAREC 4c	
Country/Route		Country/Route		Country/Route	
RUS	Tashanta (road) - BCP	RUS	Naushki - BCP	RUS	Naushki – BCP
MON	Ulaanbaishint/Tsagaanur (road) - BCP	MON	Sukhbaatar - BCP	MON	Sukhbaatar – BCP
	Olgiy		Ulaanbaatar		Ulaanbaatar
	Hovd		Zamiin-Uud (rail/road) - BCP		Undurkhaan
	Yarant (road) - BCP	PRC	Erenhot (rail/road) - BCP		Baruun-Urt
PRC	Takeshikent (road) - BCP				Bichigt – BCP
	Urumqi				

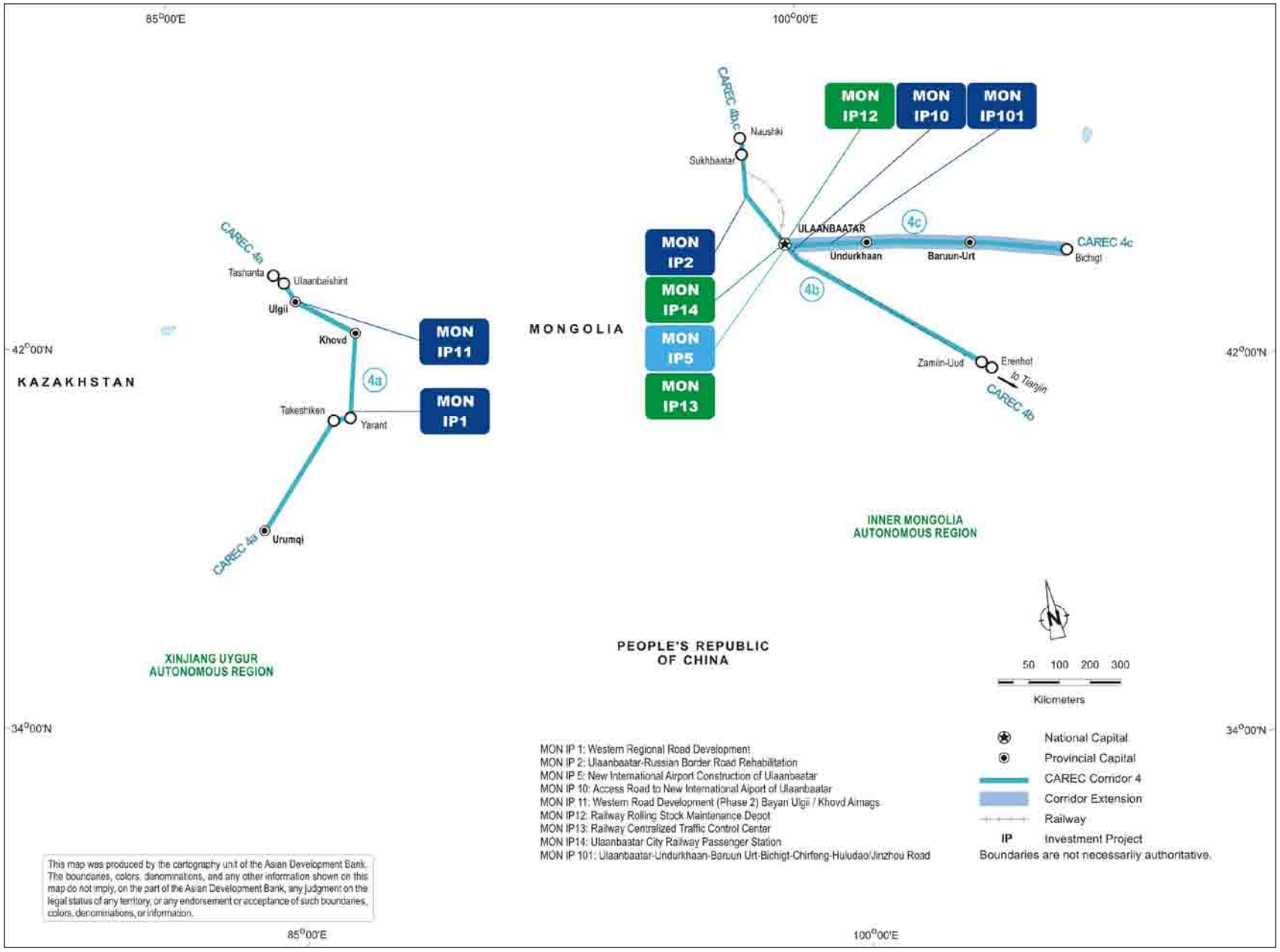
BCP = border crossing point, CAREC = Central Asia Regional Economic Cooperation, MON = Mongolia, PRC = People's Republic of China, RUS = Russian Federation.
Source: CAREC Secretariat.

Table A3.8 Investment Projects in CAREC Corridor 4

MON	IP 1	Western Regional Road Development (PRC Border at Yarant–Khovd–Ulgii–Ulaanbaishint)
MON	IP 2	Regional Road Development (Construction of Altanbulag-Ulaanbaatar-Zamiin-Uud)
MON	IP 5	Construction of New International Airport in Ulaanbaatar
MON	IP 10	Access Road to the New International Airport in Ulaanbaatar
MON	IP 11	Western Regional Road Development Phase 2 MFF—Bayan Ulgii and Khovd Aimags (provinces)
MON	IP 12	Railway Rolling Stock Maintenance Depot
MON	IP 13	Railway Centralized Traffic Control Centre
MON	IP 14	Ulaanbaatar City Railway Passenger Station
MON	IP 101	Undurkhaan (AH32)–Baruun-Urt–Bichigt–Huludao/Chifeng–Jinzhou Road

CAREC = Central Asia Regional Economic Cooperation, IP = investment project, PRC = People's Republic of China.
Source: CAREC Secretariat.

Map A3.4 Central Asia Regional Economic Cooperation (CAREC) Corridor 4



Source: CAREC Secretariat.

Table A3.9 CAREC Corridor 5: East Asia–Middle East and South Asia

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

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

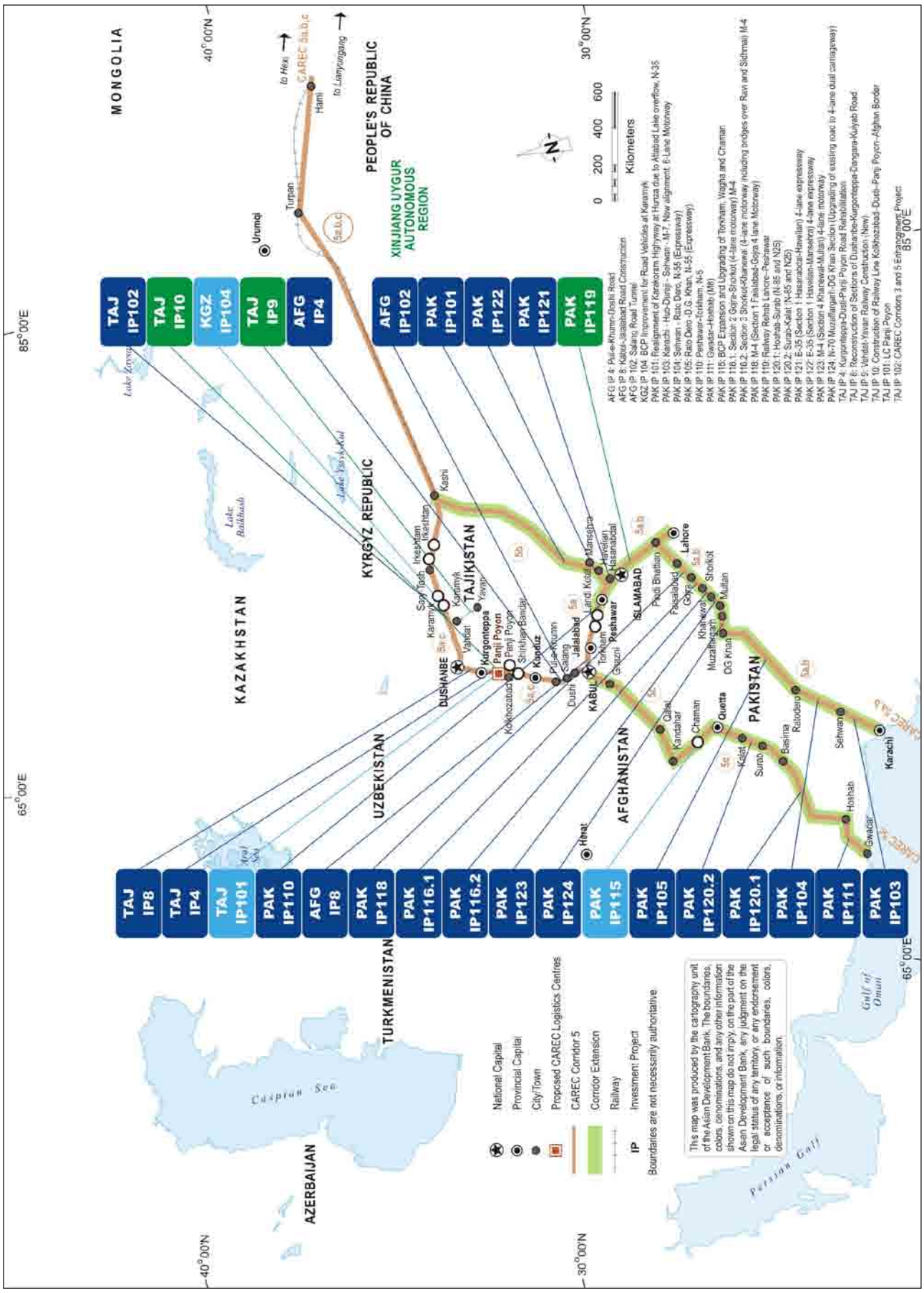
Source: CAREC Secretariat.

Table A3.10 Investment Projects in CAREC Corridor 5

AFG	IP 4	Pul-e-Khumri–Doshi Road
AFG	IP 8	Construction of Kabul–Jalalabad Road
AFG	IP 102	Salang Road Tunnel
KGZ	IP 104	BCP Improvement for Road Vehicles at Karamyk
PAK	IP 101	Realignment of Karakoram Highway at Hunza due to Attabad Lake overflow, N-35
PAK	IP 103	Karachi–Hub-Dureji–Sehwan–M-7 (250 km), New Alignment, 6-Lane Motorway
PAK	IP 104	Sehwan–Ratodero, N-55 (Expressway, 199 km)
PAK	IP 105	Ratodero–Dera Ghazi (DG) Khan, N-55 (Expressway, 200 km)
PAK	IP 110	Peshawar–Torkham, N-5
PAK	IP 111	Gwadar–Hoshab (M8)
PAK	IP 115	BCP Expansion and Upgrading at Torkham, Wagah, and Chaman
PAK	IP 116.1	M-4 (Section 2 Gojra–Shorkot [4-Lane Motorway])
PAK	IP 116.2	M-4 (Section 3 Shorkot–Khanewal [4-Lane Motorway, including Bridges over Ravi and Sidhnai Rivers])
PAK	IP 118	M-4 (Section 1 Faisalabad–Gojra 4-Lane Motorway)
PAK	IP 119	Railway Rehabilitation Lahore–Peshawar
PAK	IP 120.1	Hoshab–Surab (N85 and N25)
PAK	IP 120.2	Surab–Kalat (N85 and N25)
PAK	IP 121	E-35 (Section 1 Hasanabdal–Havelian) 4-Lane Expressway
PAK	IP 122	E-35 (Section 1 Havelian–Mansehra) 4-Lane Expressway
PAK	IP 123	M-4 (Section 4 Khanewal–Multan) 4-Lane Motorway
PAK	IP 124	N-70 Muzaffargarh–DG Khan Section (Upgrading of Existing Road to 4-Lane Dual Carriageway)
TAJ	IP 4	Kurgonteppa–Dusti–Panji Poyon Road Rehabilitation
TAJ	IP 8	Reconstruction of Some Sections of Dushanbe–Kurgonteppa–Dangara–Kulyab Road (243.3 km)
TAJ	IP 9	Vahdat–Yavan Railway Construction (New)
TAJ	IP 10	Construction of Railway Line of Kolkhozabad–Dusti–Panji Poyon–Afghan Border (50 km)
TAJ	IP 101	LC Panji Poyon
TAJ	IP 102	CAREC Corridors 3 and 5 Enhancement Project

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

Map A3.5 Central Asia Regional Economic Cooperation (CAREC) Corridor 5



Source: CAREC Secretariat.

Table A3.11 CAREC Corridor 6: Europe–Middle East and South Asia

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

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

Source: CAREC Secretariat.

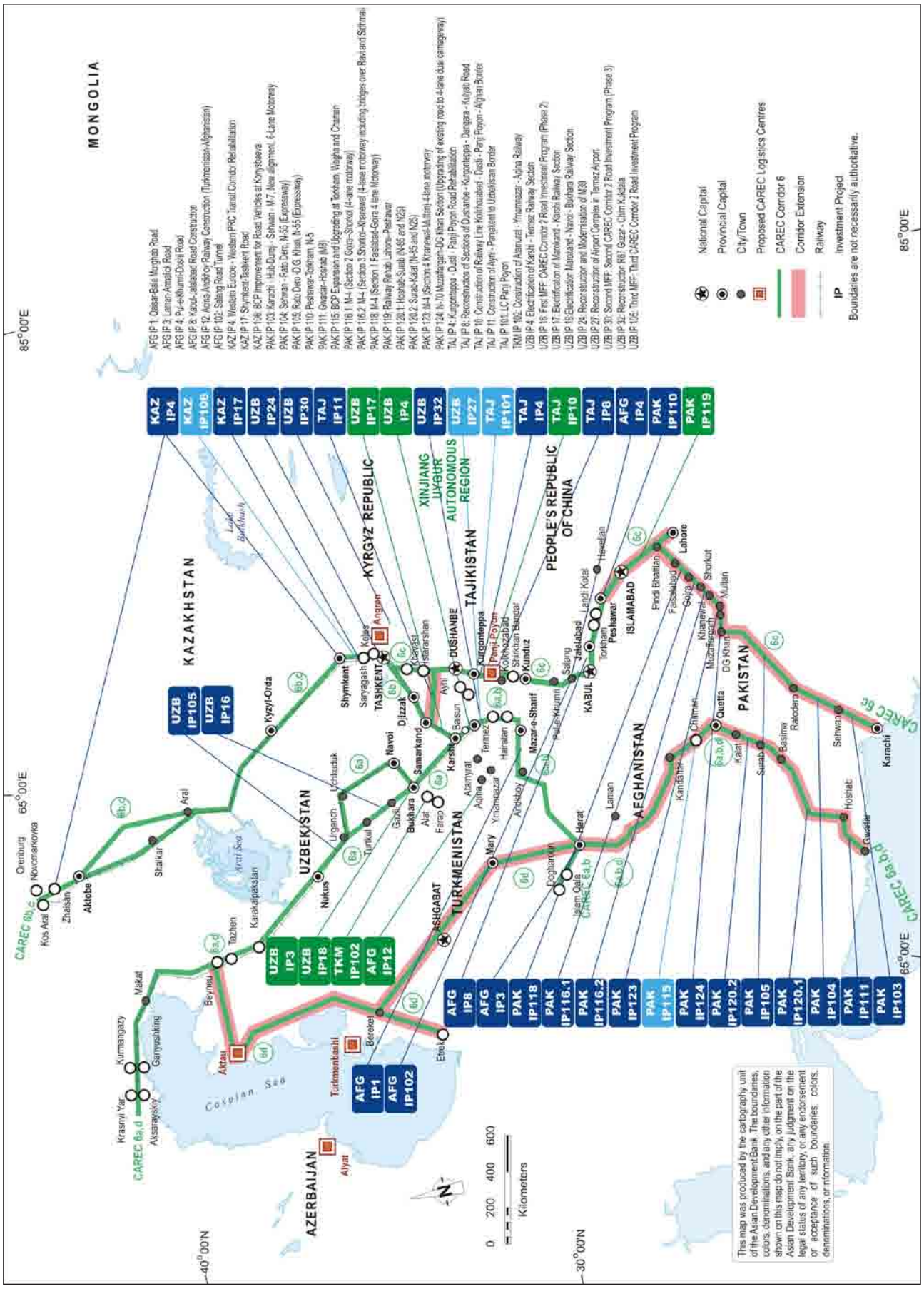
Table A3.12 Investment Projects in CAREC Corridor 6

AFG	IP 1	Qaisar–Bala Murghab Road
AFG	IP 3	Laman–Armalick Road
AFG	IP 4	Pul-e-Khumri–Doshi Road
AFG	IP 8	Construction of Kabul–Jalalabad Road
AFG	IP 12	Aqina–Andkhoy Railway Construction (Turkmenistan–Afghanistan)
AFG	IP 102	Salang Road Tunnel
KAZ	IP 4	Rehabilitation of Western Europe–Western PRC Transit Corridor
KAZ	IP 17	Shymkent–Tashkent Road
KAZ	IP 106	BCP Improvement for Road Vehicles at Konysbaeva
PAK	IP 103	Karachi–Hub-Dureji–Sehwan–M-7 (250 km), New Alignment, 6-Lane Motorway
PAK	IP 104	Sehwan–Ratodero, N-55 (Expressway, 199 km)
PAK	IP 105	Ratodero–Dera Ghazi (DG) Khan, N-55 (Expressway, 200 km)
PAK	IP 110	Peshawar–Torkham, N-5
PAK	IP 111	Gwadar–Hoshab (M8)
PAK	IP 115	BCP Expansion and Upgrading at Torkham, Wagha, and Chaman
PAK	IP 116.1	M-4 (Section 2 Gojra–Shorkot [4-Lane Motorway])
PAK	IP 116.2	M-4 (Section 3 Shorkot–Khanewal [4-Lane Motorway, including Bridges over Ravi and Sidhnai Rivers])
PAK	IP 118	M-4 (Section 1 Faisalabad–Gojra [4-Lane Motorway])
PAK	IP 119	Railway Rehabilitation Lahore–Peshawar
PAK	IP 120.1	Hoshab–Surab (N85 and N25)
PAK	IP 120.2	Surab–Kalat (N85 and N25)
PAK	IP 123	M-4 (Section 4 Khanewal–Multan) 4-Lane Motorway
PAK	IP 124	N-70 Muzaffargarh–DG Khan Section (Upgrading of Existing Road to 4-Lane Dual Carriageway)
TAJ	IP 4	Kurgonteppa–Dusti–Panji Poyon Road Rehabilitation
TAJ	IP 8	Reconstruction of Some Sections of Dushanbe–Kurgonteppa–Dangara–Kulyab Road (243.3 km)
TAJ	IP 9	Vahdat–Yavan Railway Construction (New)
TAJ	IP 10	Construction of Railway Line of Kolkhozabad–Dusti–Panji Poyon–Afghan Border (50 km)
TAJ	IP 11	Construction of Ayni–Panjakent to Uzbekistan Border (114 km)
TAJ	IP 101	LC Panji Poyon
TKM	IP 102	Construction of Atamurat–Ymamnazar–Aqina Railway
UZB	IP 4	Electrification of Karshi–Termez Railway Section
UZB	IP 16	First MFF: CAREC Corridor 2 Road Investment Program (Phase 2)
UZB	IP 17	Electrification of Marokand–Karshi Railway Section
UZB	IP 18	Electrification of Marokand–Navoi–Bukhara Railway Section
UZB	IP 24	Reconstruction and Modernization of M39
UZB	IP 27	Reconstruction of Airport Complex in Termez Airport
UZB	IP 30	Second MFF: Second CAREC Corridor 2 Road Investment Program (Phase 3)
UZB	IP 32	Reconstruction R87 Guzar–Chim Kukdala

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

Source: CAREC Secretariat.

Map A3.6 Central Asia Regional Economic Cooperation (CAREC) Corridor 6



Source: CAREC Secretariat.

APPENDIX 4

Designated Rail Corridors

Based on the midterm review (MTR) of the Transport and Trade Facilitation Strategy (TTFS), four directions advocated for inclusion in the Refined TTFS have a direct bearing on the role of railways in the Central Asia Regional Economic Cooperation (CAREC) Program:

(i) extension of the horizon to 2020 to align with the CAREC 2020 vision document, which gives more time for potential railway development;
(ii) partial realignment of the investment focus from road to rail;
(iii) increased focus on transport intermodal connectivity; and
(iv) increased focus on technical assistance (TA) and transport operational-performance issues, including those associated with railways.

Within the CAREC region, the dominant mode for freight has been road transportation, and the TTFS has emphasized road network development. However, rail transport is the dominant mode for export, import, and transit traffic, e.g., long-distance movements. There are an increasing number of unit train operations providing partially scheduled services. Private sector operators organize these services, but rely on the national railways to provide coordinated schedules. So far, these services have provided connections to selected ports in the People's Republic of China (PRC) and the Baltics.

For rail projects, the planning horizon is typically 50 to 100 years. Improvements in rail transport require not only sufficient capacity to allow the unimpeded movement of trains, but also the coordination of movements across borders and through neighboring countries to allow a scheduled movement from origin to destination. Capacity can be increased through investments in infrastructure, including rehabilitation of existing track, double tracking, improvements in signalization, and electrification. Coordination requires changes in procedures and management, and is therefore more difficult to achieve.

For long-distance freight and specific passenger services such as high-speed trains, it is common practice for those trains to be given priority. This allows the priority service to move through the rail system with minimum delay. When this prioritized service operates over a selected linear rail section or route, it is referred to as a "designated rail corridor" (DRC). Train services in the DRCs are scheduled to enter and exit corridors at specific times; they only stop at designated locations, and meet set performance and reliability criteria such as journey time. Once a train leaves a DRC, it is governed by the local regional rail systems.

The advantages of the DRC approach are improved reliability, reduced costs, reduced end-to-end times, more efficient tracking of goods, greater security, and the ability to move large quantities of goods over long distances quickly and efficiently. This will potentially allow premium tariffs.

For a DRC to function efficiently, standardization and harmonization of the elements that form the regional rail system across DRCs is vital, particularly in terms of fixed performance norms. This will require greater coordination among the railways, involving

(i) a high-level rail operational plan;
(ii) common technical standards, rules and regulations, processes and procedures;
(iii) harmonization of financial and accounting cost bases;
(iv) agreement on key performance indicators;
(v) agreement on maintenance strategies, requirements, and cost base; and
(vi) agreement on liability and insurance coverage.

It is envisaged that most of the rolling stock would be provided by the private sector or through public–private partnerships, while the DRCs would provide the locomotive fleet and determine the schedules. Movements along DRCs would be between the gateway ports and logistics hubs, with the exception of the route through Turkey, wherein the latter includes a route across the Caspian Sea, and would require coordination between the rail services on each side and shipping services.

The sites for logistics hubs would be determined as part of the design of the DRCs. The railways would construct and operate the rail yards and truck transfer facilities, whereas private logistics service providers would construct and operate facilities for storage, cargo handling, and value-added services for the cargo. The ports would provide facilities for the transfer of containers to and from the DRCs, preferably on-dock. The national customs agencies would develop procedures for the rapid clearance of goods moving in transit along the DRCs.

As a means to scale of scaling up railway interventions and associated services toward achieving CAREC goals, the concept of applying DRCs to the CAREC region will be studied and piloted. Based on (i) traffic and trade volumes, (ii) existing railways, (iii) railways under construction, (iv) planned railways, and (v) railways under discussion for possible investment, 10 initial DRCs have been identified for further investigation, including two DRCs that will serve as pilots for the concept.

It is envisaged that a three-phased approach will be followed: (i) short-term, from 2014 to 2015; (ii) medium-term, from 2015 to 2020; and (iii) long-term, from 2020 to 2030. Under the Refined TTFS, priorities up to 2020 include:

(i) Use TA resources to establish the corridor management unit (CMU), including a specific group of railway specialists charged with railway planning and operations coordination by the end of 2014.
(ii) Once established, each CMU will undertake a gap analysis based on the MTR and Refined TTFS, prioritize required studies and TA resources to assess the application of the DRC concept to the CAREC region, and initiate the procurement of consultants by the end of 2015.
(iii) Each CMU, with assistance of the CAREC Institute and the Secretariat,

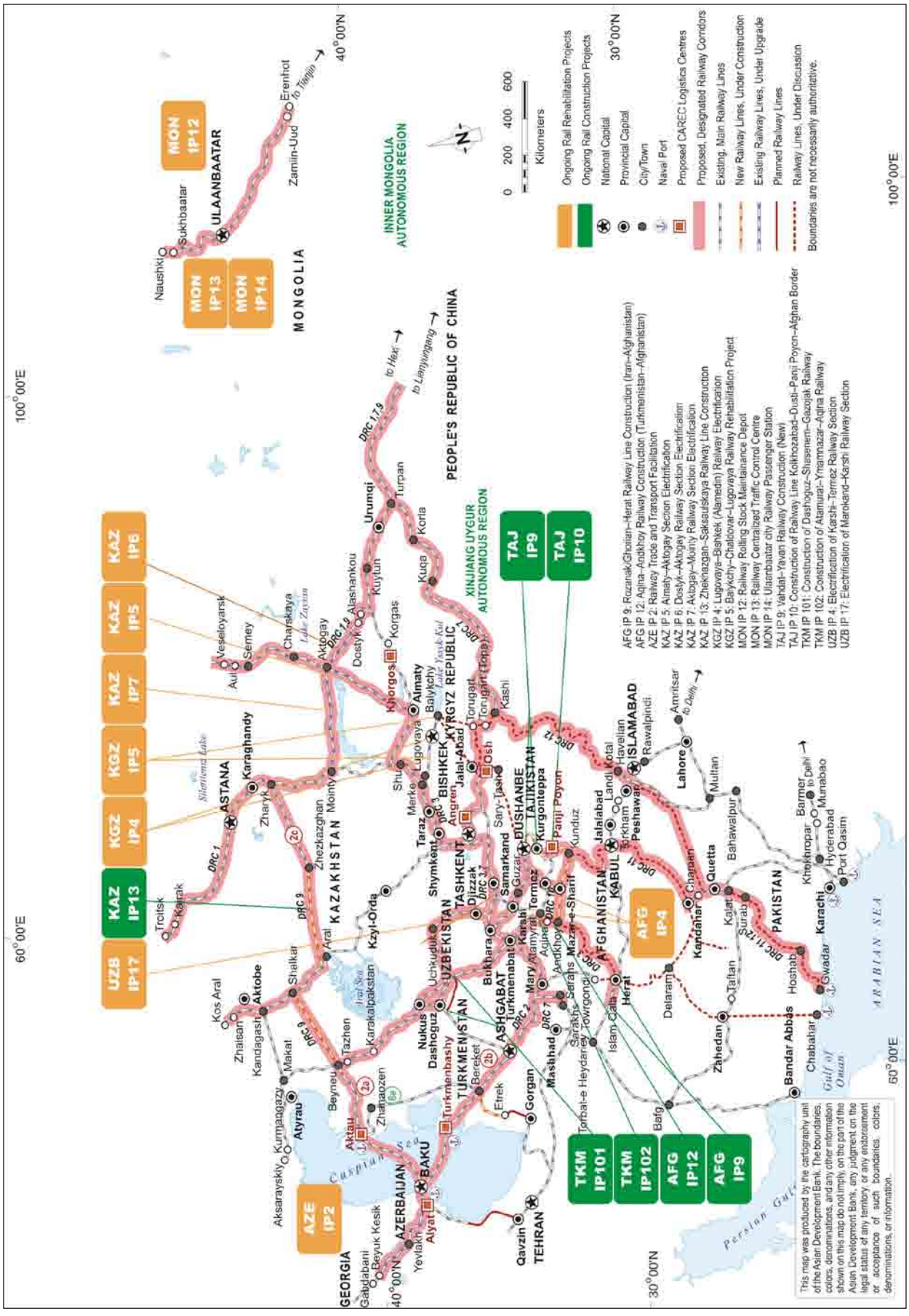
will administer TA resources to scale up railways, with a focus on implementing the DRCs by the end of 2017.

(iv) By the end of 2020, the application of the DRC concept will be piloted with two planned interventions: (1) the Turkmenistan–Afghanistan–Tajikistan Railway planned for construction; and (2) the proposed PRC–Kazakhstan–Turkmenistan– Azerbaijan-Georgia Railway Corridor, in which sections remain to be constructed in order to complete connectivity.

(v) Given the large investment cost involved, the task of developing the CAREC network will continue well beyond the end date of the refined strategy, in 2020.

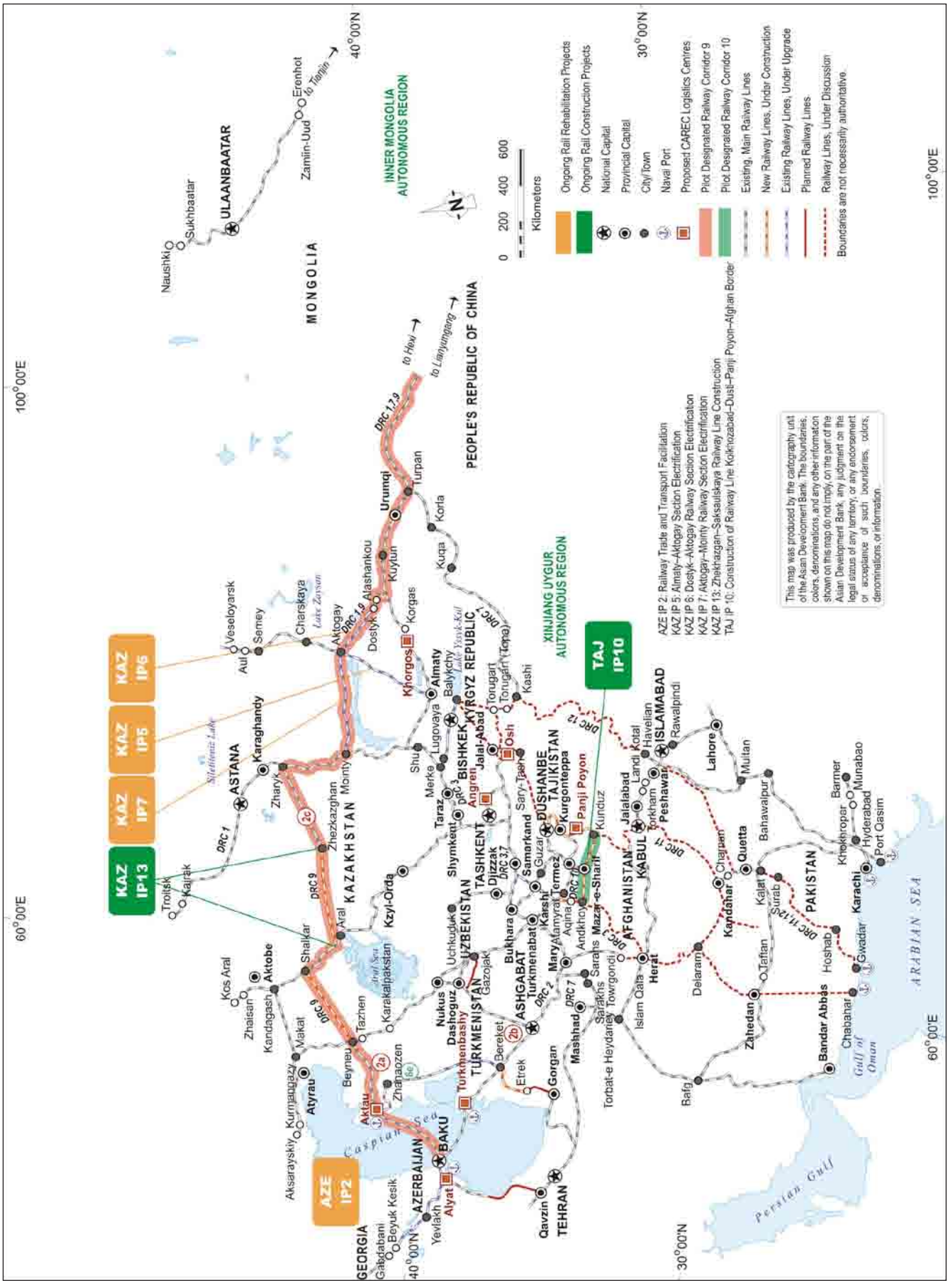
Additionally, over the short and medium terms, the CAREC Program, following the Refined TTFS, will continue to implement prioritized rail-development projects with a focus on increasing intraregional and multimodal connectivity

Map A4.1 Designated Rail Corridor Map



Source: CAREC Secretariat.

Map A4.2 Pilot Designated Rail Corridor Map



Source: CAREC Secretariat.

CAREC Transport and Trade Facilitation Strategy 2020

The Central Asia Regional Economic Cooperation (CAREC) Transport and Trade Facilitation Strategy (TTFS) was refined to account for changes in the CAREC Program since 2008, particularly expanded membership and the new strategic framework (CAREC 2020). The refined strategy also reflects lessons learned during the initial phase of implementation, aiming to more efficiently and comprehensively achieve the goals of establishing competitive corridors; facilitating the movement of goods and people through these corridors; and providing sustainable, safe, and user-friendly transport and trade networks.

About the Central Asia Regional Economic Cooperation Program

The Central Asia Regional Economic Cooperation (CAREC) Program is a practical, project-based, and results-oriented partnership that promotes and facilitates regional cooperation in transport, trade, and energy. CAREC comprises 10 countries: Afghanistan, Azerbaijan, the People's Republic of China, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. Six multilateral institution partners support the work of the CAREC member countries: the Asian Development Bank (ADB), European Bank for Reconstruction and Development, International Monetary Fund, Islamic Development Bank, United Nations Development Programme, and World Bank. ADB serves as the CAREC Secretariat.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.7 billion people who live on less than $2 a day, with 828 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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